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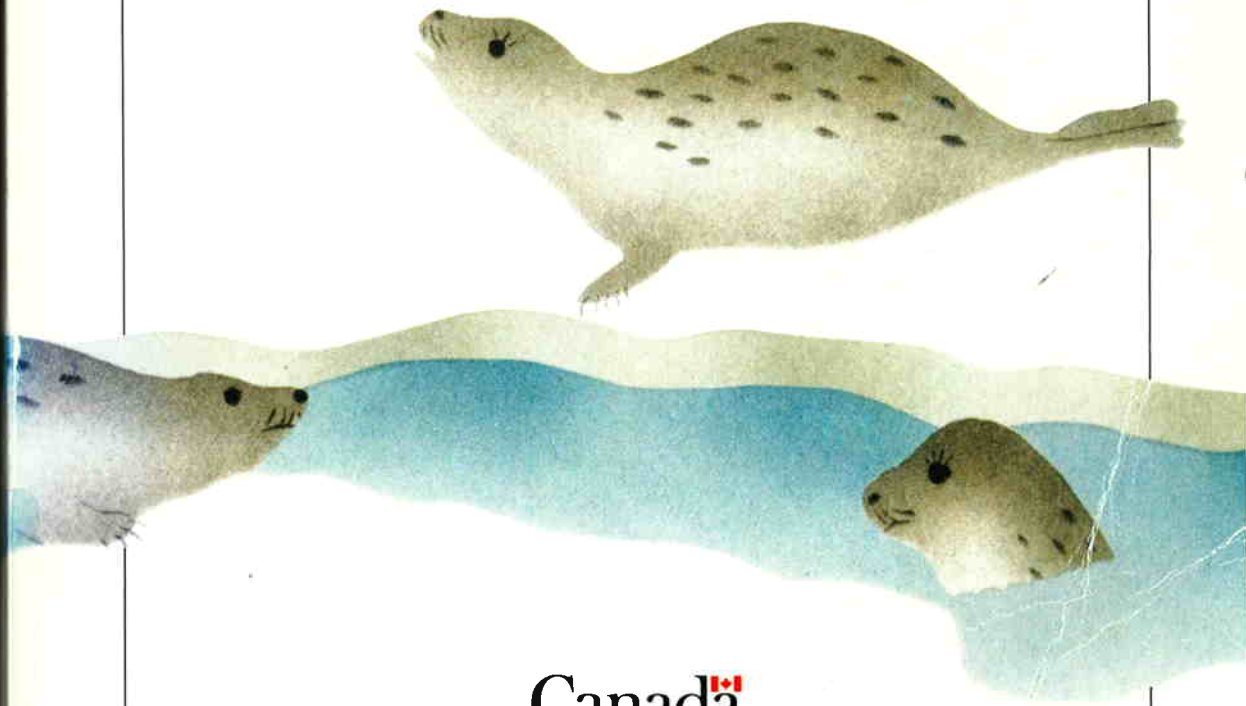
Seals and Sealing in Canada

Report
of the Royal Commission

Volume 2



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SEALS AND SEALING IN CANADA

REPORT OF THE
ROYAL COMMISSION

Volume 2

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Introduction to Seals and Sealing

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Chapter 6

Overview of Canadian Seals

Seals constitute an order of mammals called the Pinnipedia (although they are sometimes considered a suborder of the Carnivora – dogs, cats, bears, for example). Mammals are warm-blooded, air-breathing animals whose young develop in the uterus of the mother and are suckled with milk from the mother's mammary glands after birth.

Seals differ from other aquatic mammals such as whales and porpoises because of their inability to give birth to their young in the water; this activity, as well as moulting and breeding in some species, requires a firm platform such as that provided by land or ice. The Pinnipedia comprise three families of seals: the "true" or "hair" seals, such as the harp seal (Phocidae); the "eared" seals, such as sea lions and fur seals (Otariidae); and the walruses (Odobaenidae). The Royal Commission decided that virtually all problems leading to the Inquiry rested within the first two families. Consequently, walruses were not included in the Commission's deliberations.

The two families of seals, the Phocidae and the Otariidae, differ in several respects. These differences include, in part:

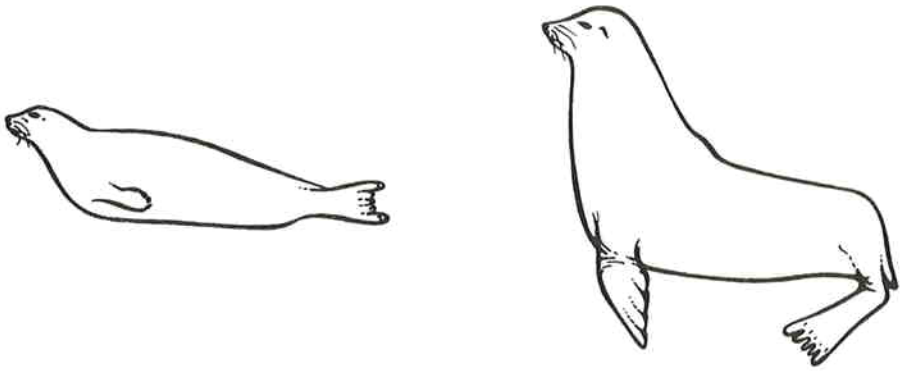
- the range of habitats occupied;
- the presence of external ears;
- the positioning of the hind flippers;
- the presence of fur on the flippers.

The Phocidae inhabit a wider range of habitats than do the exclusively marine-dwelling Otariidae; the former are found in some freshwater lakes and rivers, as well as in estuaries and the marine environment.

The Otariidae are called "eared seals" because they have small external ear pinnae, about six centimetres long, while the Phocidae (true seals) have a much smaller ear flap which is less obvious. However, all seals have acute hearing: it is often equal, in the air, to that of humans, and surpasses human hearing in the water (King, 1983).

A major difference between the two families of seals is the structure and positioning of their limbs (Figure 6.1). The hind limbs of the true seals are permanently angled backward at the hip joint. The inability of the Phocidae to bend the hind limbs forward under the body for support makes these limbs of little use for locomotion on land or ice, although they are the main propulsive force for swimming. The small forelimbs are used less often than the hindlimbs when the animal is swimming, since their main purpose is to enable the seal to change direction rapidly. On land, however, the forelimbs of the Phocidae provide some support for locomotion, and the animal is able to hump along on its abdomen for short distances at speeds approximating those of a human jogger (Backhouse, 1969).

Figure 6.1
Seal (Phocidae) Left; Sea Lion or Fur Seal (Otariidae) Right



The Otariidae, on the other hand, are able to use all four limbs to move on land. The hind feet are pointed forward and can be placed flat on the ground for support. Sea lions and fur seals can reach speeds, over short distances, comparable to those of a human runner (Backhouse, 1969). In the water, the hind limbs are carried pointing backward, and the main force of propulsion is provided by the foreflippers.

Seals also differ in their means of protection from cold. All seals are insulated by a layer of blubber just beneath the skin, but this layer is much thicker in the Phocidae and the sea lion species of Otariidae than it is in the fur seal species of Otariidae. Fur seals compensate for their lack of fatty tissue by having a denser coat of water-repellent underfur than have the

Phocidae or the sea lions. All seals undergo an annual moult of their hair or fur, which is shed in a short period of time by the Phocidae, but continuously, over several months, by the Otariidae. In order to conserve body heat, the Phocidae become more terrestrial in their habits during the moulting period, hauling out on land or ice. The flippers of phocid seals are covered with hair, but those of otariid seals are naked.

Seals are carnivores, and once the pups are weaned from their mother's milk, their food consists exclusively of animals. Although diet varies among seal species, their prey generally consists of fish and invertebrates (squid, octopus, crustaceans), some of which are commercially important species. Seals are termed "opportunistic" feeders because they take whatever animals are most abundant at a particular time and place, and do not depend exclusively on any one food species for sustenance.

Thirty-three species of phocid and otariid seals occur in the world (Table 6.1), although one is probably now extinct. King (1983) estimated the total world population of seals to number as many as 68 million. The species numbering in the millions are, in decreasing order of abundance, the antarctic crabeater seal, the ringed seal, the harp seal and the northern fur seal. Ten species of seal are found in Canada. Distribution maps for these species are given in the chapters on the status of stocks (21 and 22).

Phocid Seals

Seven species of phocid seals occur in Canada. Two of these are typically arctic species (ringed, bearded), three are temperate (harbour, grey, northern elephant seal), and two are migratory between arctic and temperate regions (harp, hooded). The arctic and migratory species bear their young on ice, while the harbour, grey and northern elephant seals whelp on sandy beaches or rocky reefs. With the exception of grey seals, which may be either monogamous (only one mate) or polygynous (one male mates with more than one female), and northern elephant seals, which are polygynous, the Canadian phocids are promiscuous (both sexes mate indiscriminately), and the males do not hold territories or maintain harems.

Harp Seal

This abundant ice-breeding species has three breeding stocks, of which the northwest Atlantic is largest. The other two are in the White Sea

and near Jan Mayen Island. The northwest Atlantic stock has supported a commercial hunt for over 300 years. Because of the controversy since the 1960s over the kill of pups, dealt with elsewhere in this Report, it is Canada's best-known species.

Table 6.1
Species of Seals of the World and Their Estimated Populations

Species	Scientific Name	World Population[a]
Otariidae		
Sea Lions		
Steller sea lion[b]	*Eumetopias jubatus*	300,000
California sea lion[b]	*Zalophus californianus*	100,000
South American sea lion	*Otaria flavescens*	240,000
Australian sea lion	*Neophoca cinerea*	5,000
New Zealand sea lion	*Phocartos hookeri*	6,000
Fur seals		
northern fur seal[b]	*Callorhinus ursinus*	1,700,000
Guadalupe fur seal[c]	*Arctocephalus townsendi*	1,000
Juan Fernandez fur seal[d]	*Arctocephalus phillippii*	800
Galapagos fur seal[d]	*Arctocephalus galapagoensis*	1–5,000
South American fur seal[d]	*Arctocephalus australis*	320,000
Cape fur seal, Tasmanian fur seal, Victorian fur seal [d]	*Arctocephalus pusillus*	875,000
New Zealand fur seal, Western Australian fur seal [d]	*Arctocephalus forsteri*	40,000
Kerguelen fur seal, antarctic fur seal [d]	*Arctocephalus gazella*	400,000
Amsterdam Island fur seal, sub-antarctic fur seal [d]	*Arctocephalus tropicalis*	214,000
Phocidae		
Northern Phocids		
harbour seal[b]	*Phoca vitulina*	360,000
larga seal	*Phoca largha*	400,000
ringed seal[b]	*Phoca hispida*	6–7,000,000
Baikal seal	*Phoca sibirica*	50,000

Table 6.1
Species of Seals of the World and Their Estimated Populations
(continued)

Species	Scientific Name	World Population[a]
Caspian seal	*Phoca caspica*	600,000
harp seal[b]	*Phoca groenlandica*	2,500,000
ribbon seal	*Phoca fasciata*	240,000
bearded seal[b]	*Erignathus barbatus*	500,000
hooded seal[b]	*Cystophora cristata*	365,000
grey seal[b]	*Halichoerus grypus*	88–100,000
Southern Phocids		
Mediterranean monk seal[c]	*Monachus monachus*	1,000
West Indian monk seal[c]	*Monachus tropicalis*	probably extinct
Hawaiian monk seal[c]	*Monachus schauinslandi*	700
southern elephant seal[d]	*Mirounga leonina*	700,000
northern elephant seal[b,d]	*Mirounga angustrirostris*	48,000
crabeater seal	*Lobodon carcinophagus*	15–50,000,000
Ross seal	*Ommatophoca rossii*	250,000
leopard seal	*Hydrurga leptonyx*	800,000
Weddell seal	*Leptonychotes weddelli*	500,000

a. From King (1983). These estimates may differ from numbers used in the text.
b. Species found in Canadian waters.
c. Endangered species, listed in Appendix I of the Convention on International Trade in Endangered Species (CITES).
d. Threatened species or look-alike species (likely to be confused with a threatened or endangered species), listed in Appendix II of CITES.

Harp seals whelp in large herds on ice floes off southern Labrador and northern Newfoundland and in the Gulf of St. Lawrence. The single pup (whitecoat) is born with a thick coat of white silky hair, which the animal begins to moult when it is one week old (ragged-jacket stage). The moult is completed in three to four weeks, when the white coat is replaced with a short-haired coat of grey spotted with black (beater stage). The pup is nursed for eight to twelve days and then abandoned, after which the females mate with one or more males (Sergeant, 1976).

Adults moult on the ice in April and May. Following the moult adults migrate north in May, while the beaters follow separately. Harp seals spend the summer in the eastern Canadian Arctic and around Greenland, and migrate south again by late December. Adult males and females are both about 1.6 metres in length. Mature females weigh an average of 120 kilograms, while the males, at 135 kilograms, are slightly heavier. The northwest Atlantic stock numbers about two million.

Hooded Seal

This large ice-breeding species is migratory, like the harp seal, but is less numerous. Its breeding groups on heavy floe ice are more scattered and constitute family groups of male, parent female and her pup. Because of the relatively scattered nature of its breeding numbers in heavy ice, the hooded seal is less well studied than is the harp seal. Adult males reach lengths of 2.5–2.7 metres and weigh about 400 kilograms. Females are slightly smaller, at about 2.2 metres and 350 kilograms.

The pup is born in the second half of March. Instead of the temporary foetal hair that the whitecoat harp seal pups possess, it has a rich, lustrous hair coat which gives the pup its name, "blueback", and which was, until recently, in high demand at fur markets. Pups are suckled for as short a time as four days and then abandoned. When lactation ends, the female mates with her male companion, who has remained with her on the ice during the whelping period. The hooded seal has been said to be monogamous, but may be polygynous to some degree (Miller and Boness, 1979).

Hooded seal breeding areas on the Canadian side of the Atlantic lie mainly off northeast Newfoundland, but some of these seals at times whelp in Davis Strait, and a few whelp in the Gulf of St. Lawrence. Others breed near Jan Mayen Island, north of Iceland. In April, the hooded seals that have whelped near Newfoundland and in the Gulf start to migrate north to Davis Strait and southwest Greenland. Major moulting concentrations occur on the ice east of Greenland in June and July, after which the Canadian seals return to Davis Strait. Southward migration of the Newfoundland stock occurs in the fall, but the group which whelps in Davis Strait appears to remain in the Strait throughout the winter.

Relationships between the Canadian and Jan Mayen stocks are not clear because the degree of exchange between populations is uncertain, and

estimates of population sizes are imprecise. The size of the western Atlantic population is difficult to determine, but it has been estimated at 300,000 animals.

Grey Seal

In Canada grey seals are confined to the Atlantic coast and are widely scattered from Labrador to Nova Scotia. They form breeding colonies in such localities as Deadman Island near the Magdalen Islands and Sable Island off Nova Scotia.

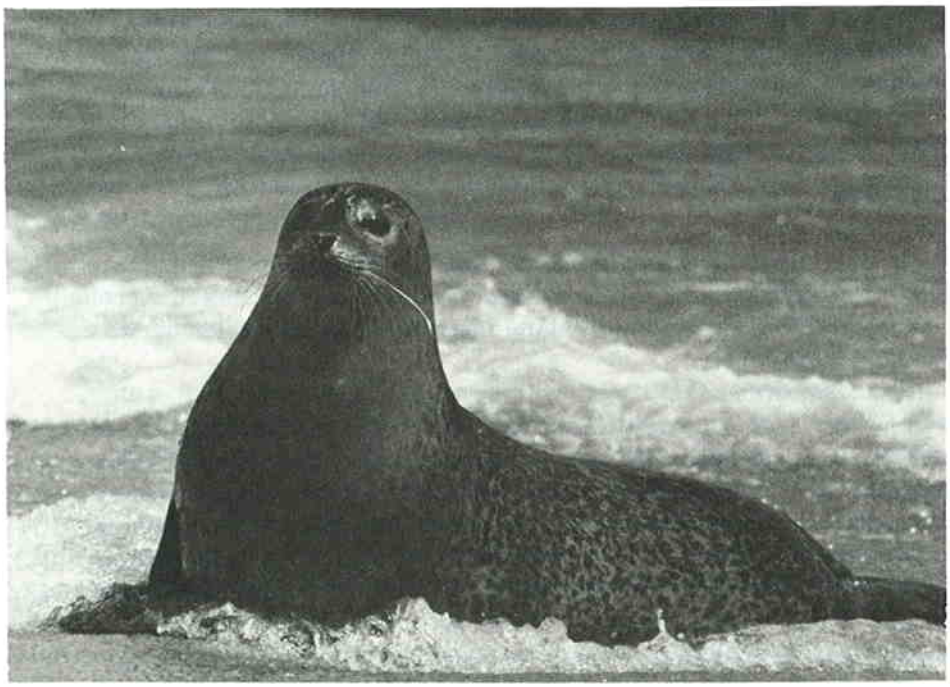
Grey seal pups, which are born between late December and early February, are covered with long white hair that is shed about three weeks after birth. Pups are able to swim at birth, but usually wait until they have completed their first moult. The pup is weaned when it is approximately three weeks old, after which it may go to sea or spend several weeks on land. The mother mates with one or more bulls, either on land or in the water, at the end of the lactation period. Males are monogamous if there is ample breeding space, as there is on fast ice or on the beaches of Sable Island, but polygynous when crowded into large aggregations (Mansfield, 1966).

Mature grey seals are large; an average male weighs 220 kilograms and reaches a length of 2.2 metres, and an average female weighs 150 kilograms with a length of about 1.8 metres (King, 1983). This seal is considered to be increasing in numbers; the present Canadian stock is estimated at 40,000–75,000 animals, more probably in the upper part of the range. This can be compared with a few thousand in 1949.

Grey seals are of concern because of their impact on Canadian commercial fisheries. In particular, they may damage gear and compete with fishermen for fish, and they are the primary host for a parasite that must be removed from the flesh of cod and flatfish.

Harbour Seal

The harbour seal, a coastal circumpolar species with no organized social pattern of reproduction, occurs on both sides of the north Atlantic and north Pacific Oceans. Harbour seals often ascend rivers into fresh water, and some of them have become land-locked in areas such as northern Quebec.



Harbour seal

Harbour seals are solitary in the water, and form groups only to haul out at low tide on exposed rocks or sand bars, where they normally remain until high tide, when they disperse to feed. On very rocky coasts they breed mostly in single family units or in small groups. The single pup, which is often born between the tidemarks, is able to swim immediately after birth. In estuaries, the population of the whole area may congregate on one or more sandbanks to whelp. The young are born with a short adult-type coat, although a covering of whitish foetal hair may persist for up to a few days in the northernmost young. The pups may swim away with the rising tide, accompanied by their mothers. Lactation lasts four to six weeks, and suckling may take place on land or in the water. Adult males are 1.5–1.8 metres long and females 1.2–1.5 metres, and the animal's maximum weight is about 113 kilograms (King, 1983).

On the B.C. coast, the stock is estimated at 45,000–60,000, and on the Atlantic coast, at 13,000. The population size in Labrador, Hudson Bay and the eastern Arctic is unknown.

Ringed Seal

Like the harbour seal, this small, ice-breeding, circumpolar species is rather solitary, but widely distributed throughout arctic and sub-arctic Canada.

Males and females both reach a length of 1.4–1.5 metres and weigh about 70 kilograms. Adult ringed seals use the claws of their foreflippers to maintain breathing holes in fast ice. The single whitecoated pup is born between mid-March and early April in a birth lair hollowed out of a snowdrift. The pup is nursed for as long as two months, after which it is abandoned by the female. The breeding season extends from mid-March to mid-May. Adults are presumed to be promiscuous, but there is some recent evidence of polygyny (Miller et al., 1982). Copulation occurs in water under the ice, while the female is still lactating. During the haul-out period in June, most ringed seals lie on the ice, fasting and moulting.

Ringed seals are a staple food and a source of clothing for the Inuit. The size of the Canadian stock is unknown, but it probably numbers over a million individuals.

Bearded Seal

This large, arctic, ice-breeding, circumpolar species is solitary, with a distribution similar to that of the ringed seal. Adults of both sexes reach approximately the same length of 2.3 metres and weigh about 250 kilograms. Bearded seals prefer shallow waters near coasts that are free of fast ice during winter, as well as gravel beaches and near-shore ice floes (King, 1983). They are most often found on moving ice floes which have open leads between them.

Pups are born in the open on the ice in early May. Lactation lasts for 12–18 days, and during this time the female remains close to her pup. Adults do not concentrate in groups during the breeding season, which takes place in May at the end of the lactation period.

The tough and flexible hide of the bearded seal has been used for dog-team traces, harpoon lines and boot soles. The meat is eaten, but the species is secondary in importance to the ringed seal for subsistence economies. The size of the Canadian stock is unknown, but it is much lower than that of the ringed seal stock.

Northern Elephant Seal

This very large species is confined to the Pacific coast. It does not breed in British Columbia, but scattered males migrate in winter from breeding colonies in California to B.C. waters. Sightings are rare, but have increased in frequency over the last 15 years. Males reach a size of 4.5 metres in length and 2–2.5 tonnes in weight (King, 1983).

Otariid Seals

The three species of otariid seals occurring in Canada are found on the Pacific coast. The Otariidae all show strong development of social structure, polygyny, and sexual dimorphism (Bonner, 1982). The breeding and pupping areas, called "rookeries", are located on land. Mature females are grouped in harems, each with a dominant male, the harem bull, that defends the territory and the females within it against other males. Dominant bulls mate with the many females (polygyny) within their individual harems. Sexual dimorphism in these three species is expressed by the considerable difference in size between males and females; the adult female attains approximately one-quarter to one-half the size of the males.

Pups are gregarious and spend much of their time in groups, sleeping, playing, or making exploratory trips around the rookery. Otariid pups are less precocious than the pups of many of the phocid species. Sea lion pups, for instance, suckle until the next pup is born in the following year, and northern fur seal pups nurse for three months. Otariid pups do not enter the ocean for a period of time after birth. Steller sea lion pups, for example, play in tidal pools before progressing to the open ocean when they are about three months old (King, 1983).

Northern Fur Seal

This species breeds on the Pribilof Islands and Commander Islands in the Bering Sea, and on Robben Island and in the Kuril Islands off Sakhalin. A small breeding colony has recently started on San Miguel Island, California. They do not breed in British Columbia, but females and young-of-the-year migrate south through B.C. waters in winter. They usually remain offshore, but sometimes come into inside waters.

Northern fur seals

Adult males return to the rookery in early June and establish their territories. Females arrive in mid-June, and harems are formed primarily as a result of the gregariousness of the females, rather than as a consequence of control by the bull (Peterson, 1968). Males that lack territories or harems form groups of bachelor bulls that occupy separate parts of the beaches.

Pups are born about two days after the female comes ashore, and mating takes place about a week after the birth. Parental care is limited, as males ignore pups, and females provide protection for only one week after the birth. After that time, for a period of three months, females return weekly to the rookery to feed their pups, which have gathered into groups. Fur seals are able to swim at birth, but enter the water only when they are about one month old (King, 1983).

Adult males are about 2.1 metres long and weigh 180–270 kilograms, whereas females are about 1.5 metres long and weigh about 50 kilograms (King, 1983). The population in the eastern Bering Sea and eastern Pacific Ocean, primarily the Pribilof Islands stock, numbers about 825,000.

At one time northern fur seals were taken at sea commercially, and were hunted for subsistence use by coastal Indians. Pelagic sealing has not taken place for many years and the stocks have been managed internationally until very recently by Canada, Japan, the United States and the U.S.S.R. through the North Pacific Fur Seal Commission, whereby commercial sealing has been restricted to breeding islands.

Steller Sea Lion

This is the largest species of sea lion. Mature males reach a length of about three metres and weigh approximately one tonne. Adult females are smaller, with average lengths of 2.2 metres and weights of 270 kilograms.

Steller sea lions form breeding harems in May and June, mainly off Cape St. James in the Queen Charlotte Islands and on islands north of Cape Scott on Vancouver Island. A number of former breeding colonies were eliminated during control killing in the 1950s.

Dominant breeding bulls arrive at the rookeries in early May. Pups are born between mid-May and mid-July. They remain close to their mothers for about one week, but when several weeks old they gather in groups. Copulation between mature adults takes place about two weeks after the birth of the pup, usually on land, but sometimes in shallow water (King, 1983). Some females and young may remain on the rookeries for the entire year, but by the end of August the adult bulls have returned to the sea.

Steller sea lions also occupy haul-out sites, which appear to be occupied all year-round by a population composed of a mixture of ages and sexes (Bigg, 1985). Some of the sea lions found in these non-breeding assemblages may be from breeding populations in Alaska and possibly also in California. The B.C. resident population is small compared with the centre of abundance in the Aleutian Islands, numbering about 4,800 to 6,600 animals.

California Sea Lion

This sea lion, which is known to many people as a circus performer, does not breed in British Columbia, but young and mature males migrate north from California breeding colonies in late fall into B.C. waters and

remain there over winter and into early spring. The breeding biology is much like that described for the Steller sea lion. Bones from this species found in Indian middens suggest that this migration pattern has been occurring for many years, but coincident with population increases in California, there has been a marked increase in the winter abundance of this species in British Columbia over the past 20 years. The B.C. winter population is estimated to number about 4,500 animals (Bigg, 1985), concentrated in the Gulf Islands and in Barkley Sound, but extending north in scattered numbers. Many people do not distinguish this sea lion from the Steller sea lion, but its raucous bark, smaller size, darker colour and a forehead "crest" in older males are distinctive.

Adult males reach a length of about 2.4 metres and weigh about 300 kilograms. Adult females are smaller, averaging about 1.8 metres in length and 100 kilograms in weight (King, 1983).

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Chapter 7

The History of Sealing

Sealing has had a long and varied history around the world. It has been undertaken for both subsistence and commercial purposes, in this country and abroad. Aboriginal peoples have hunted seals in the Arctic and on the Atlantic and Pacific coasts of Canada for thousands of years. Europeans have engaged in the hunt in "Canadian" waters since the arrival of Basque fishermen in the 16th century. For the past several centuries, commercial sealing operations have ranged around the world from the Barents Sea to the Gulf of St. Lawrence and from the Bering Sea to Antarctica.

The importance of the seal hunt to the arctic Inuit and to other Canadians living in provinces bordering the Atlantic Ocean has made it an integral component of their respective cultures. Besides its impact on incomes and material well-being, therefore, the recent drastic decline of the hunt has had a profound effect on the less tangible aspects of arctic and Atlantic life-styles.

This chapter provides a retrospective account of the seal hunt, commencing with world sealing and continuing with the hunt in Canada.

World Sealing

Seals and their relatives, the sea lions and walrus, present the hunter with an attractive package of high-quality meat, together with skins for clothing and oil for fuel or light. Consequently, they have been harvested almost everywhere that they and humanity co-exist and have become, since ancient times, a basic element in the economy and culture of coastal peoples over many parts of the globe.

Throughout much of prehistory and recorded history, however, seals, unlike some land animals, were usually underexploited because many species were migratory and spent most of their lives out of the reach of humankind. While seals could provide almost all the essentials of human life, in terms of food, clothing and fuel, only a few societies, like the coastal Inuit of the Arctic, ever became heavily dependent on sealing.

The nature of the seal hunt is determined largely by the behaviour and, especially, the breeding habits of the various seal species (Le Boeuf, 1986). (See also Chapter 6.) Fur seals, for example, are polygynous and breed in dense colonies, consisting sometimes of tens of thousands of animals, along a few kilometres of coastline. Most of their breeding places are on remote and inaccessible islands, but once they were discovered, they became highly attractive to industrial-scale sealing. While the stocks lasted, catches were limited only by the capacity of the sealers' ships.

Other seal species, including most of those found in Canada, are monogamous or promiscuous and tend to breed individually or in small colonies. These may be exploited successfully by a lone hunter, but they are unattractive to large-scale operators.

Harp and hooded seals hold an intermediate place. They do not form dense breeding colonies with little space between individual animals, as is typical of fur seals, but at breeding time they do collect in extensive patches where tens or hundreds of thousands of animals cover a few hundred square kilometres of ice. Two such concentrations occur in Canadian waters: in the Gulf of St. Lawrence (almost all harp seals) and at the "Front", the area of ice to the north and east of Newfoundland. Large-scale exploitation of these concentrations was infeasible until ships capable of operating in heavy ice became available.

Seal hunts have been conducted in areas of the north Atlantic and north Pacific from very early times. Most pre-industrial sealing was of a subsistence character: that is, seals were hunted mainly for domestic use by the hunter and his family, but there were exceptions. Records exist of the sale around the Baltic Sea of sealskins and seal oil from northern Scandinavia as part of the trade of the Hanseatic merchants, and trade in these products may have occurred much earlier. The Russians also engaged in the fur trade at an early date, including trade with the Chinese, who sought the skins of fur seals for the trimming of their more expensive robes. In few places, however, were seals abundant enough and alternative resources scarce enough for sealing to be more than a marginal activity. Only in rare instances, as in the Canadian Arctic and Greenland, did societies depend on sealing as their main source of livelihood.

Commercial sealing began in earnest with the age of exploration. The industry tended to follow in the path of the early overseas explorers who discovered previously unknown seal populations. Within 25 years of Columbus' first voyage, Spaniards were killing fur seals in the estuary of the River Plate, and the French were killing seals (probably grey seals) at the

mouth of the St. Lawrence. The European discoveries probably signalled the end of the Caribbean monk seal, although the record is not clear.

These stocks were relatively small, however, and large-scale or "modern" commercial sealing dates from the 18th century, with the discovery of some of the larger fur seal stocks and acquisition of access to the breeding patches of harp seals. During that and the succeeding century, sealing enterprise was encouraged by the general growth in world trade and the demand for leather and oil generated by the advance of industrialization. Throughout the period, commercial sealing was often synonymous with the utilization and total destruction of newly discovered seal herds.

The expansion of sealing was closely associated with whaling. Since the oil of seals is similar to that of whales (at least that of baleen whales), and since both serve the same market, whaling ships were among the first to take advantage of previously unexploited seal populations. In the 1770s, U.S. whaling ships killed southern elephant seals on the Falkland Islands, and in the next half-century or so, whalers and sealers led the exploration of the southern seas, penetrating almost to Antarctica. As they found the fur seal herds of different islands, enormous catches followed for a few years, but often the stocks were quickly depleted.

Western explorers discovered that northern fur seal pelts could be traded in China for tea and other commodities. Russian fur hunters began exploring the Aleutians in the mid-1740s and, by 1786, had discovered the large fur seal rookeries on St. Paul and St. George Islands (Pribilofs), where 80% of the population breeds (Hansen, 1982; Veltre and Veltre, 1981), and had established a sealing industry in the north and east Pacific. Between 1740 and 1790, the Russians exported a total of 2,500,000 seal furs to the Chinese (Busch, 1985).

Meanwhile, British and U.S. sealers entered the south Pacific and virtually exterminated the fur seals and sea lions found on the islands off the west coast of South America. More than three million seals were taken on Isla Mas Afuera (Juan Fernandez group) during the seven years prior to 1797 (Busch, 1985). Then U.S. and Russian sealers began to meet in the vicinity of the California coast and to collaborate in seal hunting in that region: during a three-year period *circa* 1810, the Farallon Islands off San Francisco yielded about 150,000 fur seals. Sealing in the Pacific was not without its hazards, as many seal herds occupied some of the most inaccessible islands. It was not uncommon for sealers' boats to be dashed to pieces on the rocky coasts and crews thus lost or abandoned to their fate by the ship captains.

In the early 19th century, sealers began to enter sub-antarctic regions; by 1825, 1,200,000 seals had been taken from South Georgia, and this herd was exhausted. The South Shetlands were exploited next, followed by the southern coast of Australia. The Dutch had been harvesting the South African fur seal stock since the 17th century, and this industry tended to blend with the general exploitation of seals in the southern hemisphere. By the early 19th century the accessible seal populations of that hemisphere had all been seriously depleted and, in some areas, whole herds had been wiped out. Even a century later, only a handful of seals were to be found on the islands mentioned above, although the South Georgia population has been increasing lately. (See Chapter 28.) Many fur seal stocks have not recovered to this date.

The southern islands belonged to no country, and there was no control over the exploitation of the seal stocks located on them. Farther north, in South Africa, in Uruguay and on the Pribilof Islands, local governments exercised some control, although there was a burst of uncontrolled sealing on the Pribilofs after the sale of Alaska to the United States in 1867. Generally, however, the controls were inadequate, and most stocks declined. In brief, while huge harvests of seals were taken and great profits made by some sealing interests in the 18th and 19th centuries, this era was, on the whole, a period of profligate pillage of resources, the effects of which are still visible.

Despite the difficulties of operation because of ice conditions and the greater dispersion of animals in the breeding patches, the harp seal hunt of the 19th century is by no means exempt from the foregoing criticism. A detailed description of the development of seal hunting in Canada follows. Further details of recent sealing practices in some other countries are discussed in Chapters 19 and 28.

The Arctic Seal Hunt

Archaeologists believe that Inuit have hunted seals for millenia in the area that now comprises the Northwest Territories and the sub-arctic areas of Quebec and Labrador. Evidence indicates the existence of a regular hunt as far back as the emergence of the Early Dorset culture, about 3,000 years ago (Fitzhugh, 1977). Approximately 2,000 years later, the Thule culture expanded rapidly from the west into the eastern Arctic, replacing the earlier Dorset culture. Thule culture introduced more advanced hunting techniques, thus increasing the efficiency of subsistence activities. Seal

hunting, for example, improved with the use of large skin boats and heavy-duty harpoon gear (Fitzhugh, 1977).

The Thule hunt involved intensified winter hunting for seals on the ice. Summer camps, also, were established in bays and on islands with good fishing, bird-hunting and sealing sites. Typically, the Thule winter hunt would involve living on the shore and hunting for ringed seals at their breathing holes. For many groups, such as the Clyde River Inuit on Baffin Island, ringed seals provided the bulk of their diet from freeze-up until steady caribou hunting began in late May or June.

Northern Indians were less reliant on seals, preferring a more varied diet. Moreover, their location tended to be inland and distant from seal-hunting sites. Nevertheless, for a number of Indian groups, the seal hunt was of major importance.

The commercial element was introduced into seal hunting in the Arctic in the early 1800s, when the Hudson's Bay Company began to trade with northern Indians and Inuit. This element grew in significance until, by the late 1800s, the ringed seal was both a vital subsistence resource and an important source of cash revenue. Commercial sealing remained a major factor in the arctic economy into the 1980s. Some 60,000 seals (ringed seals, for the most part) were still being harvested annually during the late 1970s, in the Northwest Territories and northern Quebec; the skins of two-thirds of these seals were marketed.

The Report of the Inuit Land Use and Occupancy Project (Freeman, 1976) noted that ringed seal hunting was virtually universal among Inuit communities in Canada. The commercial aspect of this hunt increased in extent and significance for two reasons:

- technological change (i.e., the replacement of dogteams, kayaks and harpoons by snowmobiles, power boats and rifles);
- relocation of population groups to settlements distant from seal-hunting grounds, making imperative the use of modern technology (e.g., mechanical transport) to achieve greater range.

The acquisition and maintenance of the equipment created the necessity for a cash income. As a result of the increasing costs involved, combined with the effect of the collapse of sealskin markets due in part to the actions taken by the European Community (EC), the economy and way of life of the Inuit

and northern Indians have been devastated. The issue is examined in greater detail in Chapter 13.

The Atlantic Seal Hunt

When Europeans arrived in the Atlantic region, there had existed from time immemorial a subsistence hunt for seals, conducted by the aboriginal peoples. The species hunted probably included harp seals in the winter and spring and grey seals at other times. In the 16th century, Basque, Breton and Norman fishermen, on their annual (summer) expeditions to the rich fishing grounds of the region, began to harvest the local seal stocks. At a later period, inhabitants of coastal fishing villages harvested seals from shore. The early reports of sealing activity (by Cartier and others) presumably relate in the main to grey seals, and it is possible that these operations reduced the grey seal stocks to the low level from which they are only now recovering.

Sealing in the Atlantic region nowadays tends to be equated with the hunt for harp seals, and especially with the whitecoat hunt. This was not always so, for the large-scale harvest of whitecoats only began early in the 19th century. Harp seals are born on ice floes, at the Gulf and Front breeding grounds. From the colour of its fur, the pup is called a "whitecoat". After one week, it becomes a "ragged-jacket" and, at three to four weeks, a "beater". At one to five years of age, it is known as a "bedlamer". (The hooded seal has a similar life history, except that it is born farther from land and with a bluish coat which gives the pup the name "blueback".)

Labrador

As in the Arctic, sealing has been a central economic activity of the aboriginal peoples of northern Labrador for thousands of years. The Labrador Inuit, who are descendants of the Thule Eskimos, have a highly specialized seal-hunting culture and are credited with having improved harpoon technologies. They were adept at finding and killing seals both at breathing holes in the ice and, using kayaks, on the open water.

In Labrador, the winter hunt continued until the ice became too thick and snow covered the seals' breathing holes. In the spring, when the seals basked on the ice, the hunt resumed with intensity at leads of open water. Like their more northerly counterparts, the Labrador Inuit also

turned to caribou hunting in late spring or early summer. The Montagnais, Naskapi and Cree Indians of the Labrador interior also hunted seals and had direct access to the coast across Inuit lands (Brody, 1977). Similarly, the Inuit could move inland freely to hunt caribou as needed.

The first Europeans to settle in Labrador were the United Brethren (Moravian Mission), who arrived in 1771. They established settlements from Killinek, on the northern tip of the coast, to Makkovik, joining some 2,000 Inuit already living in the area between Killinek and Rigolet. Other Europeans began to arrive in the 1790s, and immigration, on a small scale, continued throughout the 19th century. These settlers adopted the activities and learned the skills of the Inuit, including seal-harvesting techniques.

Soon after their arrival, the Moravians introduced the use of nets, which were particularly effective for harvesting harp seals during the seals' autumn and spring migrations along the Labrador coast. They exported the products of this hunt and held a monopoly of trade on the northern Labrador coast. Records indicate that, by the beginning of the 19th century, cargoes of seal products worth more than $25,000 were exported annually.

The subsistence needs of Labrador Inuit for seals increased throughout the 19th century and the first half of the 20th century. The bowhead whale had been hunted to near extinction by European whalers, and declining stocks of walrus and beluga reduced the availability of food supplies. Fur-trapping activities and permanent settlement required larger dog teams for travel and hauling wood, and more dogs meant that larger supplies of dog food were needed; seal meat was a major source of inexpensive dog food. Before snowmobiles replaced dog teams and stores offered alternative foods for human consumption, a community of 200 people required a minimum harvest of 2,500 seals per year to meet basic subsistence needs. Major failures in the annual seal harvest caused severe hardship, marked by malnutrition, susceptibility to disease, and a shortage of materials for clothing. Although the Labrador seal hunt was relatively small in scale, it was nonetheless of vital importance to the communities concerned.

Newfoundland

Sealing in Newfoundland has had an uninterrupted history since ancient times. Harpoons skilfully crafted by the Archaic Indians on the west coast of the island and spearheads and seal bones from prehistoric campsites

in Bonavista and Trinity Bays and on the northern peninsula confirm the extent of subsistence seal hunting by the aboriginal peoples. Jacques Cartier reported sealing by Indians of the Strait of Belle Isle in the mid-1500s. The first European vessel specifically outfitted for sealing sailed from England in 1593 (Busch, 1985), and by 1610 an annual summer seal hunt was being conducted by Europeans off Newfoundland.

Although European fishermen may have preceded John Cabot's arrival in Newfoundland by 15 years or more (Rothney, 1973), it was following Cabot's first voyage in 1497 that Newfoundland became famous for the prodigious codfish stocks located close to its shores. As a result, the island became the major fishing station of the north Atlantic. Fleets of fishing ships, carrying tens of thousands of men, arrived each spring; the crews fished and cured their catches through the summer and departed for Europe in early autumn with their cargoes of salted cod. This was a migratory seasonal fishery and, in the early 1700s, after 200 years as a base for the fishery and several attempts at colonization, Newfoundland still had no more than 3,000 English and a handful of French residents, and most of the latter were forced to move to Acadia in 1713.

The herds of harp and hooded seals, which congregate early each spring to whelp and breed on the ice floes at the Front and in the Gulf, were not exploited by the migratory European fishermen because the seals were in the high Arctic during the cod-fishing season, when these fishermen were in Newfoundland. A prerequisite for a harp seal hunt was the presence of permanent residents on the island. The first European settlers established themselves in the harbours of the southeast coast and, in consequence, were ill-situated to take advantage of the seal resources. In the early 1700s, however, some settlers moved to the more northerly bays, and by the 1720s, seal oil was being exported from Newfoundland to England. Throughout the 18th century, the residents confined their sealing activities to the ice and waters near their homes. They shot older seals and killed whitecoats when the animals appeared in the neighbourhood, or they set nets to intercept seals off headlands and in narrow passages.

This seal hunt was the original "landsmen" hunt, and it was centred in the sparsely settled areas around Bonavista and Notre Dame Bays. It was not very productive. Although the U.K. market for sealskins and seal oil was buoyant, there was no significant growth in Newfoundland production between the 1720s and 1780s (Colonial Office, undated). Sealing provided valuable subsistence products, however, and it was an influential factor in population distribution and settlement.

By the end of the 18th century, the population of Newfoundland had increased sevenfold, as a result, directly and indirectly, of the introduction of the potato, the British conquest of New France, the American Revolution, and the development of the seal hunt on the northeast coast of the island. Circa 1800, about 20,000 English and Irish settlers inhabited the coast from Harbour Breton in the south to Twillingate in the northeast. Wartime prosperity in the cod fishery, between 1793 and 1815, encouraged an additional 20,000 people to take up residence in Newfoundland. The better harbours became overcrowded, and a number of "planters" (fishery entrepreneurs) were prompted to send ships and crews to fish along the north coast of the island and the coast of southern Labrador during the summer months. When peace was restored, French fishermen resumed their summer fishery on the island's north and west coasts, causing serious difficulties for Newfoundland residents. At the same time, market reverses, particularly in Spain, resulted in severe depression in the Newfoundland cod fishery. A collapse of the "north shore" fishery, as had occurred in post-war depressions during the 18th century, was averted by growth in the sealing industry.

In the 1790s, fishermen had discovered that harp seals could be harvested on the ice floes during March and April, and certain shipowners in St. John's and the more densely populated harbours of Conception Bay began to send vessels to hunt them. The vessels were small, and their crews had much to learn about sealing. Through trial and error, captains and fishermen acquired the necessary skills and thus inaugurated the large-scale commercial seal hunt that was to play so prominent a part in Newfoundland's economy in the following century.

During the first half of the 19th century, the sealing industry accounted for up to one-third of the island's total exports. The growth of the industry in the early decades of the century contributed increasingly to the employment of shipping and manpower. In 1827, 290 vessels and 5,418 men were engaged in sealing. By 1833, the numbers had increased to 359 vessels and 7,983 men. Thereafter the number of vessels dropped slightly, but individually, the ships increased somewhat in average tonnage and carried larger crews (about 32 men each, on average). In 1848, the fleet was distributed as shown in Table 7.1.

Expansion peaked in 1857, when 370 vessels and 13,600 men were involved in the seal hunt. The harvest of seal pelts had followed a parallel trend. From a level of 5,000 sealskins in 1793, production had risen to over 53,000 skins in 1803 and 81,000 in 1805. It rose again to 165,000 skins in 1818 and 282,000 in 1819. In 1831, following energetic development of the

Table 7.1
Large-Vessel Sealing Fleet, Newfoundland, 1848

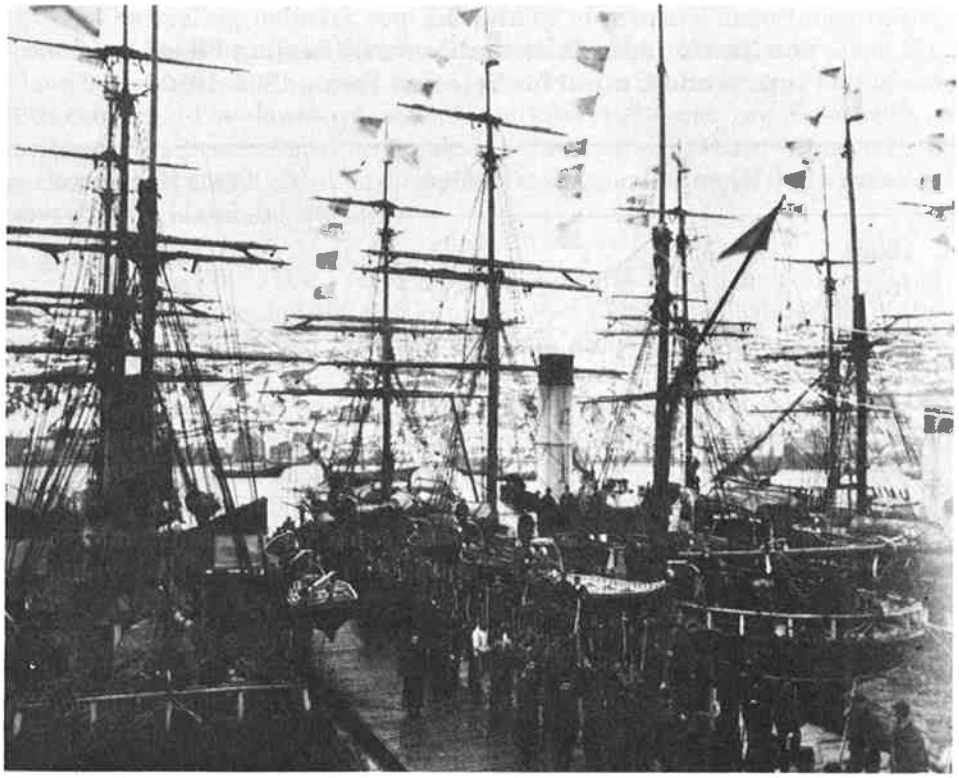
Place of Ownership	Vessels (no.)	Total Tonnage (tons)	Total Crew (no.)
St. John's	96	9,353	3,215
Brigus	66	5,010	2,111
Carbonear	54	4,634	1,672
Harbour Grace	51	5,084	1,684
Other ports	74	5,803	2,123
Total	341	29,884	10,805

Source: Colonial Office (undated).

European market, production reached 687,000 skins, and this level was maintained throughout the 1830s and 1840s, when exports exceeded 600,000 skins in each of a number of years. Similarly, exports of seal oil rose from about 1,000 tons annually at the beginning of the century to over 7,500 tons each year during the 1830s. (These quantities are measured in long tons, each long ton weighing 2,240 lb and equivalent to approximately 1 tonne.) By this time too, the wartime and post-war disturbance of international trade had subsided and prices had stabilized.

The plateau in production and commitment of resources, achieved by the Newfoundland sealing industry in the 1830s, was maintained into the 1860s. This period is referred to nostalgically on the island as "the Great Days of Sealing". Then production fell into decline, probably as a result of overexploitation of the seal stocks, and other changes began to take place. The change-over from sail to steam power was initiated in 1863, when two steamers were sent to the ice fields, and the fleet gradually expanded to include some 20 steam-powered vessels.

> *The seal fishery has been greatly altered within the last twenty years. It is now conducted chiefly by steamers – about twenty in number – and partially by small craft numbering from twenty to thirty and varying in size from ten to seventy tons (Talbot, 1882).*



Send-off of the sealing fleet

The subsequent career of this fleet, at five-year intervals, is illustrated in Table 7.2.

The increasing size of sealing vessels and the introduction of steamers had a significant effect on the distribution of Newfoundland's residents, particularly those situated on the Avalon Peninsula. In the early years of the 19th century, the outports were heavily engaged in the sealing industry, but by the end of the century, St. John's dominated it completely.

As a result, during the 1880s and 1890s, Port de Grave, Harbour Grace and Carbonear declined in population. With this shift in the base of operations, sealers from the outports journeyed to St. John's each spring to compete for berths on the sealing vessels. Although the fleet thus continued to be manned largely by external labour, St. John's captured most of the advantages of the industry's relocation.

Table 7.2
The Newfoundland Steam-Powered Sealing Fleet: Inputs and Output for Selected Years, 1865–1910

Year	Vessels[a]	Men	Seals Harvested
1865	3	323	19,086
1870	10	1,050	102,310
1875	19	3,357	252,880
1880	24	4,894	124,968
1885	18	7,466	174,681
1890	15	3,309	165,052
1895	16	3,784	234,993
1900	19	3,760	353,276
1905	22	3,532	177,100
1910	19	3,364	333,349

Source: Chafe (1923).

a. From 1865 to 1887, most vessels (about 60% of the fleet) made second trips each season to the sealing grounds. This practice then began to be phased out, and it was banned officially in 1895.

The employment generated by the sealing industry was much more extensive than direct participation in the seal hunt. It included employment both in the construction and maintenance of vessels, ancillary craft and equipment, and in the processing of pelts and the rendering of blubber into oil. In addition, the administration of supplies created employment for agents, clerks and others.

> *Shipbuilding was a great industry during the first half of the last century . . . nearly every vessel at the seal fishery was native built. Every harbour of importance on the East Coast built its own vessels; Twillingate, Fogo, Greenspond, Bonavista, King's Cove, Trinity, Hants Harbour and Conception Bay . . . [work was provided] for ship carpenters and sail makers, building, rigging and fitting out and repairing vessels, making punts, oars, gaffs . . . (Chafe, 1923).*

The sealing industry continued to be of primary importance in the economy of St. John's, and the city was less affected than other areas of the island by recession in the trade in seal products during the second half of the 19th century. The downturn accelerated after 1880 and, combined with a decline in the price of seal oil (concurrent with the increase in petroleum production), brought about severely depressed conditions in this vital segment of the colonial economy.

In the 1850s, the average export of sealskins (an indicator of the industry's size) exceeded 400,000 annually, but during the last decade of the century, the number had fallen to approximately 250,000. By this time exports of seal products were worth only about one-third as much as they had been in the 1850s and accounted for less than 10% of the total value of Newfoundland's exports. The smaller, less secure sealing enterprises were unable to survive the economic contraction and, consequently, the industry became highly concentrated in structure.

The composition of the fleet also changed. Beginning in 1906, the wooden steamers of 200–500 tons, which had predominated at the turn of the century, were replaced by steel vessels of about 2,000 tons, that were heavy and powerful enough for ice breaking. About 20 of these vessels were acquired during the succeeding decade. It proved extremely difficult, however, to find profitable use for them outside the one-to-two-month sealing season, and many were disposed of during the First World War. The fleet was reduced to eight or 10 vessels in the 1920s, and the last of those was withdrawn from the seal hunt during the Second World War.

The decline in the relative importance of sealing persisted into the present century. The overall economy of Newfoundland had grown considerably: the population, for example, which stood at fewer than 75,000 in 1836, was over 220,000 in 1901 and approximated 290,000 in 1935. On the other hand, by the late 1920s, sealskin exports from Newfoundland had dropped to an average of about 145,000 skins per year, and employment in the large-vessel sealing fleet was less than 2,000. Nevertheless, the hunt continued on a fairly substantial scale, as shown in Table 7.3.

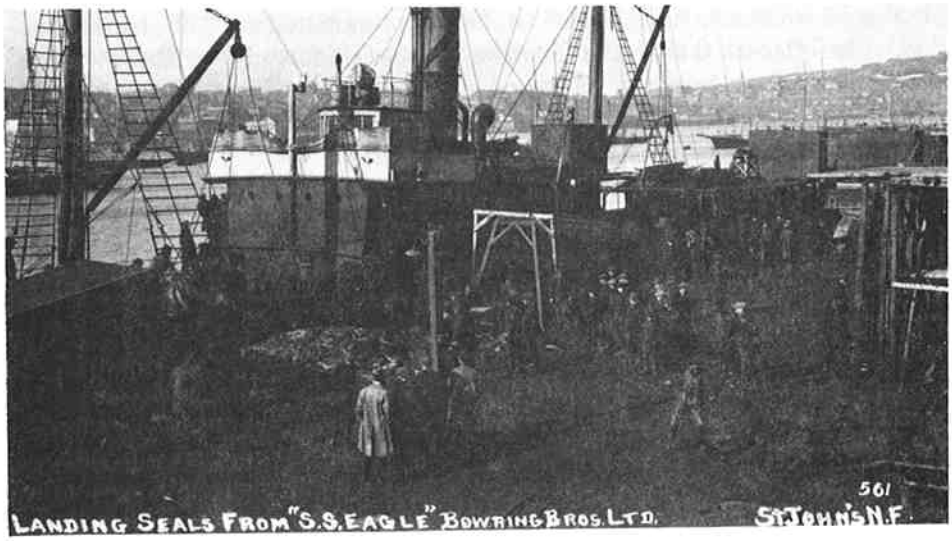
This table, unlike Table 7.2, includes landings by smaller vessels or "longliners" and by landsmen, as well as by the large-vessel fleet. The landsmen's contribution to commercial production during the period 1911–1913, inclusive – when, as far as is known, smaller vessels did not operate – was negligible.

Table 7.3
The Newfoundland Seal Harvest for Selected Years, 1915–1980

Year	Pelts Landed (no.)	Gross Value ($)
1915	47,004	n.a.
1920	22,285	n.a.
1925	127,882	n.a.
1930	241,236	n.a.
1935	143,031	n.a.
1940	159,687	n.a.
1945	11,543	n.a.
1950	121,908	n.a.
1955	55,561	n.a.
1960	37,459	115,374
1965	79,954	902,681
1970	93,286	763,079
1975	78,127	1,630,341
1980	122,223	3,322,381

Source: Canada, DFO (1985).

A striking feature of the series in Table 7.3, and one obvious even from a random tabulation, is the wide annual variation in the seal harvest: the 1930 harvest, for example, was more than 10 times larger than that of 1920. The variation is explained in part by difference in sealing "effort"; for example, the number of vessels in operation was drastically reduced during wartime (sealing ceased altogether in 1943); in part by difference in weather conditions and/or in seal behaviour (migratory pattern, and other aspects); and in part by fluctuation in seal-product prices. The relatively small harvests of the late 1950s and 1960s reflect a shift in production to a Nova Scotian fleet, crewed for the most part by Newfoundland sealers, but landing in Nova Scotia. (See Table 7.6.) Dominance in the large-vessel seal hunt was reasserted by the Newfoundland-based fleet in the 1970s.



Discharging seals from S.S. Eagle

Until the Second World War, seal oil was the principal commercial product of the sealing industry. In the post-war period, the situation was reversed: demand in the international fur trade made sealskins increasingly valuable, and the hunt came to be prosecuted primarily for pelt production. There have been other changes since 1945. The large steel steamships were replaced by diesel-powered vessels, up to 10 in number, somewhat smaller but still capable of manoeuvring in heavy ice. These were joined, in the 1970s, by a fleet of intermediate-sized fishing craft of more restricted mobility, some 140 in number, known as "longliners". Landsmen, many of whom use small powered boats, continued to harvest seals as before.

The more or less steady increase in pelt landings from the 1960s onward represented a response to improving market conditions: between 1960 and 1980, the average price for pelts increased by a factor of nine, that is, from $3 to $27 each. This development attracted additional Canadian and foreign entry into the seal hunt of the northwest Atlantic. A further important development was the establishment of a large sealskin-processing plant at Dildo, Newfoundland, in 1970. This step resulted in an improvement of seal-product quality and in an increase of Newfoundland's share of the total Atlantic seal harvest from about 60% in the 1960s to 80% in the early 1980s.

Success was short-lived. With the collapse of the major market in Western Europe, reinforced by the EC ban on imports of "whitecoat" and

"blueback" products, the price of sealskins plummeted in 1983. First the large-vessel fleet and then the longliner fleet were forced to withdraw from sealing operations, bringing to an end – temporarily at least – an industrial activity with a history in Newfoundland of almost two centuries.

Quebec

Jacques Cartier is credited with the first recorded observations of abundant seal and other marine resources in the Gulf of St. Lawrence. As for Newfoundland, the earliest interest of Europeans in these waters related to fishery resources, especially codfish, but as the world demand for oil products increased during the 18th century, more attention was paid to seals and other marine mammals. The seal hunt that has evolved in Quebec includes the harvesting of adult harp seals on their migration into and out of the Gulf, along the north shore, and the harvesting of harp seal pups and adults at the breeding patches, mainly by sealers from the Magdalen Islands.

Sealing from the Quebec north shore, or Côte du Nord, was an important subsistence and commercial activity from at least the middle of the 19th century, as shown in Table 7.4. As early as 1689, the harvest of migratory harp seals on that coast had become so lucrative that the French fought with the local Indians for its control. When Abbé Ferland visited Samuel Robertson at La Tabatière on the lower north shore in 1858, he recorded that Robertson netted at least 4,000 seals in a single season (Chambers, 1912). The total production of the north shore is not known, but it was much smaller than that of Newfoundland. Harvests declined in the late 1800s, but recovered to some extent in the present century, peaking between 1945 and 1955 (Baril and Breton, undated.) In recent years, the catch has averaged about 5,000 seals annually, valued at $100,000. (See Table 14.17, Chapter 14.)

The seal hunt at the breeding patches developed along much the same lines as the one based in Newfoundland. Colonel Richard Gridley, an entrepreneur from Boston, established himself on the Magdalen Islands about 1762 and held a monopoly of the walrus hunt in the Gulf. He brought to the islands – and virtually enslaved – a number of Acadian families from Prince Edward Island and Nova Scotia to exploit the walrus herds. By the 1790s, these workers had decimated the herds, and their energies were redirected toward the abundant seal stocks, which had already been exploited by Indians. The seal hunt thus became the most lucrative occupation of the Magdalen Islanders. By the middle of the 19th century, it was well

established. In the sample year of 1848, 21,000 gallons of seal oil, almost all of it from grey seals, were shipped out of the Magdalens (Mowat, 1984).

Table 7.4
Sealing Activity, Quebec North Shore, Between 1860 and 1890

Year	Vessels Engaged	Seals Caught
1860	5	3,311
1865	14	3,316
1870	14	17,312
1875	18	4,426
1880	21	18,397
1885	20	428
1890	22	1,905

Source: Vigneau (1969).

Commander Fortin, subsequently Canada's first fishery-patrol officer, reported on land-based sealing activities on the Magdalen Islands in 1864:

> *In an instant, the news is spread through all the islands by the ringing of bells and firing of guns, and soon the whole population rushes to the shore, whence may easily be seen the seals scattered over the ice as far as the eye can reach.*
>
> *Young and old men, each armed with a large knife, a rope and club, spring on to the fields of ice, while women remain on shore within reach, to prepare their meals, and to supply them with hot drinks in order to protect them from the effects of the cold and damp, to which they are incessantly exposed . . . This fatiguing and often dangerous labour continues throughout the whole day, and even the night in clear weather, so long as there are*

> *any seals on the ice near the shore, and the ice has not been driven away by the land breeze . . . (LeMoine, 1878).*

In 1864, the ice was close to shore for only two-and-a-half days (27– 29 April) but, in that brief period, the landsmen took 6,000 seals worth $18,000. In addition, some 25 schooners from the Magdalen Islands were fitted out for the hunt and earned $9,780 from the 1,633 seals taken. Two vessels were lost in the ice that year, leaving 13 widows and 45 orphans. Between 1875 and 1890, an estimated 60 vessels were engaged in the offshore seal hunt in the Gulf (Roy, 1963). The majority of these, however, came from ports on the middle north shore of the Gulf (Table 7.4). Subsequent developments corresponded closely with those in Newfoundland, except that, with less exposure to the north Atlantic Ocean, the ice was more stable, and there was relatively greater participation by landsmen. The progress of the hunt in recent times is shown in Table 7.5.

Table 7.5
The Seal Harvest, Magdalen Islands, Between 1955 and 1980[a]

Year	Quantity (no.)	Value ($)
1955	235	1,175
1960	n.a.	n.a.
1965	937	10,307
1970	3,033	24,264
1975	3,995	39,950
1980	7,743	157,200

Source: Québec (1955–1980).

a. The years selected, for conformity with the other tables in this chapter, distort the actual record. The average catch per year for the period was about 12,000 seals, valued at over $126,000. Annual catches varied in quantity from 235 (1955) to 41,757 (1964) and in value from $1,175 to $517,626 (for the same years). These data demonstrate the enormous annual variation characteristic of the seal hunt of the Magdalens.

Nova Scotia

Nearly a century later than Cartier, Samuel de Champlain and Nicolas Denys made similar observations on the wealth of resources in the coastal waters of the Gulf of St. Lawrence and the Bay of Fundy. Denys, writing in 1672, reported on the attempts of seafaring entrepreneurs from New England to develop the cod fishery and the seal hunt in southwest Nova Scotia. He also recorded how French settlers from Port Royal set out in the month of February to hunt grey seals on the islands located between Cape Forchu and Cape Sable:

> *The men go all round the islands with strong clubs; the fathers and mothers flee into the sea, and the young which try to follow are stopped, being given a blow of the club upon the nose of which they die . . . Fully three or four young ones are needed to make one barrel of oil, which is good to eat fresh, and as good for burning as olive oil. It has not the odour in burning of other fish oils, which are always full of dregs or settlings at the bottom of the barrels (Denys, 1908).*

Denys also noted that the Micmac Indians harvested the smaller harbour seals to obtain oil for their feasts and to grease their hair. To the present day, the name of the Aspotogan peninsula, dividing St. Margaret's and Mahone Bays on the south shore of Nova Scotia, is derived from the Micmac word for a place where the passage of seals is barred. As early as 1774, the local people were utilizing seal stocks: they made clothes from the tanned hides, used the oil to fuel lamps and consumed the meat during summer (Chantraine, 1980).

About the end of the 18th century, an enterprising Nova Scotian established an oil-extraction plant on Sable Island to make use of the area's abundant grey seal population. The station was eventually plundered by New England fishermen, but Nova Scotians resumed the hunting of grey seals on the island after the colonial government assigned permanent lighthouse keepers there in the 1820s. Other Nova Scotians turned their attention to the harp seal stocks in the Gulf of St. Lawrence and off the coast of Newfoundland. In 1829, vessels from Halifax, Lunenburg and Liverpool sailed to Newfoundland, but the results were disappointing. During the same period, approximately 20 smaller vessels from west coast ports in Cape Breton engaged in the seal hunt in the Gulf (Innis, 1954).

Another would-be sealing entrepreneur, William Foster, petitioned the Nova Scotia Legislative Assembly in 1833 for the creation of a bounty to assist large vessels to undertake the voyage to the Newfoundland sealing grounds, arguing that:

> *Those concerned in the Seal Fishery from Halifax, Liverpool and Lunenburg have to contend with a long and hazardous voyage and expensive outfit, their vessels are obliged to proceed to the Atlantic ocean to the Northward of St. John's, Newfoundland, at the very worst season of the year, this, added to the difficulty experienced in procuring of men of sober habits and sufficient skill, accustomed to such voyages, has already driven several out of the Trade. Your committee respectfully submit to the House the propriety of granting to this important branch of Trade a bounty on all Tonnage of vessels employed in it for two or three years, until it is fairly tried, when the beneficial effect arising from it may be felt in common with Newfoundland where it has been carried on with much success (Nova Scotia Legislative Assembly, 1833a).*

Subsequently, on 20 April 1833, the Assembly passed *An Act to Encourage the Seal Fisheries of this Province*, which allocated a fund of £750 to assist vessels to participate in the offshore hunt. The bounty was set at £0.16.5 per ton for vessels 45 tons and over, £0.11.0 per ton for vessels under 45 tons. Bounty assistance was restricted to vessels that fitted out and manned crews from ports in Nova Scotia and to sealing activities undertaken between 1 March and 1 June (Nova Scotia Legislative Assembly, 1833b).

Because of the high costs involved in fitting out vessels for the offshore hunt and the riskiness of the investment, Nova Scotians did not pursue Atlantic offshore sealing as vigorously as did their Newfoundland counterparts. They did, however, participate in the Bering Sea fur seal hunt in the 1880s (*Proceedings of the Tribunal of Arbitration, 1895*). They also engaged in the south Atlantic seal hunt during the 1920s. One expedition lasted eight months, for example, leaving Halifax in October 1923, and returning to port in May 1924. The pelts were unloaded at Montevideo and shipped to England for processing (*Montreal Standard*, 24 May 1924).

The large-vessel seal hunt was abandoned in the 1930s, but was reinstated after the Second World War when the Karlsen Shipping Company, which had moved to Halifax during the war, established a seal-processing facility at Blandford in 1948. In most seasons between 1955 and 1970, seal landings in the province from the Front and Gulf grounds exceeded those in Newfoundland, as indicated in Table 7.6.

Table 7.6
The Nova Scotian Seal Harvest,[a] Between 1950 and 1980

Year	Quantity (no.)	Value ($)
1950	39,093	76,600
1955	99,732	245,400
1960	111,600	585,500
1965	54,966	549,000
1970	43,209	432,000
1975	33,309	635,000
1980	27,882	660,000

Source: Canada, DFO (1985).

a. The data include a small indigenous landsmen's catch.

Developments in the seal hunt of the Atlantic region subsequent to 1975 will be found in the account of the recent or contemporary sealing industry and of the trade in seal products presented in Chapters 14–17.

Appendix

Appendix 7.1 Landmarks in the History of Canadian Sealing

1000 B.C. (approx.)	Inuit of the Early Dorset culture engage regularly in sealing in the central and eastern Arctic and in Labrador.

1000 A.D. (approx.)	Inuit of the Thule culture move into the central and eastern Arctic and Labrador and greatly improve efficiency in sealing technology.
1534	French explorer Jacques Cartier notes Labrador Indians harvesting seals in the Strait of Belle Isle. By the end of the 16th century, seals become an important catch for Basque, Breton and Norman fishermen on their annual expeditions to the western Atlantic fishing grounds. Settlers begin harvesting seals from shore.
1794	The introduction of wooden schooners to Newfoundland waters enables seals to be hunted at the breeding patches offshore.
1863	Steamers replace sailing vessels in the Newfoundland offshore (large-vessel) seal hunt. By this time the annual seal hunt employs a major proportion of the island's population and accounts for about one-third of its exports. The yearly harvest often exceeds 500,000 seals.
1895	Concern over dwindling seal populations leads to the enactment of laws in Newfoundland to protect animals of breeding age by prohibiting sealing vessels from making more than one trip a season to the ice.
1906	Wooden steamers are replaced with much larger steel craft in the Newfoundland large-vessel seal hunt.
1911	The Fur Seal Treaty is signed by the United States, Russia, the United Kingdom (on behalf of Canada) and Japan, banning the pelagic hunt for north Pacific fur seals. Pelagic sealing, in which Nova Scotian sealers were active, had led to disastrous depletion of the stock.
1946–1948	After the large steel steamships are phased out of the hunt, their place is taken by a fleet of smaller diesel-powered vessels, based in Nova Scotia as well as in Newfoundland.

	Sealskins replace seal oil as the principal product of the sealing industry.
	Plant for primary sealskin processing is established at Blandford, Nova Scotia.
1949	Newfoundland becomes a province of Canada, leading to extensive and intensive research on the harp seal stocks by federal agencies. Seal-protection regulations come into force.
1961	A closing date, to protect adult females in moulting concentrations, is imposed on the annual seal hunt.
1964 and after	Increasing public interest in harp and hooded seals leads to more population studies, better control of hunting procedures, and research into humane killing methods.
1967	The International Commission for the Northwest Atlantic Fisheries (ICNAF) begins collecting scientific data on harp and hooded seal populations.
1970	The use of aircraft to hunt seals is banned.
	A plant for the primary processing of sealskins is established at Dildo in Newfoundland.
1972	The *Marine Mammal Protection Act of 1972* is passed by the U.S. Congress, effectively prohibiting the import of seal products.
1977	Canada extends national fishery-management jurisdiction seaward over an exclusive economic zone (EEZ) 200 nautical miles wide adjacent to the coast.

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PART III

Public Concerns about Sealing

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Chapter 8

Humanity's Relation to Animals

To kill an animal however painlessly, or however humanely, is still to inflict harm on that animal (Sumner, 1985).

As a sealer, as a fisherman standing before you today, I say to you that I am the endangered species. I am endangered but I still fight back. I will survive. I will not let animal rights become more important than human rights. I will not let people give souls to animals while they rob me of my human dignity and right to earn a livelihood (Small, 1985).

From the beginning of time, the human race has sought to control the natural environment for its own purposes. The degree of this control has increased continuously to the extent that humanity has found it necessary to establish rules of conduct governing the use of the natural environment. In determining what is right and wrong in humans' interactions with animals, consideration of moral principles has been necessary. In particular, there are questions of what obligations humanity has to animals; whether animals have rights of their own; when and how humankind can use animals; and when and how humankind can kill animals. In dealing with these questions, it is important to realize that views on what is moral or ethical vary. Interpretation depends on many factors such as history, community, geography and culture.

Although the primary objective of the Royal Commission is to examine the various principles that should be followed in respect to the seal hunt and the management of seal populations in Canada, it is necessary to do so within the general context of how humans interact with animals.

There is no single, generally accepted set of principles governing human interaction with animals, and there is a wide range of viewpoints. With respect to sealing, there are several types of seal hunt and reasons for killing seals. While the clubbing of seal pups has been the element of Canadian sealing that has attracted most attention, other elements also pose

important and difficult questions. These issues include the hunting of seals by aboriginal peoples for subsistence; the importance of seal hunting to the people in the coastal areas of mainland Newfoundland, Labrador, the Quebec north shore, and the Magdalen Islands; the level of future seal populations; and the possibility of culling certain seal species in order to assist the fishing industry. Judgments on each of these issues may vary greatly, even on the basis of a single set of principles.

Common to most of the viewpoints expressed below is a recognition of humanity's special responsibilities and obligations to the environment. The practical expression of this viewpoint, however, may be very diverse. In this chapter no attempt will be made to reach final conclusions. Rather, the chapter sets the background against which some of the technical issues can be judged.

Different Views about the Treatment of Animals

Animals as Individuals

Morgan (1983) categorized viewpoints concerning animals according to the degree to which human interests dominate animal interests. She suggested the following classification: animal exploitation, animal use, animal control, animal welfare, animal rights, and animal liberation. A note of caution is necessary here because the viewpoints described by Morgan consider only the treatment of individual animals. The more general concerns with what happens to the population of a single species and the ecological interaction between species are not addressed.

The group labelled as standing for animal exploitation takes the view that humans are entitled to treat animals as they will, without regard to their interests or suffering. Only a small minority (2%–5%) of respondents in the six Western countries surveyed in the Royal Commission poll (see Chapter 11) considers that humans have the right to use or kill animals without restraint.

The next two groups, representing animal use and animal control, can be discussed together because they tend to hold very similar points of view. Both consider animal populations as resources that should be harvested in the most efficient manner, on the basis of social and/or economic criteria; at the same time overexploitation should be avoided. The justifica-

tion for this attitude is based more on the need to produce long-term benefits for humankind than on principles of biological conservation. Nonetheless, humanity has the responsibility to protect animals both from suffering and from extinction.

Animal-use and animal-control groups have their differences: the former are more inclined to practise *laissez-faire*, and the latter are more interventionist in philosophy. The differences in viewpoint often relate to the interest of the individuals involved, some of whom are actually engaged in hunting and fishing and some of whom take part in management agencies. Members of the first group hold that no action to conserve the population or to correct alleged cruelty should be taken until the need for action has been conclusively proved. Members of the second group believe that rules and regulations should be introduced as soon as possible. The long-term result is likely to be much the same in both cases: protected species, high sustained yields, and little, if any, cruelty. The pattern whereby a fishery or sealing industry reaches such a situation, however, could be very different under the two approaches. Participants in the sealing and fishing industries could normally be expected to share views similar to those of the group promoting animal use, whereas employees of the federal Department of Fisheries and Oceans (DFO) and their provincial counterparts could normally be expected to share views similar to the group promoting animal control.

Supporters of animal welfare emphasize the need to avoid inflicting suffering. Some of their principal concerns are with captive or domestic animals. As far as wild animals are concerned, they differ from the previous groups in the relative emphasis they give to the avoidance of causing suffering to animals. If they were convinced that harvesting could be carried on without inflicting significant suffering, they would probably develop long-term policies very similar to those advocated by groups supporting animal use and animal control. If, however, significant suffering were an unavoidable part of some harvesting, the group supporting animal welfare might call for elimination of that harvesting or its substantial reduction even if such action involved significant economic cost. Opinion polls suggest that most people can be categorized as supporters of animal-use, animal-control or animal-welfare viewpoints.

A clear statement of the ethical views on harvesting of these groups was made by the Hon. N. J. Cournoyea, Minister of Renewable Resources, Government of the Northwest Territories: "A wildlife harvest is ethical if animals are killed humanely and the populations are maintained" (Cournoyea, 1985).

Two final categories of viewpoints, animal rights and animal liberation, are held by only a small minority. Only 2%–7% of the respondents in the countries polled by the Royal Commission expressed attitudes that correspond to these categories (see Table 11.2, Chapter 11). These respondents share very similar basic principles and ultimate ends. The classification makes a distinction between animal abuse, which is opposed by both groups, and animal use, which, provided that no killing or other suffering is involved, might be allowed by the group supporting animal rights. In terms of their manner of viewing animals, however, these groups can be considered together.

The fundamental principle put forward by the animal-rights movement and the animal-liberation movement is that animals have certain rights. Advocates of this viewpoint draw analogies with the tenets of those who champion human rights. They attempt to look at questions from the non-human viewpoint and to treat the rights of animals as essentially similar to those of humans.

Singer (1975) bases his argument for animal rights on the fact that animals experience both pain and pleasure: "No matter what the nature of the being, the principle of equality requires that its suffering be counted equally with the like suffering, in so far as comparisons can be made, of any other being." On the subject of killing animals, he argues that certain considerations give some lives more value than others, but that there is no sharp distinction between killing humans and killing animals.

Regan (1985), in dealing with the ethics of commercial sealing, makes the point in very personal terms: "Whereas some people see seals as stocks or herds, with quotas to be harvested or populations to be cropped, others (myself included) see them as individuals, each one of which has a life of its own to live . . . "

Sumner (1985) expressed the view that "ethical issues about the hunt must reflect the fact that animals, in this case seals, do count, or matter, to some extent in their own right; that is, they have some intrinsic value, or intrinsic importance. The benefit to humans from the seal hunt does not justify the high cost to the seals."

Stone (undated) provides an assessment of the interrelationship that encompasses the various viewpoints so far discussed, while opting for a middle ground:

> *. . . humans have a built-in source of conflict. On the one hand we share with other animal species a biological drive to claim a place in the sun, and it is that drive which leads us to kill animals for food, to use their hides, to displace them to build our cities, and to rely on them to develop medicines to cure our diseases . That biological drive is at tension with a moral awareness which is central to our institutions, laws, mores and civilisation. To resolve the conflict we must develop a system of ethics or morals which acknowledges the relevance of both drives. . .*
>
> *Yet there is an equally powerfully converse argument. In rural societies, there are no protest movements concerning animals. People who live close to the land are aware from childhood that all animal life is a matter of struggle against starvation and predators. Only when people are protected by the extraordinary productivity of modern farms from the seasonal struggle for food does the idea arise that man can live in utopian co-existence with other animals. If we were to desanitise our cities, if city folk were brought a little closer to the struggle for food, what would disappear (the argument goes) is not the use of animals, but the protest movements.*
>
> *Now I'm pretty sure that it is the latter view which is correct. On our list of priorities, animal welfare gives way quickly to issues of our own survival. But it does not follow that the concern with animal welfare is trivial. The advocates of animal welfare may be middle-class and citified but the issues they raise compel attention.*

After discussing the various viewpoints put forward, Stone concludes that a moderate approach is necessary as a basis for reform: "It is time for moderates on all sides of this long debate to lay the foundation for progress."

Emond (1985) states that the animal-rights group gives some answers to the fundamental questions about the kind of society Canadians wish to form. The following statements are extracts from his deposition:

> *But the animal rights supporters go much further than equal treatment of all persons. They seek to expand our moral consciousness and hence the boundaries of our moral community by including all animals in such a community. There is however another view of society, one that sees society as an* ecological community, *tied together "by biological relationships in interdependent webs or systems of life." Such a view focuses on the characteristic structures of an ecosystem and emphasizes its capacity to withstand changes or stress. (Emphasis in original)*

The ecological viewpoint proposed by Emond and further discussed later in this chapter stresses the maintenance of animal populations rather than the obligation to relieve the suffering of individual animals: "This is not to say that the environmentalists feel no moral obligation toward individual animals, but only that the integrity of the broader community is sometimes better served in ways other than animal welfare. The ecological community seeks harmony and balance." Emond concludes by saying: "Were seals an endangered species, prohibition would be a sensible response. If they are not, it seems to me that the interests of the people (the hunters and consumers) clearly deserve respect."

There appears to be a contradiction among some of those who champion the cause of animal welfare by concentrating on the seal hunt. How, for example, can one contend that killing seals is immoral and yet not condemn other types of killing (e.g., Barry, 1985; Snow, 1985)? Sealers appearing before the Royal Commission found it difficult to understand the attitude of those members of the anti-sealing groups who oppose the seal hunt, yet accept the killing of animals for their own consumption: "Amidst the vast slaughter that mankind for its diversion, sustenance, and clothing visits upon the animal kingdom, why should the seal hunters of Newfoundland be selected for abuse?" (Newfoundland Fishermen, Food and Allied Workers Union, Local 1252, 1985). Cournoyea (1985) addresses the same subject as follows:

> *It is ironic that our people, who live so close to the land, are being affected by a people who are so far removed from the natural environment, namely urban-based animal rights groups. Urban people, through their consumptive use of fuel, power, manufactured goods,*

> *processed foods, and non-renewable resources contribute to far more serious environmental destruction than well-managed harvesting of a renewable resource can. Provided that conservation measures are implemented, renewable resource harvesting can continue indefinitely.*

Many of those most active in the animal-rights movement are aware of this problem. Thus Singer (1975) has said:

> *To protest about bull-fighting in Spain or the slaughter of baby seals in Canada while continuing to eat chickens that have spent their lives crammed into cages, or veal from calves that have been deprived of their mothers, their proper diet, and the freedom to lie down with their legs extended, is like denouncing apartheid in South Africa while asking your neighbours not to sell their houses to blacks.*

In a democratic society, those who profess strong viewpoints often receive extensive media coverage, despite the fact that they may represent a very small proportion of the population. This section has dealt extensively with the viewpoints of the animal-rights group and the animal-liberation group, and reactions to those views by others who hold more moderate, middle-of-the-road views. Those presenting animal-rights and animal-liberation views before the Royal Commission were as numerous and as vocal as those holding the middle-of-the-road viewpoints referred to above, although the latter are much more numerous in the population as a whole. The society in which we live, however, is not a vegetarian society. The number of mammals, birds and marine species killed each year is in the billions. This figure is not likely to change in the foreseeable future, and it must be taken into account in assessing the viewpoints set out in this section.

Animals as Species and Populations

In the arguments set out up to this point, the classification of viewpoints has been in terms of the consideration given to the individual seal. The distinction is made between those at one extreme, who view a seal

as just so much meat or as a potential fur coat, and those at the other, who believe that the rights and interests of an individual seal should be given as much attention as those of a human being. Even in this classification, there is not necessarily a sharp division between seal killers and strong supporters of the rights of animals. Instead, there is a middle ground into which most people fall, along with the aboriginal peoples, who both kill seals, and recognize the interests of seals.

Other classifications are possible, and another important ground of classification exists in terms of the attention given to the populations of seals, and to the ecosystems in which these animals live. Again, a progression can be noted from careless slaughter or destruction of the environment, at one extreme, to rigid conservation and opposition to all interference with the natural system, at the other. Individuals or groups often tend to take similar positions under both classifications, but this is not always the case. Economic groups interested in the long-term welfare of their members should have a strong interest in maintaining healthy seal populations, even if they may have little interest in the individual seal. Many animal-rights groups have little interest in populations or ecosystems *per se*; indeed, some extreme members have been responsible for some of the more ecologically irresponsible acts, such as the liberation of mink in parts of the United Kingdom.

A similar policy of strong support for conservation of animal populations and ecosystems may emerge from quite different basic attitudes, attitudes of ethical concern or of enlightened self-interest. An example of the former is the statement of MacKay (1985):

> *The underlying philosophy which suggests that living animals are merely resources, is the philosophy that had led to widespread ecological problems, some with tragic consequences of great magnitude for people as well as non-humans. More and more we are groping, however inconsistently and perhaps even illogically, for new perceptions of our own place in the scheme of things. We are looking for a new way to relate to others, human and non-human who share the finite resources of this planet.*

One of the best statements of the latter approach, and one that receives wide support, is the World Conservation Strategy. Prepared by the

International Union for Conservation of Nature and Natural Resources, (IUCN) with the co-operation and support of the World Wildlife Fund (WWF) and the United Nations Environment Programme (UNEP), and in collaboration with FAO and UNESCO, that strategy defines conservation as:

> *. . . the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations (IUCN, 1980).*

This approach emphasizes the human use of resources and particularly their use by future generations. The primary concerns of this strategy are that the harvest of populations be sustainable, and that the harvest not unduly interfere with ecosystems and ecological processes. Wildlife species should be conserved; if they are harvested, the harvest must not endanger the species and should provide on a sustained basis for future human needs. Protection of the ecosystems and the environment is essential. Living resources – plants and animals – are critical for human survival. Since human requirements for these resources are rapidly increasing, society must recognize the importance of conserving these resources. Whereas this strategy is concerned solely with ecosystems and populations, Morgan's (1983) analysis deals only with the individual animal.

The Canadian Nature Federation was founded to promote awareness and enjoyment of nature, as well as the conservation of the natural environment so that the integrity of natural systems is maintained. In a submission to the Royal Commission, the Federation states:

> *The Nature Federation does not oppose the consumptive use of wildlife and does not oppose sealing. Throughout history, the people of Canada have harvested wild living things for food and clothing, originally to serve personal needs and later for trade. The sealing industry developed out of this tradition . . .*
>
> *Individual sealers . . . probably as a rule live more simply and with less of an impact on the environment on which the animals they kill ultimately depended, than do most of the people in cities who oppose sealing . . .*

> *However, although the Nature Federation does not oppose sealing, as an organization representing Canadian naturalists, it is not its policy to promote sealing, either. Rather, the Canadian Nature Federation promotes and supports policies that ensure the perpetuation of the vast herd of Harp Seals which inhabits the northwest Atlantic, and policies that increase public awareness and understanding of this herd, which is part of Canada's natural heritage (Fox, 1985).*

The Minister of Renewable Resources of the Government of the Northwest Territories expressed the following view to the Royal Commission:

> *Fish and wildlife resources should benefit people. In order to provide those benefits, however, the supply of those resources should be maintained by the application of sound resource management principles . . . The Department encourages the wise use of seal resources for the benefit of northern people . . . (Cournoyea, 1985).*

It is a point of view very similar to that expressed in the World Conservation Strategy.

Special Case of the Aboriginal Peoples and Others Dependent on the Seal Hunt

The Hon. T. Curley, Minister of Economic Development and Tourism, Government of the Northwest Territories, spoke about the Inuit relationship with animals in the following manner:

> *The Inuit hunter is a proud and independent man, preferring to earn his living by hunting, retaining all the skills and self-esteem that are the symbol of every craftsman. He would rather provide for his family through his own efforts than rely on welfare, which he considers demeaning and unmanly. We in the North*

> *view the present anti-sealing campaign as a totally misguided intrusion into our lives.*
>
> *The Inuit and Dene, because of their reliance on renewable resources, have earned the reputation of being professional conservationists, who support strongly the "wise use" of the earth's resources. Non-indigenous people do not have the same relationship with the land, instead they attempt to manipulate it. This difference in philosophy manifests itself in the animal rights movement. Urban people, through their consumptive use of renewable and non-renewable resources and manufactured goods, contribute to far more serious environmental destruction than well-managed harvesting of a renewable resource can. Provided that conservation measures are implemented, renewable resource harvesting can contribute indefinitely to the well being of our residents (Curley, 1985).*

The aboriginal peoples of northern Canada live on land which does not permit farming. Consequently, since time immemorial, these aboriginal people have depended on hunting and fishing for their existence. Their view of the natural world is different from that of non-aboriginal people living in the south, particularly those who live in urban centres. Aboriginal people usually have a respect for animals and the environment in which they live. Being well aware of the dangers of over-exploitation, they have always realized that wildlife species have a right to existence.

Okituk (1985), speaking on behalf of the Makivik Corporation, stated to the Royal Commission that the Inuit view every living creature as entitled to life. The animals which Inuit kill to survive are a renewable natural resource. There is balance in the ecosystem which must be respected, and it is the duty of Inuit to maintain a balanced system. Ernerk (1985), speaking on behalf of the Keewatin Inuit Association, declared that seal hunting has a cultural and social significance to the Inuit. It is an affirmation of their identity and culture. It is an important means of subsistence. According to Amagoalik (1985), speaking on behalf of the Inuit Tapirisat of Canada, "Ironically, a ban on seal hunting in the Arctic would inevitably result in grave harm to other animal populations. The reason is that most other major food sources, like caribou, whales, geese and anadromous fish, are neither as big a product nor as plentiful as seals."

The following extracts from a submission by the Labrador Inuit Association (1985) express very clearly the Inuit's special relationship with animals :

> *At the centre of our beliefs is the recognition of the relationship of our souls to the environment, to the animals and to the spirit of all our ancestors. We are people of natural laws.*
>
> *As Inuit we too have given some human characteristics to our animals, including the seal, but we give them those characteristics exclusively in the spiritual realm and do so to recognize and pay tribute to the seal and its importance to us in our physical and cultural lives. It is our way of expressing our respect for the seal and our appreciation of our environment.*

Out of regard for this special relationship, the executive, legislative, and judicial authorities in Canada have recognized:

1. That since time immemorial, the Inuit and Indian peoples

   (a) have been exercising personal and usufructuary rights over the territory occupied by them;

   (b) have been exercising fishing, hunting and trapping rights while in possession and occupation of these lands.

2. That the diet of the Inuit and Indians consists mostly of the food which they trap, hunt and fish, that their religion revolves around the game animals, and that the killing of all animals has a strong religious significance for them.

   (*Le Chef Max "One-Onti" Gros-Louis et autres contre la Société de développement de la Baie James et autres* 1974 Rapports de Pratique (Quebec, Canada) 38 and authorities therein cited is authority for these statements.)

In addition to aboriginal peoples, there are others living on the coast of Newfoundland, Labrador, the Quebec north shore of the Gulf of St. Lawrence, and the Magdalen Islands who are also dependent on hunting and

fishing. Hunting seals is part of their social and cultural fabric. Since this subject is dealt with in Chapter 15, it is sufficient to say here that sealers often have an intimate appreciation of nature, partly because their livelihood is directly tied to the environment. Like arctic sealers, Atlantic sealers live in an environment which either precludes farming, or where farming and employment opportunities other than hunting and fishing are very limited. Although the harvest of seals takes place during only a few weeks in each year, it comes at a time when sealers have no other source of employment to provide cash income. To sealers, then, the harvesting of seals is a natural and fully acceptable practice, since they view seals as a renewable resource.

Small (1985), speaking on behalf of the Canadian Sealers Association, told the Royal Commission that sealers want the right to harvest the renewable resources of the land and sea. They are not interested in relying on social welfare assistance, preferring to earn their living with pride and dignity. They are bitter about the anti-sealing campaign and believe that their views were ignored by the protest groups.

Public Opinion

In a democratic country, the governing bodies are elected by universal suffrage and therefore depend on the public will. Parliament, in enacting legislation, and the Executive, in promulgating rules and regulations, take into account the opinion of the majority. It is through free and complete examination and debate of the issues involved, without any fear of reprisal, that the population makes known its will to elected representatives. There are dangers, however, in permitting the majority to impose its will on the minority. Society is in a constant state of evolution. What was acceptable yesterday is not necessarily acceptable today. The majority opinion which existed yesterday may become the minority opinion tomorrow. Moreover, minorities can often reflect the cutting edges of progress and civilization. Individual citizens and groups must be protected against decisions that a majority might wish to adopt, even though that majority might be acting in what it believes to be the common interest.

The population expects the governing authorities to provide leadership, although that leadership may not always be in accordance with the will of the majority. Freedom of speech, freedom of assembly, and the right to practice one's religion are examples of individual rights which the majority are obliged to respect. Prior to the enforcement of the Canadian

Charter of Rights and Freedoms, the courts relied on the rules of natural justice to protect individual citizens and groups. Since the enactment of the Canadian *Constitution Act, 1982* these and other fundamental rights have been enshrined in the Constitution.

The Canadian *Constitution Act, 1982* contains provisions guaranteeing aboriginal, treaty or other rights or freedoms pertaining to the aboriginal peoples of Canada. Sections 25 and 35 of the Act read as follows:

> 25. *The guarantee in this Charter of certain rights and freedoms shall not be construed so as to abrogate or derogate from any aboriginal, treaty or other rights or freedoms that pertain to the aboriginal peoples of Canada including*
>
> *(a) any rights or freedoms that have been recognized by the Royal Proclamation of October 7, 1763; and*
>
> *(b) any rights or freedoms that may be acquired by the aboriginal peoples of Canada by way of land claims settlement.*
>
> 35. *(1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.*
>
> *(2) In this Act, "aboriginal peoples of Canada" includes the Indian, Inuit and Métis peoples of Canada.*

These special provisions were enacted at the request of the aboriginal peoples in order to help them preserve their culture and identity, their customs, traditions and languages.

Non-Consumptive Uses of Seal Populations

Hunting is not the only potential source of economic benefit from wild animals. Many of those criticizing seal hunting on ethical grounds have suggested that emphasis on the use of seals should be switched to non-

consumptive uses. For some African countries the economic benefits obtained from the tourist trade currently exceed those from any other use of wildlife. Such non-consumptive uses are now receiving increasing attention in discussions of resource management. The possibility of tourist visits to the harp seal nursery areas must be assessed. While the Atlantic ice lacks the warm climate and proximity to the Indian Ocean beaches that so help the East African tourist industry, for which wildlife is the major attraction, several interveners appearing before the Royal Commission recommended that Canadian tourism authorities promote tours to view seal populations. Atlantic Marine Wildlife Tours Ltd. stated that the harp seal herd is one of the world's largest single concentrations of marine mammals; as such, it could serve as a tourist attraction (Lewis, 1985). (See Chapter 17.)

Seal tourism and seal hunting are not necessarily incompatible. For example, a geographical separation could allow harvesting of seal pups and seal-watching tours to co-exist, as these activities do in South Africa and Uruguay. (See Chapter 28.) Clearly there are occasions when the two types of activities are incompatible. Animals that are hunted normally become shy and, therefore, less valuable as tourist attractions. This does not seem to be a factor in the harp seal hunt, for the seals seem equally indifferent to moderately close approaches by either hunters or photographers.

In general there is as yet little significant non-consumptive use of seals in Canada. The possibility of future non-consumptive uses should therefore not be forgotten, though it does not seem to be a significant factor in framing management policy. It should also be pointed out that some proponents of the animal-rights viewpoint may regard non-consumptive use of animals as representing interference with, or harassment of, animals and therefore as unacceptable.

Regional Differences

Regional differences, not just in the type of sealing, but in attitudes to many aspects of sealing, including the views on the morality or immorality of the activity, are very striking and need careful consideration in any attempt to reach a balanced judgment on the ethical issues involved. At a fairly superficial level, the difference in economic importance of sealing in Canada as a whole (negligible), in St. John's (minor), in some Newfoundland outports (an important contribution to income at a critical time of year), and in parts of the Arctic (where the harvest is vital to subsistence), provide one set of criteria for determining whether sealing is justified and acceptable. But narrow economic criteria, it is contended, are not enough.

Regional differences call, where possible, for regional solutions. To some extent it may be possible to achieve these solutions. Regulations can differ from region to region, or special allowances can be made for Inuit hunting when calculating quotas for seals. Many actions, however, are unselective, either explicitly, or in their practical effect. The wording of the European Community's (EC) ban was specifically aimed at the killing of young harp and hooded seals (whitecoats and bluebacks). Yet, though other factors were at work, the EC ban was a significant element in the collapse of the whole sealskin market in Europe. Among the main losers from this collapse were the Inuit people, who received only a fraction of the price previously received for their ringed seal skins, and who had never hunted whitecoats or bluebacks.

Summary

There are many different views concerning what constitutes the desirable relation between humans and animals. These inevitably influence peoples' perceptions about the sealing issues. At one extreme, some hold the view that no seal or other animal should be killed. For others, some killing of animals is acceptable, but the important questions (as the issue relates to seals) are whether the killing threatens the sustained existence of seal stocks; the degree of pain or suffering caused; the effect the seal hunt has on other animal species, such as fish stocks; and whether the purposes for which the seals are killed are important or trivial.

There have been serious differences among the various seal hunts in Canada concerning the threat to the stocks, the degree of humaneness practised in the kill, and the importance of the activity to both the participants and the final consumers of the seal products. Even from a single viewpoint, the acceptability of different sealing activities may vary. Different policies may therefore be desirable for different situations.

To investigate whether the stock is depleted or threatened with extinction, the average time required for a clubbed or shot seal to lose consciousness or die, the contribution of sealing to the economy of different communities, or the uses made of seal products, can help to resolve some arguments about the acceptability of a given sealing operation, but it cannot resolve some of the more fundamental issues. As long as there are basically different attitudes to the relation between humans and other animals, different conclusions about appropriate public and private behaviour will remain.

To those who view seals mainly as a potential economic resource, or to those concerned principally with the conservation of animal populations or ecosystems, a seal fishery that satisfies the following conditions would be acceptable:

- The seal polulation should be in a healthy condition.
- The numbers killed should not exceed the sustainable yield.
- The seals should be killed quickly and humanely.
- The seal products should be put to useful purposes with minimal waste.

From the viewpoint of supporters of animal rights or animal liberation, a hunt represents the exploitation of seals; it interferes with the animals' rights to live and to multiply within the constraints of the natural checks and balances of the ecosystem. To these people commercial hunting represents an unnatural and immoral intrusion by humankind on the welfare of animals.

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Chapter 9

The Campaign Against Sealing

> *Right off from the beginning, it was my belief that what we were dealing with here was not so much an issue of conservation in the traditional sense of the word, but we were dealing with an issue that was more directly linked with ethical and moral concerns (Moore, 1985b).*

> *We feel very angry about the methods used by certain anti-sealing groups to halt the sealing industry in Newfoundland. If the curtailment of the seal hunt was the result of a need to conserve, this would be acceptable. It is not easy to accept that our sealing industry was so easily destroyed by means of propaganda (Barker, 1985).*

The campaign against Canadian sealing, principally the hunt of harp seal pups, has run for more than 20 years. Millions of people around the world have become involved on one side or the other in this controversy. The effort expended by both sides has been large relative to the size of the sealing industry. As Lavigne (1978) has stated:

> *It would appear that the amount of public attention, including media coverage, focused on the harp seal is disproportionate to the realities of the situation. The gross economic value of the sealing industry to Canada does not account for the attention it receives from the general public, the media and various government officials.*

This chapter briefly traces the history and nature of the anti-sealing protest, and the reactions of governments and proponents of sealing to this campaign.

History of the Anti-Sealing Movement

Prior to 1950, little concern was expressed about the Canadian and Newfoundland seal hunts, and the general public outside the areas of the hunt knew very little about sealing. In the 1950s and early 1960s, individuals and organizations began to question two aspects of the seal hunt. The Canadian Audubon Society was concerned that too many harp seals were being killed, and that the population could not tolerate the level of harvest (Horwood, 1960; Sergeant, 1963; Pimlott, 1966). After observing the hunt, Lillie and Cunningham raised the concern that seals were being killed inhumanely; various Canadian animal-protection organizations adopted the cause (Horwood, 1960). At this time, however, the idea that the seal hunt should be completely abolished was rarely, if ever, suggested.

Sustainable harvest levels and humaneness of killing methods are still major concerns of a number of organizations. Certain groups that were troubled by these issues in the late 1950s and early 1960s worked with government and sealers to achieve solutions that would sustain herd populations and prevent inhumane killing, and they remain concerned about these questions to this day (e.g., Brown, 1985; Fox, 1985).

In 1964, the seal hunt became more widely publicized and more groups became involved. Artek Films produced a documentary on the seal hunt containing scenes in which a seal was cruelly killed. The film was aired on Radio-Canada in Quebec and subsequently, on German television. The authenticity of this film is in doubt due to conflicting statements that the cruel killing was staged (e.g., Pimlott, 1967). Lust, a Montreal journalist who saw the film, wrote an article about the hunt entitled "Murder Island"; this article was published in more than 300 newspapers around the world (Lust, 1967). Lust's article was probably the first introduction for many people to the Canadian seal hunt.

In 1965, Davies began a campaign in behalf of the New Brunswick Society for the Prevention of Cruelty to Animals which was aimed at abolishing the Canadian seal hunt (Davies, 1970). Davies directed his efforts to creating a public attitude in Canada hostile to seal hunting, to encouraging Europeans to boycott harp seal pelts, and to soliciting foreign support for Canadians fighting against the seal hunt (Davies, 1970). He later continued his campaign with the International Fund for Animal Welfare (IFAW), which he founded in 1969, and he has remained actively involved in the anti-sealing movement.

The years from 1965 to 1969 were a period of great anti-sealing activity. The hunt was the subject of intensive media attention, with television coverage and articles and photographs in many influential newspapers and magazines. Davies personally escorted reporters and photographers to the ice each year, starting in 1967. Key elements made the hunt ideal for media coverage: the clubbing of harp seal pups in the Gulf of St. Lawrence took place each year during a single concentrated period and within concentrated areas; the seals were very young and very attractive; the killing took place in the open on the ice; and the killing was bloody and looked brutal.

During this period, many aspects of the hunt were condemned. Protesters charged that too many seals were being harvested and claimed that this was endangering the species. Frequently they charged that the killing was exceptionally cruel, and that pups were skinned alive. They claimed that it was wrong to kill helpless, nursing seal pups in front of their mothers, and that the mothers wept over the carcasses of their young; that sealers made little money from the hunt; and that there was no need for the products of the hunt. These charges have been repeated throughout the history of the anti-sealing campaign.

The widespread publicity given to the sealing issue during the late 1960s aroused considerable public concern in North America and even more in Europe. Canadian government officials in Ottawa and abroad received many thousands of letters (Coish, 1979), and protesters in West Germany organized a petition, containing a reported three million signatures, to persuade the Bundestag to ban the importation of sealskins (Anonymous, 1967). As a result of the publicity and public concern, European prices and markets for sealskins were reduced considerably (Foote, 1967).

Media interest in the seal hunt seemed to die down during the period from 1970 to 1975, but the protest movement remained active. IFAW tried to promote tourism as an alternative use of the seal herds in the Gulf of St. Lawrence. Organizations concerned with animal rights became more deeply involved with the seal hunt. Some protest actions were undertaken, but the period appears to have been relatively calm in comparison to the activity that began in 1976. At the same time, the problems affecting other marine mammals were receiving widespread attention, especially in the United States. Most of the stocks of large whales were depleted, and great numbers of porpoises were being caught incidentally in the U.S. tuna purse-seine fishery in the eastern Pacific. These events and, to a lesser extent, concern over harp seals led to the adoption of the United States *Marine Mammal*

Protection Act of 1972, which has served as a significant milestone in the changing attitudes towards marine mammals.

Greenpeace began its involvement with the seal hunt in 1976. Basically an organization with an environmental focus, its initial concern was the numbers of seals being harvested, rather than the issue of cruelty. Greenpeace was extremely successful in attracting media coverage by, for example, protecting seals with their own bodies, dyeing seals so that their pelts would be worthless, blocking the path of an ice-breaker, trying to disrupt the send-off of the sealing fleet, and one protester handcuffing himself to a ship's towline. All of the groups ensured that their activities had media coverage and thus stirred up world-wide interest in the hunt. Prices for sealskins, which had recovered during the early 1970s, again plummeted (Wenzel, 1978).

Some protesters, by their presence on the ice close to seals, contravened the Seal Protection Regulations or other relevant laws and were charged and convicted in court. The actions of protesters and the perceived threat from some protest activists no doubt caused some sealers to refrain from sealing in their presence. In particular, sealing vessels stayed well clear of the *Sea Shepherd* in 1983, presumably out of fear of being rammed. Its captain, P. Watson, had previously rammed a pirate whaling vessel off the coast of Portugal.

In 1977, Davies turned IFAW's attention away from activities on the ice and directed it toward political action in Europe to end the seal hunt. The goal of the anti-sealing campaign in Europe was to force the European Community (EC) to ban the importation of pelts from harp and hooded seal pups. To this end, IFAW:

- purchased full-page advertisements in 15 European newspapers, with a potential readership of 44 million, asking concerned readers to write their members of the European Parliament (MEPs) and encourage them to support the import ban;

- encouraged the British and Canadian members of IFAW to write key MEPs;

- presented a three million-signature petition against the hunt to the president of the European Parliament; and

- sent a 17-member IFAW team to lobby the MEPs intensively for two weeks prior to the vote (Davies, 1982).

During the campaign IFAW spent more than £1,500,000 (Best, 1983a). Other anti-sealing organizations were also active in campaigning for the ban. Herscovici (1985a) indicates that the European Parliament received about five million letters and postcards on the issue.

Former MEP Moreland, in testimony before the Royal Commission, discussed the pressure that was put on the MEPs during this campaign. MEPs had received about 100,000 letters during 1982; he had personally received about 1,000 letters (Moreland, 1985).

The campaign was ultimately successful. The EC Council of Ministers approved a two-year ban which went into effect on 1 October 1983. (See Chapter 10.) Anti-hunt groups have maintained pressure on the EC to retain the ban. The markets for sealskins have collapsed almost completely, probably as much or more because of the massive public campaign for a ban and the subsequent influence on public fashions, as because of the ban itself, which affected only products from harp and hooded seal pups. Despite collapsing markets, hunting of seals continued in Canada, in part because it plays an important subsistence role in many areas. Anti-sealing groups therefore continued their campaign to bring an end to the killing of seals, especially that of whitecoats.

In 1982, IFAW launched a campaign in the United Kingdom to boycott Canadian fish products until Canada ended the hunt. It first wrote to the Canadian government and representatives of the Canadian fish-processing industry, outlining the boycott and its potential effects. As Best's letter (1983b) shows, IFAW was fully cognizant of the damage that such a boycott would cause if it succeeded, but it attributed the responsibility for damage to the Department of Fisheries and Oceans (DFO), which could end the boycott at any time by implementing "a legally binding prohibition on the killing of all harp and hooded seals up to the age of 1 year in the Canadian exclusive economic zone" (Hart, 1984). DFO (Canada, DFO, 1985) reports that IFAW later added further conditions for ending the boycott, including a ban on hunting at the whelping grounds and a restriction of the total annual harp seal harvest to 30,000 animals.

In the second phase of the boycott, IFAW and its members wrote to British retailers of Canadian fish products requesting that they not stock these products. The third phase was mounted through newspaper advertisements, public mailings and door-to-door handouts, asking Britons not to buy Canadian fish products and requesting that they write to their retailers about the boycott. In 1984, IFAW extended the fish boycott to the United

States. Two major fast-food chains were selected as special targets (Canada, DFO, 1985). One major British supermarket chain agreed not to stock Canadian fish products, but otherwise the campaign does not appear to have been very successful (Anonymous, 1984; Fraser, 1984), and it was formally ended in 1985 (IFAW, 1985).

Nature of the Anti-Sealing Movement

The anti-sealing movement is an aggregate of many organizations and individuals working more or less independently toward related goals, rather than a single cohesive movement. The activities of the various organizations generally complement one another, however, and the groups share some common characteristics. Although many of the organizations making up the anti-sealing or seal-protection movement have grown increasingly sophisticated with each new campaign, many of their techniques have been used virtually since the movement began.

Information Provided to the Public

The protest groups have always actively publicized the seal hunt through mailings to their members and the general public, newspaper advertisements, books, films, and information releases to the media; they have also encouraged media coverage of the hunt. Not surprisingly, the information presented has usually been selected to help the seal-protection cause.

One of the most evident features of the anti-sealing information is its emotional appeal, which has elicited a response from individuals around the world. Photographs and descriptions of attractive young harp seal pups are contrasted with gruesome photographs or descriptions of the killing of these seals. Lavigne (1985a) and Herscovici (1985b) have argued that harp seal pups elicit an innate human biological response to protect the animal. Clubbing pups may appear brutal even to trained observers familiar with methods of killing animals.

Anti-sealing material emphasizes the analogies between seals and humans, through use of words that are generally used of humans such as a "baby seal", "murder", "innocent", or by attributing human properties to seals, for instance in ascribing tears to sadness. Tears are a normal biological function that keep the eyes of harp seals moist, and they are not related

to grief. (See Chapter 20.) Some groups have so often charged that seals are skinned alive, or that mother seals weep over the bodies of their babies that many readers unquestioningly accept these charges as facts.

The anti-sealing campaign owes part of its success to the fact that it has been able to isolate as its target a small group of rural people whose way of life is far removed from the understanding of the urban people at whom the anti-sealing appeal has been aimed. As Cournoyea (1985) has stated:

> *Animal rights groups have to date attacked those who live closest to the land, who are poorest and who have remained relatively aloof from mass technological society: sealers, fur trappers and native peoples.*

Some information handouts use emotional language to paint the sealers as the villains of the seal hunt. Amory (undated) stated:

> *He goes to meet, in a curious, friendly, playful way, the first human being he has ever seen and is – by that same human* – clubbed on the head and skinned on the spot – *sometimes while he is still alive.*
>
> *This sad, cruel episode is repeated over and over and over during the "hunt" by hundreds of Canadian and Norwegian sealers, who first kick away the mother, and then drive home their horrible message by bludgeoning the baby using a club, or the brutal spike-tipped hakapik. (Emphasis in original.)*

In other handouts, the sealers are presented as victims of the ship and factory owners. For example, Moore (1982) stated:

> *It is not really the sealers that are being defended but rather* a few millionaires, many foreign, *who own the ships and factories where the skins are processed.*

> *The seal hunters are being exploited under an archaic system of piecework carried out in an uncontrolled, bloody, ice-cold environment.* If offered viable alternatives *in the fast-expanding fishing or oil industry, they would certainly be the first to change their ways. (Emphasis in original.)*

The emotional pitch of the campaign has no doubt added to the bitterness expressed by both sides of the sealing issue.

The anti-sealing campaign has become a symbol for many persons engaged in the conservation and animal-rights movements. In a statement which put emphasis on the conservation and environmental issues, Davies (1970) wrote:

> *I see the seal issue as representing a showdown for wildlife. These animals are symbolic, and if they can't be saved, it is probably not ever going to be possible to save any substantial population of wild creatures. The world will gradually fill with filth, and one day, empty of all but man, this planet will become the loneliest place in the universe.* Perhaps in saving the seals, man may save himself. *(Emphasis in original.)*

Moore, on the other hand, expressed a view that explicitly played down environmental and ecological issues (quoted in Herscovici, 1985a):

> *And that's why the seal hunt was such a special issue . . . What the seal hunt represented was the paramount focus for public attention on the need to change our basic attitude and relationship to nature and to the species that make it up . . . It wasn't primarily a question of wildlife management or economics or politics or science or any of the other things they tried to argue their way around. It fundamentally came down to a question of morality . . .*

Some groups made an effort to create mistrust of government and industry actions and information. Amory (undated), for example, discussing a Canadian government public relations campaign claimed, " This last ditch attempt to continue the hunt was packed with inaccuracies, over-estimations and outright lies." In 1981, the Sea Shepherd Conservation Society stated that, "The Royal Canadian Mounted Police told Paul Watson in March 1979 that if he returned to the ice they would kill him" (Anonymous, 1981). Best (undated a) sent a memorandum to members of Parliament and the Canadian press which began "It is important to understand that statements made by the Department of Fisheries and Oceans are frequently replete with distortions, innuendos and lies."

Anti-sealing groups have been quite selective in their use of the information available about the hunt. This is not surprising in what is, in essence, a propaganda campaign, the object of which is to present a particular viewpoint as strongly as possible. Lavigne (1978) commented on this tendency on the part of both sides of the sealing controversy:

> *Both sides disregard unfavorable data and carefully select only those scientific "facts" which support their particular point of view and quote them widely and usually out of context to lend credence to their cause.*

The anti-sealing groups, for example, were selective in the information used to present their view of one of the most important issues, the humaneness of the killing. Of the more than 40 veterinarians, animal-welfare officers and biologists who have observed the hunt and assessed its humaneness, the anti-sealing groups have emphasized the observations of the only two veterinarians, Simpson and Jordan, who concluded that not only was the hunt inhumane, but also that it could not be changed sufficiently to render it humane. (See Chapter 20.) A Greenpeace (1978) advertisement discussing humane killing used results from a study by Rowsell (1977). It did not mention that this was a study of the shooting of seals and was not applicable to clubbing, nor did it provide any information from the various studies dealing with clubbing.

Use of the Media

Anti-sealing groups have made skilful use of the various types of media throughout their campaigns. The issue was first brought to public

attention through media efforts (Artek film, Lust article), and Davies made persistent efforts to obtain media coverage of the hunt:

> *This persistent wooing of a major newspaper might not make sense to some. But I had convinced myself that one day the Canadian Government would yield to hostile domestic and international public opinion . . . and the* Daily Mirror *was the largest, English-speaking daily newspaper in the world (Davies, 1970).*

The importance that Davies placed on media coverage is shown by his statement that "reporters, by definition, can do more for the seals than pathologists can" (Davies, 1970), that is, that media coverage was more important than answering the question of how much cruelty there was in the killing of seals. From 1967 onward, press and television reporters and photographers regularly accompanied the protesters visiting the ice.

Several methods were used to increase media interest in the hunt. In the late 1970s, famous individuals, including politicians, and movie stars Brigitte Bardot and Yvette Mimieux, were taken to the ice to attract the attention of the press. Protest rallies also generated media coverage.

Greenpeace proved to be masters at arranging events that attracted media attention. The events were usually more symbolic than practical in terms of "saving" seals, but they sometimes prevented sealers from carrying out their work or distracted fisheries officers who would otherwise have been overseeing the hunt.

The role of the media in disseminating information on the seal hunt is evident from the results of the Royal Commission's poll (Chapter 11), which showed that almost all respondents received their information on the seal hunt from the media.

Direct Mail

In recent years the protest groups have increasingly used computerized direct mail techniques. Morast (quoted by Rolbein, 1984) stated that by 1982, IFAW had learned how to use direct mail to reach more people and to focus on supporters who would donate money. In 1984 they were sending out

about 400,000 pieces of mail every four to six weeks to people on their computer files who had already made a donation. Their computers allowed them to contact people by geographic area, by issues of interest, and by the times and sizes of previous donations. They also conducted membership drives, sometimes using lists bought from other organizations. All told, Morast stated that IFAW sent out more than five million pieces of mail in a six-month period (Rolbein, 1984). The printing and mailing costs alone for an operation of this size would probably have run to more than $2 million, which gives some indication of the economic significance of the protest movement.

The mailings are used to encourage supporters or potential supporters to take some specific action, such as mailing a postcard or letter, or boycotting Canadian fish products. They usually also carry an appeal for donations, which provide the revenue that the anti-sealing groups need to function and to keep the anti-sealing campaign active. Best (undated b) included the following appeal in a mailing:

> *Please, please, please befriend a seal. There are 200,000 of them facing a wicked death. If I could find just 200,000 people – one for each seal – to send a gift* today *then they could be saved. (Emphasis in original.)*

A Greenpeace mailing (undated) included an appeal to adopt a seal:

> *By supporting Greenpeace's Adopt-A-Seal Program, with a tax-deductible contribution of $25 or more, you can help save a seal pup's life. We're going back out on the ice this year to save the pups from death, and we would like to send you a picture of one of those seal pups – your baby seal – plus a certificate of adoption identifying you as part of the Adopt-A-Seal Program. We'll also send you seal commemorative stamps, to use on your letters, share with your family and friends, or just save – as a beautiful reminder of what you've done to save one of nature's gentlest creatures.*

In the fund-raising appeals, the anti-sealing groups usually presented themselves as having very limited resources to wage their campaigns

relative to what they contended to be the much greater resources of the government and the sealers. Davies (1984a), for example, stated:

> *This costs money, and the seals and I can only beg your generosity. Smith and his gang [Canadian Sealers Association] have the Canadian government and the fur industry to turn to for help.* THE SEALS AND I HAVE JUST YOU. *(Emphasis in original.)*

These fund-raising methods have been quite successful. According to Morast the income of IFAW (U.S.) jumped from $1 million in 1978 to $2.8 million in the first six months of 1982 (Rolbein, 1984).

Public Pressure

Letter-writing campaigns and other techniques have been very successful in developing public pressure for various specific anti-sealing actions. Masses of letters and massive petitions doubtless had considerable impact on many politicians. In an example of such a letter-writing campaign, the Royal Commission received some 108,000 virtually identical postcards as a result of at least two Greenpeace (U.S.) mailings.

In addition to form letters and post cards in which the senders do little more than sign their names (which account for the vast majority of all the anti-sealing correspondence), many people sent letters setting out their personal views. DFO (Canada, DFO, 1985) presented a sample of these to the Royal Commission and the Commission has seen a number of others. Most of them are rational and often helpful to politicians and others who are trying to determine the nature and strength of public views. A disturbing minority, however, were obscene and/or abusive. A 1977 letter to a sealer in St. Anthony, for example, expressed the hope that he would become impotent so that he could not father any more sealers. Again, a 1971 letter to the "Federal Fisheries Dept." in the Magdalen Islands included the wish that the crew of a sealing vessel that had sunk had gone down with the ship.

Influencing Politicians

As the anti-sealing movement has become more powerful, it has gained increasing political influence, largely because of many efforts to lob-

by politicians and win political support. Elected politicians from the United States and the United Kingdom have been taken to the ice to witness the hunt (and the protest activities). Letter-writing campaigns have been mounted, not only to sway the votes of politicians, but also to support the efforts of politicians favourable to the movement. In adopting this approach, the seal-protection groups are following the example of many other pressure groups for which the direct lobbying of politicians, especially in the United States, is a major activity.

During the campaign for an EC ban, in particular, anti-sealing proponents worked closely with politicians and advisers in the EC. Best (1985a) stated that Canadian authorities:

> *. . . seemed completely unaware of the high degree of access to bureaucratic and elected officials enjoyed by interest groups in the European Community, and the importance placed on their involvement in the decision making process.*

Furthermore, as has been mentioned previously, a 17-man IFAW team lobbied the EC MEPs intensively for two weeks prior to their vote.

Reactions to Anti-Sealing Campaign

Government Regulatory Actions

During the early to mid-1960s, the federal government took steps to exert more control over the seal hunt. These actions were no doubt caused, at least in part, by the pressure from groups and individuals concerned about the hunt, particularly about the humaneness of the killing and the number of seals being killed.

The Canadian government introduced regulations to control the methods of killing seals in 1964, greatly increased government supervision of the hunt, held meetings with representatives of humane societies to improve the regulations, and began to take qualified observers to the ice in 1965 and 1966, to assess the humaneness of the killing techniques. Several observers of the hunt during the period from 1966 to 1968 noted definite

improvements in the humaneness of the killing methods (Hughes, 1967, 1968; MacLeod, 1967; Walsh, 1967), although Simpson (1967) did not see any improvement. Government efforts to improve killing methods are described further in Chapter 20.

The 1964 Seal Protection Regulations, first applied during the 1965 hunt, set a quota of 50,000 harp seal pups to be taken by sealing ships in the Gulf of St. Lawrence. With international co-operation, the Canadian government gradually moved to bring all killing of harp seals in the northwest Atlantic under a quota system. Government efforts at managing the harp seal harvest are described in Chapter 30.

In 1971, the government established an independent advisory Committee on Seals and Sealing (COSS). COSS was established to investigate all aspects of seal hunting in the northwest Atlantic and the Arctic, in particular the economic, sociological, ecological and humanitarian aspects, and to recommend to the Minister of Fisheries and Forestry any changes in regulations that it deemed necessary. The membership of COSS has consisted of university biologists, a veterinarian, animal-welfare officers from Canadian and international organizations, and representatives from the sealing industry. COSS has made numerous recommendations for changes to the Seal Protection Regulations, many of which the government has implemented.

Two provisions of the Seal Protection Regulations that pertain to the use of helicopters near seals and to visiting a hunt have often been criticized as being more for the purpose of controlling the activities of protesters than for the purpose of protecting seals.

In 1970, the Seal Protection Regulations were amended to prohibit helicopters and other aircraft from landing within one-half nautical mile of a seal hunt in the Front or Gulf area. This regulation was changed in 1974 to prevent landings within one-half nautical mile of a seal. In 1976, the government added further restriction requiring that helicopters and other aircraft (except for commercial flights) must be operated at an altitude of at least 2,000 feet over any seals on the ice. Provision was made in 1976 for exceptions to both these requirements, provided that ministerial authorization had been obtained. A principal purpose of the altitude regulation was to prevent aerial disturbance of the breeding seals (Mercer, 1980). The purpose for the landing regulation was to prevent the use of aircraft in taking seals (Mercer, 1980), but a recent Canadian Press wire (Anonymous, 1985) states that the purpose was to protect pregnant seals from disturbance. Protesters have charged that the regulations were implemented to prevent observation

of the hunt rather than to help the seals (e.g., Davies, undated). Recently, after the harp seal pup hunt and protest activities on the ice had virtually ended, the Minister of Fisheries and Oceans moved to reduce the distance specified in the landing regulation to one-third nautical mile in order to facilitate tourist visits to the harp seal herds (Anonymous, 1985).

A second regulation, introduced in 1978, required that only the holders of sealing licences or permits issued by the Minister could approach within one-half nautical mile of any area where a seal hunt was being conducted. This regulation was obviously implemented to control the activities of the protesters on the ice. The Minister of Fisheries, the Honorable R. LeBlanc, stated in a press release that the regulation was "designed not to prevent legitimate viewing of the seal herds, but rather to prevent illegal and unjustified interference in the lawful activities of the seal hunters" (Canada, DFE, 1978). COSS had recommended the adoption of the regulation for the same reason (Rowsell, 1978). (COSS compared the seal hunt to an outdoor slaughter operation and stated that there was no necessity for the government to provide access to slaughter operations.) In the press release, the Minister stated that, "Accredited journalists, scientists, humane society personnel and other legitimate observers will be permitted to the hunting areas as usual," but that DFE "will not, however, allow persons or groups near the sealing operations whose announced intention is to interfere with the livelihood of authorized and licensed fishermen." This provision would presumably also have enabled fisheries officers to devote more of their time to the actual supervision of the hunt.

Protest groups have interpreted the regulation as a government attempt to impose a form of censorship on news from the hunt (e.g., IFAW, undated b). DFO (Canada, DFO, 1985) reported that from 1979 to 1984, 190 permits were issued to individuals, media representatives, and representatives of organizations, including groups opposed to the seal hunt. However, despite requests to DFO, the Royal Commission was unable to obtain information about which or how many applicants were denied permits, or about the specific grounds on which refusals were based.

Another DFO regulatory provision aimed at controlling the actions of protesters involved the marking of seals. In 1976, Greenpeace made plans to spray seal pups with an inert and physically harmless green dye in order to ruin the value of their fur (Coish, 1979). DFO quickly responded with an amendment to the Seal Protection Regulations prohibiting the tagging or marking of live seals in any manner, except with the permission of the Minister.

Government Provision of Information

In order to present its viewpoint on the seal hunt, the Canadian government, and in particular DFO, prepared many informational brochures and responded to a great many letters of concern (Canada, DFO, 1985).

In contrast to the very strong emotional appeal of some of the information provided by the anti-sealing movement, the government information has generally concentrated on the technical details of the protests: the status of stocks and the amount of suffering inflicted, rather than presenting the ethical and moral issues. Emphasis is often placed on DFO's views that the numbers of seals taken are within sustainable yields, that the method of killing is humane, and that the seal hunt is an important source of revenue to the sealers.

Some of the government statements have been attacked by the seal protection movement. For example, the brief submitted to the Royal Commission by the Canadians for Abolition of the Seal Hunt (CASH, 1985) is headed "Deception of the Canadian public and the news media on matters related to sealing – through false and misleading statements from government officials and others using public funds." Some of these accusations are so general that they are incapable of being confirmed or disproved. Of the more specific accusations, some are clearly mistaken, and others represent matters of interpretation, but there remains a small core of cases where statements have been clearly misleading, whether accidentally or deliberately.

A good example of the first type of specific accusation appears in CASH's brief, which quotes a DFO pamphlet as stating: "Question: Is the harp seal an endangered species? Answer: No, definitely not." The brief then goes on to say that this statement "flies in the face of international concern expressed by virtually all independent marine scientists world-wide, regarding seal stock depletion", and quotes at length two scientists who emphasize the uncertainties inherent in estimating the abundance and status of seal stocks. This shows a misunderstanding, perhaps not unexpected on a complex technical issue, about the nature of the doubts raised. These doubts were principally related to the precise numbers of harp seals, and whether, as a result of the catch quotas in the last 10 or 15 years, their numbers were increasing or not. The statements quoted are not really relevant to the question of whether or not the harp seal is at present an endangered species. As discussed in Chapter 21, there are doubts whether recent pup production is 300,000 or 400,000 or even 500,000, and whether recent total allowable

catches (TACs) have allowed the stock to increase or still result in a decrease. It is quite certain, however, that the total harp seal population is high – well over a million animals – and if there is a decrease it is slow. Few, if any, marine scientists could be found to challenge the DFO statement, as it related to the conditions of 1982, though many would have and did, express concern about the conditions 20 years earlier, before effective management measures were introduced.

Similar misunderstandings about technical matters or the changes that have occurred in the management of seals in the last 20 years underlie many of the accusations pertaining to matters in which the government statements have, in fact, been perfectly correct. In some other situations, the interpretation is less straightforward, as in arguments over whether or not "whitecoats" were killed in 1983.

As shown by Lavigne (1985b, Table 4), several different classifications and names are used to describe seals less than one year old. The term "whitecoats" is used in all technical classifications – but not in identical ways – as well as serving as a synonym in common public usage for "baby seal". The broadest grouping is that used by the Northwest Atlantic Fisheries Organization (NAFO) in which whitecoats included all seals aged up to about 19 days; seals aged from 19 days to one year were classed as "beaters". In contrast, both scientists and the sealing industry use more detailed classifications restricting the term "whitecoat" to animals seven days old and less; they term the older animals "ragged-jackets" and "grey coats" (scientific usage) or "overgangs" and "tanners".

In 1983 some 10,000 young seals were killed. These animals were apparently 10–20 days old and were classed by the industry as "tanners" or "ragged-jackets". The DFO then stated, in one sense correctly, that no "whitecoats" were killed. However, in the initial reports to NAFO, which used the broader classification, these animals were included as whitecoats. When this discrepancy was noted, the NAFO reports were modified to include them as beaters, and no whitecoats were recorded.

The matter of classification is not merely a statistical detail. A "baby" seal (see Chapter 11) has a significance to many members of the public that is different from that of an older seal. The boundary is uncertain, but could be somewhere about the time of weaning, or of moulting the white foetal hair – in both cases, at about two weeks of age – and somewhere between the scientific categories of "whitecoat" and "ragged-jacket". Thus, to be able to claim that no "whitecoats" and, by implication, no "baby seals" were being killed had considerable significance in the public relations

arguments. It is not surprising, therefore, that Lavigne (and others) have made considerable play on the discrepancies between various statements and the reclassification of the reports to NAFO. Certainly, these records did leave DFO open to attack, but no more than that. On the basis of the evidence presented by Lavigne, the statement that no whitecoats were killed and the later amended report to NAFO were not untrue, and were consistent with the more detailed classification of ages.

Similar conclusions can be reached about most of the other criticisms made by Lavigne and others which appear to have some substance. The matters under consideration are subject to differences of interpretation. The interpretations favoured by DFO may not be those favoured by opponents of sealing, but most of them were neither obviously wrong nor clearly misleading. The report of the International Council for the Exploration of the Sea (ICES) working group (ICES, 1983) did show that there was probably a recent increase in harp seals and did represent "an important victory for Ottawa and its responsible stewardship of the seal herds" (quoted by Lavigne, 1985b, from the *Toronto Sunday Star*, 21 November 1982), even if ICES did not say that the stocks had certainly increased. Harp and other seals do eat a great deal of fish, some of which are commercial species. There is little or no doubt that they do have *some* effect on fisheries on these species even if that effect cannot be rigorously demonstrated. In these and other instances the pro-sealing interests may have chosen the pieces of information that suit their argument, and so have the anti-sealing interests, but these actions fall far short of science being "misrepresented, misused and abused in public discussion", as claimed by Lavigne.

There have been exceptions, perhaps most notoriously in relation to the ICES report. The observation that the estimates of the population in 1977–1980 (1.5–2.0 million) were mostly above those for the late 1960s (1.2–1.6 million) was accompanied by a strong qualification: the possibility of no increase or a slight decline was not negligible. That this qualification was omitted in popular presentations of the ICES findings is excusable. In some cases the responsibility for the omission lay with the media rather than with the official statement. However, there were official communications that did not recognize these qualifications. By exposing themselves to public rebuttals, as in the correspondence columns of the *London Times*, such statements undermined the credibility of all Canadian statements on seals. In the specific case of the ICES report, they had the effect of deflecting attention from the conclusions of the report that were very helpful to the pro-sealing case: that there are over a million seals, that their numbers may well be increasing, and that at the worst, the rate of decline is slight.

Even if these errors in public statements by the pro-sealing interests are recognized, it does not appear that they have been, as a whole, more biased or more misleading than statements by anti-sealing groups. The balance, in fact, probably lies the other way. The effect on the public of misstatement by the two groups is not the same, however. Occasional misstatements or extreme selectivity in the use of information by committed pressure groups can often be excused as individual acts of over-enthusiasm, without invalidating the general argument. When a government department appears to be misleading the public, however, its whole credibility on an issue is weakened. This may seem unfair, but it is a reality and must be recognized as such.

Pro-Sealing Campaigns

Sealers and other individuals who were directly or indirectly affected by the actions of the anti-sealing movement seem to have been very slow in responding to the call to end the seal hunt. At first they apparently did not consider the movement a serious threat. Furthermore, sealers in the outports were not organized to stand up to the anti-sealing movement.

In the late 1970s, various groups in Newfoundland began to work together and circulated petitions to support the hunt (Coish, 1979). Some attempted to counteract the emotional pitch of the anti-sealing campaign with humour, using such means as satirical songs, a play by the Mummers that toured Canada (Coish, 1979), and the tongue-in-cheek organization Codpeace.

In 1978, Newfoundland Premier Frank Moores toured cities in Canada, the United States and Europe to present the pro-sealing viewpoint at press conferences and meetings with politicians. The tour received considerable publicity and included some rather acrimonious confrontations with anti-sealing people. Coish (1979) reported that the tour had led to balanced reporting of the issues in a number of cities, but Herscovici (1985a), from his perspective of six years later, concluded that the counter-offensive had had little lasting effect.

Groups have been organized to represent the sealers and hunters directly, such as the Canadian Sealers Association, and the Indigenous Survival International (ISI). Some of these have had direct contacts with protest groups, and these contacts have promoted a better understanding of the sealers' problems. Discussions between ISI and Greenpeace International in England, in October 1985, have apparently led Greenpeace to call off

its campaign against the fur trade. Greenpeace has not given up its basic opposition to fur trapping, and feels that there is no future for it, but it wants to maintain a working relationship with aboriginal peoples in order to fight other environmental issues (Moore, 1985a).

Sealers' reactions to protesters, like the protests themselves, have generally been peaceful and within the law, even when protesters directly interfered with the lawful work of sealers. One incident, however, differed in this respect. In 1984, a fuel emergency forced an IFAW helicopter to land on the Magdalen Islands. A riot ensued in which the helicopter was destroyed. IFAW later turned this outburst of anger against the sealers, mounting a fund-raising campaign centred on the actions of "brutal . . .destructive . . . lawless" sealers (Davies, 1984b). The wrecked helicopter was mounted on a truck and taken to various U.S. cities as part of the fund-raising drive.

Overall, the reactions of governments, sealers, and pro-sealing groups and individuals to the anti-sealing campaign can be summarized as ineffective. This point was made by Henke (1985), and Felsberg (1985) stated that:

> *Our Governments – Federal and Provincial – were persistently unaware or unconcerned [about] the profound nature of this powerful international debate, or remained naive and helpless to counteract the challenge, and it was left to individual effort to attempt a pittance on a personal level.*

No one has found an effective means of challenging the emotional appeal and the professional techniques of direct mail, mass advertising and media coverage that have been used by the anti-sealing groups. Best (1985b) made an important point about his view of the relative competence of pro- and anti-sealing campaigns:

> *The reduction in the number of seals killed of almost 90%, over the last few years, has been, in no small way, caused by the incompetence and deficiencies of those representing the sealers and the Inuit. And I would like that ignorance to be maintained. There are a great many issues left to be dealt with in Canada that will involve*

> *Inuit and people from Newfoundland and the less they know about political lobbying, the better it will be for wildlife.*

Some Consequences of the Anti-Sealing Campaign

Reactions Against Environmental Organizations

The anti-sealing protest movement may have had an impact on the effectiveness of some moves to protect and conserve the Canadian environment. While the environmental movement has wide support in most of Canada, and the rest of the world, this is not the case in areas where sealing is carried on. To many people in those areas the anti-sealing movement is seen as an attempt by people remote from the sealing areas, and often badly informed about seals and sealing, to impose inappropriate urban values on others who are often much poorer. This adverse reaction to this aspect of the conservation movement has had the effect of reducing the credibility of all conservation activities in regions such as Newfoundland. Snow (1985), in behalf of the Wilderness Society of Newfoundland and Labrador, stated that:

> *The whole issue has resulted in all "environmental groups" being tarred with the same brush in Newfoundland and in other parts of Canada. For some people, environmental groups have become synonymous with Greenpeace or Brian Davies. This has greatly reduced the effectiveness of groups like the Wilderness Society. While trying to protect the interests of Newfoundlanders and the Newfoundland environment, we are constantly vulnerable to being labelled as Greenpeacers.*

The Public Image of Canada and Canadian Sealers

The vast publicity that has surrounded sealing has had its effect on foreigners' view of Canada and other Canadians' view of Newfoundlanders. Thus, in the IFAW poll discussed in Chapter 11, over 55% of people in West Germany said that the seal hunt made them feel less favourable towards Canada. Most of the other West German respondents reported no effect or no views. The effect was less pronounced in the United Kingdom and the United States, where 35% and 19% respectively reported less favourable feelings, and 1% and 4% respectively reported more favourable feelings. These differences may have occurred because, in the more distant countries, the sealing issue may represent one of few things that some people know about Canada. Thus, from Peru, Benavides (1985) reported:

> *As you may know considerable protest goes on all over the world with reference to killing the snow white seal puppies in Canada. So much so that many children at our school when they mention Canada say "Is that the country that has the same flag, red-white-red, as we have and where they hit the baby seals with a baseball bat?" Peru was known as a land of gold, Incas, guanos and the fine vicuna carrying the finest wool in the world. Now, I find that abroad people talk of Peru as a land of terrorism, or Japan as the land of electronics and cruel killing of whales. It seems that cruelty more impresses the press all over the world than the good things.*

This adverse image has particularly concerned the Newfoundland sealers and Newfoundlanders in general, because they have been more closely linked with it in the mind of the Canadian public than have been other sealers or provinces. It has caused considerable and justified resentment (Barry, 1985; Felsberg, 1985; Small, 1985).

> *We have been labelled barbarians in the later years but we were not labelled barbarians when we were asked to fight two wars and volunteered to become a part of the cause. We fought side by side so we could make a living, not to be later singled out and have a part of our livelihood taken away from us (Walsh, 1985).*

Perceived Future Trends

The Protest Industry: One Protester's Viewpoint

Public statements by Best, formerly of IFAW (Canada) and now with I KARE Wildlife Coalition, provide considerable insight into possible future trends of those environmental groups for which the seal issue has been particularly important:

> *I feel quite content to create an industry based on trying to protect wildlife, as big if not bigger than the one based on exploiting wildlife . . .*
>
> *And if Inuit and Newfoundlanders have a right to make a living out of killing seals and make it a part of their culture, do I not have a right to make a living saving them and make that part of my culture? (Best, 1985b).*

It is implicit in Best's remarks that the seal protest movement is an industry in its own right, and that there are individuals employed in the movement who have a direct economic interest in maintaining the public argument over seals. While the policies of the protest groups are determined by the broader issues of conservation, cruelty or ethics, these groups depend on financial support by the public, and therefore must focus some of their attention on those aspects of these issues that can attract broad public interest, such as the clubbing of whitecoats ("baby seals").

According to Best, this industry will achieve its aims by continuing the controversy and obtaining political power, and some peoples and cultures will suffer from these activities:

> *Controversy and continuing controversy is what will protect wildlife. I find that the idea of coming to some sort of an agreement is one of the more nice moral things that we try to put forth. It stops the conflict and I see no value in that. I intend to continue the conflict going in all issues, constantly, because what destroys the markets*

> *and what prevents people from taking wildlife is the fact that someone is going to be always around screaming at them for doing it . . .*
>
> *But what will decide what will happen is whoever acquires the most amount of political power, and right now those who pollute the air and the water and the land, and sell dead animals have the say . . . If the people who want animals left alive get more power than those people, then there will be more living things on this planet. It's as simple as that. And no matter what happens either way, for wildlife or against it, someone's culture will suffer, someone's economy will be affected, because change does that . . .*
>
> *What it really comes down to is that you want to live one way, I want to live another way. We have a problem, and whoever gets the most amount of political power gets to say what's going to happen. And whoever prevails will impose on the rest of society a new morality (Best, 1985b).*

Future Sealing Protests

The significant protest businesses, such as those described by Best, will not abruptly disappear even if the "sealing issue" were to disappear tomorrow. In fact, it will not. Whatever the decision of the government and the state of the market for seal products, some seals will almost certainly still be killed: by Inuit for meat or by fishermen angry with seals for damaging their gear. Even if no seals were killed, there would likely be arguments over the effect of seals on fishery gear, fish catches or the incidence of parasites. The future activities of protest groups will depend on what forms of seal killing remain. The protest groups have already drawn their members' attention to other aspects of Canadian sealing, such as netting and shooting of seals (e.g., Davies, 1982) and clubbing of grey seal pups in culls (Bøe, undated). They could place increased emphasis on these issues in future.

If any clubbing of baby harp seals continues, the future is clear. Whatever the technical realities about the amount of pain inflicted, this form of hunting inevitably appears as brutal and abhorrent to most people.

Opposition to this type of seal hunt is bound to gain wide public support, and questions relating to such matters as conservation and the status of stocks would be irrelevant. Because the "baby seal" issue can mobilize so much public support, many of those with interests in the financial welfare of environmental or animal-welfare groups will feel unable to ignore the issue. As long as any whitecoats are killed, or are likely to be killed, the anti-sealing movement will be actively pursued, probably along the lines of Davies (1985):

> *Well, it's been over two years now since the EEC victory – where does the cause of the seals stand today? In 1983 and again in 1984, the slaughter of harp and hooded seals in the North Atlantic was reduced to about 20% of the average annual take of previous years . . . If the EEC ban* is not renewed *sometime this year, however, this is what will happen in 1986 . . .* Many more *baby seals, bleeding from the nose and mouth, will be rolled onto their backs to have the skins ripped from still trembling bodies . . . some will be skinned alive! . . . It really is true . . . that the lives of* hundreds of thousands *of these animals hang on your decision. (Emphasis in original.)*

It is also clear that such campaigns would have similar success in attracting mass support resulting in demonstrations, mass petitions or thousands of protest letters as in earlier campaigns.

If clubbing of baby seals is stopped and netting and other methods that clearly involve cruelty are phased out, the situation could be very different. Those elements of the seal hunt that would remain, mostly shooting, have an image that is much less obviously brutal and abhorrent. Those groups for which sealing is just one among many issues would find less reason for protesting on these grounds, on grounds of cruelty or, assuming that the numbers of seals killed are properly controlled, on grounds of conservation. At the same time, the financial support from the public for anti-sealing campaigns is likely to be much less without the pictures of baby seals being killed to catch the public eye.

There seems, in fact, once the potentially explosive issue of clubbing baby seals is removed, to be no reason why there should be serious conflict between most conservation and animal-welfare groups, including many of those which have taken an active part in the anti-sealing campaign, and

Canadian sealers and fishermen, including the aboriginal peoples of the North. The two "sides" have long-term interests in the natural environment which may differ in detail, but they share more similarities with each other than with most urban societies, or indeed agricultural societies. Sealers and fishermen have much to gain from working together with environmental groups, or at least from engaging in meaningful dialogue rather than continuing conflict, especially conflict at a distance, through the media, or with the government acting on behalf of one party. A significant step in this direction has occurred with the meeting between Greenpeace International, and Indigenous Survival International, in October 1985, over the general fur trade.

There will still be some groups for which sealing is the sole or dominant issue, or whose members believe, regardless of whether cruelty has been stopped, or whether conservation is no longer a problem, that all killing of seals should be stopped. There are also groups and individuals that consider conflict and confrontation to be the means of attaining their objectives and of maintaining public attention, and that are thus not interested in reaching a consensus (e.g., Best, 1985b). Undoubtedly, some of these groups will continue their activities as long as any killing of seals continues. However, without the support of the public at large or of other conservation groups with wider interests, it seems unlikely that their campaigns will be as effective as they have so far been.

Other Issues

The Canadian seal hunt is only one of the issues of concern to the organizations involved in the anti-sealing movement, even though it is a major concern of many of them. If there were no Canadian seal hunt, these organizations would have other issues to which they could devote their efforts.

At such a time, the various groups that have been fighting against the seal hunt would probably focus on different issues. Organizations such as IFAW have been concerned primarily with animal killing and the protection of wild and domestic animals, and they will probably continue to focus on such issues. Greenpeace, on the other hand, has always had and will probably continue to have broad environmental interests, including a strong opposition to nuclear testing, a position that has received world-wide publicity since the sinking of the Greenpeace vessel *Rainbow Warrior* in Auckland harbour in July 1985. Many of the organizations are international in nature and might turn to issues that do not include Canada.

Best has identified two areas of particular concern to Canada, in which the animal protection groups may become involved. The first is fur trapping:

> *To state . . . that if the seal hunt is lost to the protesters they will turn their energies to other aspects of the fur fashion industry is stating the obvious (Best, 1983b).*

He has also suggested the possibility that the protest groups might take up the question of Inuit (and presumably Indian) hunting practices:

> *I would say, in a hypothetical sense, and I'm not speaking for the organization . . . If it was entirely up to me, I would launch an aggressive campaign against Inuit hunting practices. Only because I think that the Inuit should be put on notice that they are not living alone in the world. In other words, that the wildlife that walks out in front of them . . . does not belong to them. It belongs to everyone (Best, 1984).*

Fur trapping is an issue that has been of considerable concern to many humane societies and animal-protection organizations, and many of these groups are actively campaigning against it. A number of briefs and testimonies to the Royal Commission expressed concern about the possible impact on aboriginal Canadians of campaigns against fur trapping (Cournoyea, 1985; Ernerk, 1985; Bekale, 1985; Moss-Davies, 1985; Moses, 1985).

An examination of these other campaigns that might be undertaken by the groups that have been protesting the seal hunt is outside the terms of reference of the Royal Commission. However, a loss of all fur markets following the loss of most sealskin markets could have a disastrous effect on many northern communities, for whom wildlife is the only resource. The Royal Commission therefore feels compelled to take note of possible future changes in the fur trade generally in considering the impact of the changes in sealing.

Undoubtedly the successes of anti-sealing groups can result in their tackling the fur trade with increased enthusiasm. It might also be argued,

however, that as long as the seal issue and especially the "baby seal" issue remain open and command wide public attention, these issues will be a source of support and funding for these groups. Any conclusions about the conservation, cruelty or ethical aspects of the commercial seal hunt will have an immediate impact on how similar aspects of the fur trade are treated.

Nor is there much doubt that if the lessons of the seal campaigns have not been learned by those engaged in the fur trade, there will be similar successes for those opposed to hunting or trapping wild animals for their furs. A success for those wishing to continue with these activities will depend, *inter alia*, on recognizing that opponents of trapping or hunting are not homogeneous, acknowledging the real complaints that are common to most groups, such as the cruelty that is inevitable in some forms of trapping, and identifying those groups that have interests that are not dissimilar to those of trappers and hunters, for example in such matters as a balanced and productive ecosystem. If action is taken to deal with the real problems, such as the leg-hold trap, and if co-operation is sought with the organizations with related interests, the problems with the relatively few protest groups which are implacably opposed to all aspects of the fur trade should be reduced.

Future Government and Pro-Sealing Activities

The pictorial attractiveness of the baby seal and the apparent brutality of clubbing, together with the remoteness of many urban peoples from the uglier realities of the natural world, provide advantages to the anti-sealing interests in what has often been a propaganda war. These factors do not, however, account fully for the successes of the anti-sealing movement and the extent of public opposition to sealing. An important factor has been the competence with which the anti-sealing campaign has, in large part, been conducted, and the difficulties that have occurred in mounting an effective counter-campaign.

The counter-campaign in defence of sealing, which has been conducted largely by DFO, has been much less effective than the campaign against sealing. Although governments do have some advantages in such a campaign (e.g., through access to funds), they also have disadvantages; furthermore, some of their apparent advantages can be double-edged. Statements made by a government spokesman, for example, are generally considered reliable and trustworthy, and the trust they evoke should be an advantage when the evidence is confused, and the truth – about the status of stocks, for instance – can be almost as much a matter of opinion as a matter of demonstrable fact. This trust can break down, however, if government

statements can be shown to be misleading. Protest groups do have the advantage that the public is much more likely to discount individual misleading statements made by these groups as a forgivable piece of enthusiasm for their cause, than it is to take a lenient view of misleading government statements.

Unfortunately, as noted earlier, there have been instances when public statements by Canadian government representatives have been clearly wrong and have been highly counter-productive. They have made it very easy for the anti-sealing groups to represent the Canadian position as unreliable and constituting an abuse of science (e.g., Holt and Lavigne, 1982), and for this view to be increasingly accepted by the scientific community (e.g., Beardsley and Becker, 1982) and the general public.

This viewpoint, in fact, influenced the sealing decision in the European Community. Few members of the European Parliament (MEPs) have the opportunity to go into the details of the seal arguments, but some have contacts in the scientific community to whom they can turn for guidance. In the face of a barrage of cards and letters from their constituents and the supporting arguments of the anti-sealing groups, and on the other side, the counter-arguments of the Canadian government, the MEPs would naturally ask their contacts whether the Canadian government's statements were reliable. If the answer were "no" or "not completely", the typical MEP could vote with a clear conscience in favour of a ban on imports of seal products.

It must be stressed that this point relates to the impact of a few incidents in which government statements fell below the highest standards. The results emphasize the need for the greatest care in future. It is not suggested, however, that the general level of government statements has been poor. To be more specific, a number of the allegations of government bias and misrepresentation made to the Royal Commission have not been substantiated.

Difficulties with government statements have arisen from attempts to present complex issues by means of the relatively blunt instruments of press releases and brief formal statements. These may provide the only practicable means of approaching large numbers of people quickly and directly, but less direct approaches may be more productive. Thus the Royal Commission poll showed that 70%–88% of the public obtained their information on seals and sealing from the media. (See Chapter 11.) The appropriate channels are therefore those media resources concerned with

environmental and related matters. Through extended dialogue, it should be possible to give the appropriate media representatives complicated information that can then be conveyed to the public.

Another disadvantage of government authorities who are engaged in a propaganda war is that their official position makes it easy for anti-sealing groups to represent themselves as David tackling Goliath. This perception may well have an effect on the trend of developing public opinion, even when the government is speaking on behalf of small groups. When the arguments are largely between two distinct interests, it seems much better for the two groups to present their viewpoints directly or to meet face to face, rather than for the government to act as spokesman for one or the other group. The recent accord over fur trapping between Greenpeace International and Indigenous Survival International provides an example of two distinct interests meeting directly and finding some common ground.

Public opinion is not fixed. While the present state of public opinion makes it wholly impractical to consider large-scale killing of whitecoats and difficult to practise other forms of sealing, these conditions may not remain the same in the future. The public opinion polls have shown that many of the reasons given for finding the killing of seals unacceptable were either based on inaccuracies or were inconsistent with public attitudes to other activities. (See Chapter 11.) A greater knowledge of seals and sealing might lead to a less negative public attitude towards sealing.

MEP Moreland (1985) provided an example of the way that public attitudes, as represented by those who have expressed strong anti-sealing views, might change. At the time of the debate in the European Parliament, he had received 1,000 letters calling for support for the proposed ban. He wrote to senders, explaining why he could not support the ban. He received 20 responses, of which 15 accepted his defence of sealing, and only five wrote to defend the anti-sealing argument. It cannot be assumed on the basis of 20 replies that 75% of the original 1,000 people with presumably strong anti-sealing views had been converted by Moreland's letters to supporting sealing. It is interesting, however, to consider what happened to the other 980 original correspondents. If they still held strong anti-sealing views, they should, presumably, have attempted to pressure their MEP to vote in the way they wished. That they did not would suggest either that their initial views were not strong, and that they were responding somewhat unthinkingly to requests to join the mail campaign, or that they had been persuaded by Moreland to modify their strong anti-sealing views, although not necessarily to accept completely the pro-sealing argument.

By itself this incident proves nothing, but it does support the view that public attitudes are susceptible to change through rational argument. How far can this change go? In other words, if a section of the sealing industry wished to promote public acceptance of its activities, what chance would they have of success? One ground can be dismissed at once: there is no chance of public acceptance of clubbing "baby" whitecoats. Whatever the logical arguments about the status of the stocks, cruelty, or the ethical comparisons with other widely accepted activities, public opposition would again become overwhelming if only a few pictures of the clubbing operation were to be shown on television.

The situation is different for other types of sealing. There is already wide public acceptance of aboriginal hunting for subsistence, as well as concern among some of those active in promoting the EC ban about the unplanned impact of their actions on aboriginal peoples. Those wishing to continue other types of sealing would need to prepare similar factual defences. Supportive arguments should include demonstrations of the facts that there is no risk of the stocks being endangered, that no undue pain is inflicted, and that the hunt is ethical in the sense that the benefits to be obtained by the hunters are sufficient to justify killing seals.

If the arguments are presented in a rational manner, and if constructive discussions are held between the various pro- and anti-sealing groups, there is reason to believe that this process should lead to the resolution of many of the present conflicts. In some cases it may lead to public acceptance of some forms of sealing. In other cases, where there are strong arguments against that form of sealing (e.g., netting of seals), it could lead to a better understanding on the part of the sealers of the reasons why the public finds their activities unacceptable.

If the Canadian government is to support any type of sealing, it should concentrate on those types, such as aboriginal hunting, which appear to be acceptable to the public. It should therefore make regular studies of the current state of public opinion toward different types of sealing. The implications of current public opinion for government provision of information are dealt with further in Chapter 11.

Government information programs should not appear to prejudge the issue or to take either side of the debate. The government's role should essentially be to provide the facts. This responsibility should include taking full account of the doubts that surround many aspects of sealing, such as the status of the stocks or the frequency of improper killing of seals, and the implications of these uncertainties.

Conclusions

1. The anti-sealing campaign has been professionally promoted by means of skilled political lobbying based on an emotional appeal. For 20 years it has been highly successful in generating public concern and in raising money for the anti-sealing groups.

2. The anti-sealing campaign owes part of its success to the fact that it has had as its target a small group of rural people whose way of life is far removed from the understanding of the urban people at whom the anti-sealing appeal has been aimed.

3. A major factor in the success of the anti-sealing campaign has been the failure of the pro-sealing forces to grasp the significance, the nature and the tactics of the anti-sealing movement, and to respond with an effective counter-offensive.

4. The animal-protection movement has become a thriving business in its own right. The sealing issue and, especially, the "baby seal" issue are major sources of public support for this industry.

5. Some elements in the anti-sealing movement will continue to seek out areas of Canadian vulnerability and will mount campaigns to exploit these until the harp seal pup hunt is abolished.

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Chapter 10

The Importation Ban of the European Communities

On 1 October 1983, a European Communities Directive (EC, 1983b), binding on all member states, came into force. It prohibited the import of the skins, raw or processed, of harp seal pups (whitecoats) and hooded seal pups (bluebacks). The Directive noted the important role that the hunting of seals and other animals fulfills in certain areas of the world, and the fact that the traditional Inuit hunt does not include whitecoats or bluebacks. The Directive initially covered a period of two years; it was later renewed for a further period of four years, that is, until 1 October 1989 (EC, 1985c). (Copies of the Directives are reproduced in Appendices 10.1 and 10.2.)

This chapter describes how and why the European Communities (EC) came to institute the ban, the arguments raised by the Government of Canada against the ban, and the possibility of the ban being modified in the future. The description draws from two reports prepared by consultants at the request of the Royal Commission. The first report offers a European perspective of the developments leading to the ban (MIA, 1986), while the second report provides a Canadian perspective (Gardner Pinfold, 1986). The intent of this chapter is to present both perspectives before the Commissioners offer their own conclusions and recommendations. Those conclusions and recommendations follow at the end of the chapter.

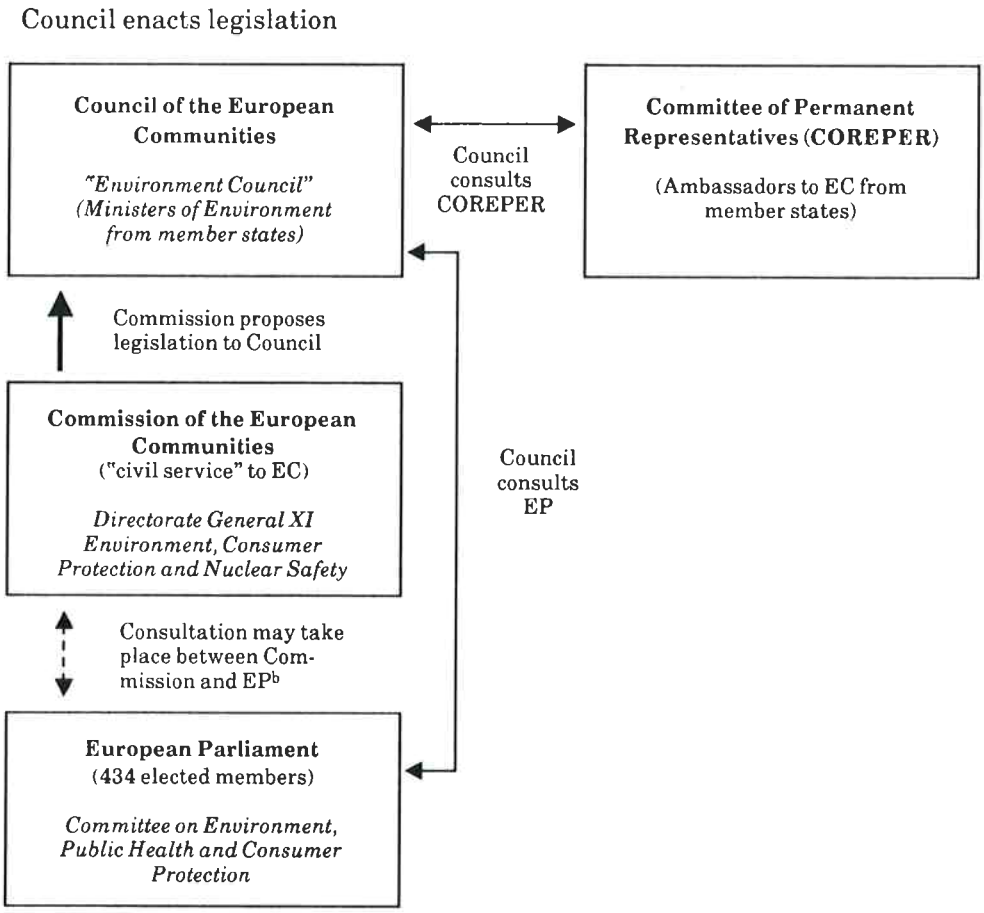
The EC's Institutions and Decision-Making Processes, and the Legal Framework

Before examining how and why the ban on whitecoats and bluebacks was introduced it is useful to describe briefly the EC's institutions and decision-making processes, and the legal framework of the ban. (The EC is properly referred to as the European Communities, but it is commonly referred to as the European Community, EC or simply the Community.)

Institutions and Decision-Making Processes

Community legislation is enacted by the Council of Ministers on a recommendation of the European Commission and after consultation with the European Parliament (EP). (See Figure 10.1.)

Figure 10.1
Institutions of the European Communities[a]



a. The subgroups specifically concerned with the importation ban on seal products are shown in italics.

b. In the case of the importation ban, the initial proposal originated in the European Parliament.

When the directives against the importation of certain seal products were issued, the Council of Ministers was composed of one minister from each of the 10 member states. (Details are given of the Community's structure when the directives were issued, prior to the 1986 accession of Spain and Portugal. The numbers have changed subsequently to reflect their inclusion.) The composition of the Council depends on the subject under discussion. For the seal question, the ministers involved were normally those responsible for environmental matters, and hence that Council is sometimes called the "Environment Council". Under the EC Treaty, most Council decisions – especially those concerned with agriculture – can be taken by majority vote. Germany, France, Italy and the United Kingdom had 10 votes each; Belgium, Greece and the Netherlands had five votes apiece, Denmark and Ireland three votes apiece, and Luxembourg two. A "qualified majority" meant 45 votes out of a total of 63. Decisions affecting the vital interests of member states, however, have to be taken unanimously. As described elsewhere, there is disagreement between Denmark and the other members about whether a future extension of the seal Directive can be decided by a qualified majority vote, or whether a unanimous vote would be required.

When it receives a proposal from the Commission, the Council refers it to the Committee of Permanent Representatives (COREPER). This committee is composed of the Permanent Representatives (Ambassadors) of the member states to the Community. When the Permanent Representatives are in agreement, decisions are often adopted without debate in the Council. In the case of the seal ban, the matter was of sufficient importance and sufficiently controversial to be discussed at length by the Council itself. It was in the Council, as described below, that the compromise solution to extend the ban by four years was negotiated.

The European Commission based in Brussels is the "civil service" of the Community. The Commission is represented at meetings both of the Council of Ministers and of the Committee of Permanent Representatives. Its functions are to supervise the working of the EC, in particular to see that EC legislation is adhered to, and to make recommendations for legislation to the Council of Ministers. The Commission is headed by 13 Commissioners who are nominated by the member states for a period of five years. Each Commissioner, except the President of the Commission, is responsible for one or more of the Directorates General (DG) into which the Commission is divided. For the seal question, the relevant Directorate General is DG XI (Environment, Consumer Protection and Nuclear Safety), specifically Directorate XIA (Protection and Improvement of the Environment). The Commissioner heading DG XI is Mr Clinton Davies (United Kingdom) who was

appointed in January 1985. Previously the responsible Commissioner was Mr. Narjes (Germany).

Since June 1979, the European Parliament has been directly elected. The term of office of the Parliament is five years, and the second direct elections took place in June 1984. The Parliament contained 434 members: the United Kingdom, Germany, Italy and France each represented by 81 members; the Netherlands by 25; Belgium and Greece by 24 each; Denmark by 16; Ireland by 15; and Luxembourg by 6. The Parliament will now be increased by 60 Spanish and 24 Portuguese members. It has few real powers. It cannot legislate, but it can refuse the Community budget – a power it has used on one occasion, and it can censure and dismiss the Commissioners, a power it has never used. It also has the right to be consulted about proposed legislation. Because it is directly elected the Parliament has some moral authority. The Parliament and its different committees can submit questions, oral and written, to both the Council and the Commissioners. Representatives of both the Commission and the Council attend Parliamentary debates and meetings. There is therefore considerable dialogue between the Parliament and the Commissioners and the Council.

Eighteen permanent committees prepare the ground for full sessions of the Parliament. These committees correspond roughly to the areas of competence of the Commission's Directorates General. The committee concerned with the seal question is that on Environment, Public Health and Consumer Protection. Members of the European Parliament (MEPs) can also set up "intergroups" on specific subjects. One such intergroup, "The Intergroup on Animal Welfare", became particularly involved in the seal issue, as will be seen below.

The Legal Framework

The ban on the import of products of harp and hooded seal pups exists in the form of a Council Directive. A directive is legally binding on all member states, but each state is at liberty to determine by what means it is enforced in its own territory. The Commission can be satisfied, for example, by an effective voluntary ban imposed by the relevant trade association(s) instead of by national legislation. The only specific action that member states have had to take under the Directive relating to seals is to introduce a common tariff number for the banned products so that trade can be monitored. The Commission had originally proposed to introduce the ban in the form of a regulation which would have obliged member states to intro-

duce legislation. In the Council some Ministers, including the U.K. representative, resisted this proposal because they wished to keep as much national freedom of manoeuvre as possible. The legal basis of the ban, as given in the Directive, is Article 235 of the Treaty of Rome, a catch-all article enabling the Community to take action in areas not specifically mentioned in the Treaty. This article has often been used to introduce legislation concerning environmental matters in which the Community has increasingly involved itself during the last 10 years. The Commission had originally proposed instituting the ban under Article 113, which is concerned with regulation of trade, but was overruled by the Council. The argument about whether to use Article 235 or Article 113 has no practical significance to this discussion.

There is some disagreement within the Community about whether the Directive provides a precedent for the EC to involve itself in questions of animal welfare as distinct from conservation. The United Kingdom apparently wishes to resist such a precedent, and against the evidence and the opinions of the other member states, maintains that the Directive is solely concerned with conservation. The issue is an internal legal argument.

For external use, in the General Agreement on Tariffs and Trade (GATT), for example, the Community would probably prefer to rely on the conservation argument. A precedent for restricting international trade because of the cruelty of the slaughtering methods could easily lay the EC open to retaliatory action. According to the EC Commission's legal advisers, however, there has been no test case to show how far either conservation or animal welfare would prove to be acceptable reasons for restricting trade under Article 20 of the GATT.

The EC has a duty to harmonize trade inside the Community. Article 30 of the Treaty of Rome says that products which are freely on sale in one member state should not be banned in another. Before the Directive was issued, some member states had already banned whitecoat and blueback skins, while others had not. The Directive allowed this situation to be resolved.

It was necessary for the 1983 Directive to be approved unanimously in the Council. But the Directive itself stated that it would remain in force until October 1985, *unless the Council decided otherwise by a qualified majority*. In 1985, when the subject came up again in the Council, all member states except Denmark and Greece maintained that because of the terms of the Directive, a qualified majority was sufficient to extend it *after* October 1985. The Danes maintained that the meaning of the 1983 Directive was

that it could be revoked *before* October 1985 by a qualified majority, but not that it could be extended after October 1985 by a qualified majority. In any event, this argument was not resolved. A compromise solution to extend the Directive for four years was reached unanimously. Since the terms of the Directive remain the same, however, the only change being to replace "1985" by "1989", the argument about a qualified majority will likely be resumed in 1989 unless, in the meantime, the constitution of the Community is modified to allow wider use of majority decisions.

The Issues: A European Perspective

During the debate within the European Community and in discussions between the EC and Canada and Norway, the issues involved were:

- the seal pup hunt (particularly its perceived cruelty);
- the population status of harp and hooded seals;
- the interests of the people, particularly Inuit, dependent on seals;
- the interests of the EC in the fur trade and fishing industry;
- harmonization of trade within the EC;
- restriction of trade between the EC and Norway and Canada.

Within the Community the importance of these issues, over time, was not necessarily the same for all parties. Nevertheless, the overwhelming issue, without which the ban would not have been introduced, was the perceived barbaric nature of the hunt for "baby seals" and the resulting public outcry.

The Seal Pup Hunt

The public objections to the "baby seal" hunt have been analysed by the European Commission (EC, 1983a) as deriving from a "combination of all of the following aspects: the slaughter of (1) defenseless, newborn, (2) wild animals (3) on a massive scale (4) under not sufficiently controllable circumstances, (5) with clubs and hakapiks, that can be misused, (6) bleeding

and pelting on the ice (7) in many cases in the presence of the mother (8) for trivial, luxury purposes." To these objections may be added public response to the appealing appearance of the young seal.

The public outcry against the seal hunt was the main reason advanced by both the Parliament and the Commission of the EC in favour of a ban. This is explicitly stated in the relevant documents. The Council, which was driven somewhat reluctantly to agree to the ban, was much less explicit, and in the Directive (see Appendix 10.1) mentioned the public outcry only indirectly by referring to the opinion of the European Parliament. Too much importance, however, should not be attached to the wording of the Directive. According to MIA (1986), the Council believed it politic, in view of the Directive's application to Canada and Norway, to put forward the more "scientific" conservation argument. It is also important to recognize that the Directive was a compromise between those member states (the majority) whole-heartedly in favour of a ban and those, such as Denmark and the United Kingdom, which for various reasons, as described elsewhere, were less than enthusiastic.

The fact that the public outcry was the main consideration of both the Parliament and the Commission can be briefly demonstrated as follows. A major Parliamentary Committee report (EC, 1981), referred to as the "Maij-Weggen Report", sets out as the first point of its explanatory statement the fact that the "annual slaughter of young seals, in particular hooded seals and harp seals, never fails to arouse deep public outrage". In the Parliamentary debate on the Maij-Weggen Report, Mr. Narjes, on behalf of the Commission, stated that the Commission could not ignore condemnation of this "brutal hunting practice", and called upon Canada "to put an end as quickly as possible to the brutal hunting of young seals" (EC, 1982c). Subsequently, the Commission attempted to persuade Canada and Norway to prohibit the killing of the "baby seals". When the attempts failed to produce "positive results", the Commission made its proposal for a regulation, in which it gave as reasons for a ban "the moral objections among large sections of the general public" and the fact that "increasingly strong public demand" had induced several states to introduce their own measures, and that this movement risked distorting trade within the Community (EC, 1982b). The proposal did not mention conservation.

Nevertheless, the Council's resolution of 17 December 1982, asked the Commission to try again to persuade Canada and Norway. In these second negotiations, Canada's suggestions that the Commission participate in a "humane killing panel" were rejected (EC, 1983a). The Commission had no wish to be involved in any way in the prosecution of the seal pup hunt.

Moreover, the Commission already believed that "It is an established fact that the stunning and exsanguination method used in the killing of sealpups is technically humane and similar to methods used in slaughterhouses" (EC, 1983a), and had considerable doubts about the efficacy of a stunning pistol. In any case, "It must be seriouly doubted whether improved stunning methods would change public opinion" (EC, 1983a).

EC Commission staff had mentioned to Norwegian representatives that they considered the hunt by professional sealers operating from large ships more humane and easier to supervise than the hunt by landsmen and longliners. It was made clear to Norway, however, that this was not a reason for exempting large ships from the ban. In the words of the Commission, "It is not the methods and circumstances of the hunt of baby seals that is at the root of Parliament and public objection – it is the fact of the hunt itself" (EC, 1983a).

After reporting to the Council, the Commission was asked by the Council to continue talking to Canada and Norway in the period before the ban was due to come into effect, in October 1983. These talks foundered on the fact that Canada desired an undertaking from the Commission that future recommendations and actions would be "based solely on objective scientific evidence" (Canada, 1983). The Commission refused to agree to this proviso since its report "must necessarily deal with all aspects of the sealpup question" (EC, 1983a) including the overriding issue of public opinion and the seal pup hunt.

The Population Status of Harp and Hooded Seals

There was genuine concern within the European Community about the status of seal populations, at least that of the hooded seals. There was also concern about other species of seal, especially the Mediterranean monk seal, which the Community is taking special steps to protect. The Mediterranean monk seal is certainly an endangered species and might follow the Caribbean monk seal which is probably extinct. In several of the European discussions the fate of different seal species was apparently confused (e.g., EC, 1982c), and this confusion may have strengthened the case of those arguing for a ban on all seal products.

The Maij-Weggen Report went into considerable detail about the population status of numerous seal species, and concluded that most were under threat to a greater or lesser degree, although not the harp seal or the

ringed seal (EC, 1981). The Commission's communications to the Council of February and August 1983 also contained detailed analyses of the population status of harp and hooded seals. The Commission concluded that:

> *The results of the NAFO study underline the necessity for a cautious management of harp seals as long as the existing uncertainties cannot be adequately removed. In the case of the hooded seal there should be significantly reduced TAC's and quotas or even a cessation of the commercial hunt (EC, 1983c, Point V of the summary).*

A ban on the import of skins of seal pups would not have been seen as the appropriate response, however, if conservation had been the only issue. For example, the Maij-Weggen Report (EC, 1981) recommended that all endangered seals should be included in the Convention on the International Trade in Endangered Species (CITES), while the Commission in its communication to the Council of February 1983 said that "The conservation question can appropriately be dealt with . . . in NAFO, ICES and CITES" (EC, 1983a). Nevertheless, an import ban on pup skins, by reducing the demand for skins, and hence, presumably, the number of pups killed, would contribute to a lessening of concern about the seal populations. This was a pay-off from the ban which the conservationists welcomed (MIA, 1986).

The European Commission pointed out that the conservation issue should not be confused with the objection to killing "baby seals" and should be dealt with separately. Nevertheless, there was a tendency to blur the two issues. For example, the Maij-Weggen Report stated that, "In view of the threat to the species and the barbaric hunting methods employed, a Community import ban on the skins of both harp and hooded seals seems appropriate" (EC, 1981). The EC Directive itself gave "doubts concerning the population status of harp and hooded seals" as a justification for the ban (EC, 1983b).

Since Greenland left the European Community in January 1985, the EC is no longer directly involved in the management of the north Atlantic seal stocks through NAFO, but it does retain a general interest in the protection of endangered species. The Community is a member of CITES as a signatory of the Washington Convention.

Harmonization of Trade Policy

When the Commission made its proposal for a regulation in October 1982, it noted that some member states of the EC had already introduced bans on the import of seal pup products, while others were preparing to do so, either by legislation or by means of voluntary agreements with the fur trade (EC, 1982b). France had had such a voluntary ban since 1977, and in the Netherlands, trade in any sealskins had been prohibited since 1980. Voluntary bans were instituted in Germany and the United Kingdom in early 1983. This situation risked creating distortions of trade within the European Community.

At about the time that the Directive came into effect in October 1983, the other member states introduced legislation to enforce the ban. In all member countries, except the United Kingdom, the various bans were without time limit. The United Kingdom had enacted legislation to enforce the Directive for its period of application, that is, to October 1985.

The Commission, in its June 1985 recommendation to the Council to renew the ban, mentioned this situation as giving rise "to the necessity to adopt Community measures in order to avoid distortion of the functioning of the Common Market" (EC, 1985b). In fact, even now that the ban has been renewed, there is not total harmony. The Netherlands, for example, continues to ban *all* seal products. It is worth pointing out that even if the ban had not been renewed at the Community level in 1985, member states would almost certainly have continued to enforce their own national bans. Harmonization of trade policy thus does not appear to have been of overriding concern.

Economic Interests within the Community

Apart from the interests of Greenland Inuit, the only economic interests within the EC concerned by the ban were those of the fur trade and the fishing industry.

Fur Trade

The fur trade interests in most member states were in favour of the EC ban as a means of defusing the public protest which risked damaging the trade as a whole. In fact, in Germany, France and the United Kingdom, the fur trade interests had already introduced their own bans before the Direc-

tive came into force in October 1983. In the Netherlands and Belgium, trade in sealskins had mostly ceased several years previously. It was only the Danish fur trade which had a substantial economic stake in sealskins and was opposed to the ban. The Danish fur trade also refused to co-operate with the government in instituting a voluntary ban.

The EC Commission itself believes that the ban is in the interests of the wider fur trade. In proposing the prolongation of the ban in June 1985, the Commission stated that it was

> *. . . convinced that the negative reactions to be expected in case the Directive is not prolonged will do further and maybe irreparable damage to the fur industry as well as to the economy of the Inuit in Canada and Greenland. A prolongation of the Directive will prevent such and other, otherwise unavoidable, negative consequences and, although it seems to be paradoxical, rather serve than harm the interests of all parties involved (EC, 1983a).*

Fishing Industry

The fishing industry might have opposed the EC ban on the grounds that the resulting increase in seal populations would be prejudicial to the industry. In fact, apart from some questions in the European Parliament, the fishing industry made no objections.

This may be explained by the fact that harp and hooded seals cause little or no direct damage to coastal fisheries in EC waters, unlike the situation in Canadian coastal waters, where seals do cause serious damage to fisheries. (See Chapters 24, 25, 26.) Some Western European fishermen were concerned, however, that the sealing controversy could affect fish-quota allocations in Canadian waters.

Inuit Interests

The Directive banning the import of whitecoat and blueback products into the European Community specifically excludes the products of the Inuit hunt (EC, 1983b, 1985c). This exception was made on the insistence of Denmark. Exemption for the Inuit was based on the following arguments:

- Inuit do not hunt newborn pups to any significant extent.
- Local hunting for domestic consumption is not the main threat to the seal populations.
- The traditional Inuit way of life depends on sealing.

These arguments were taken up in the 1982 Maij-Weggen Report, which even went so far as to say that to take account of the interests of the indigenous population in the arctic regions, "where necessary, the limited and controlled hunting of or trade in endangered species" should be permitted (EC, 1982a).

During the Parliamentary debate on the Maij-Weggen Report, Mr Narjes, speaking for the Commission, showed himself in favour of protecting the Inuit. He said that the Commmission had already made contact with Greenland and Canadian Inuit groups "in order to guarantee with them that the traditionally accepted use of seal stocks will not be hindered by Community measures" (EC, 1985c).

In the event, the original Commission proposal for a Regulation of October 1982 did not mention the Inuit because it was concerned with imports from *outside* the Community. The Commission, as already mentioned, thought that an exemption for Inuit was superfluous, since Greenland at that time was inside the EC and therefore would not have been affected by the proposed regulation, while Canadian Inuit are rarely in a position to kill whitecoats or bluebacks and therefore generally do not do so. Since the Directive finally adopted by the Council in 1983 called on member states to prevent imports of bluebacks and whitecoats into their *own territories*, it was necessary to make an explicit exemption for the Inuit hunt.

The member state most deeply concerned about the interests of the Inuit was Denmark, and Denmark argued strongly in the Council against enforcing an indefinite ban. The extension of the Directive for a period of four years after 1985 was a compromise between the Danish wish that the Directive be extended for only one year and the wish of most other member states that the ban be extended indefinitely. Denmark also insisted that the Commission undertake a study on the situation of the Inuit. The report is due before October 1987.

The European Commission, however, as well as others, has argued that the ban is, in fact, a good thing for the Inuit. By defusing public opinion on the "baby seal" question, the ban leaves open the possibility of Inuit

developing a seal industry based on the hunt for adult seals. It has been pointed out that the public outcry against the "baby seal" hunt caused great damage to the seal trade in general. It has also been argued that it would have been in the best interests both of Inuit and of others engaged in sealing to extend the ban indefinitely in order to avoid continuing uncertainty and the risk of arousing public opinion each time that the ban came up for renewal.

Other people involved, including members of the U.K. Seal Protection Group, warned the Royal Commission's Belgium-based consultant that it would be dangerous for the Inuit to attempt to build up a seal-products industry on a large scale (MIA, 1986). At signs of any such move the anti-sealing campaigns would be ready to go into operation again.

Now that Greenland has left the European Community, it will be more difficult to gain support for the Inuit within the EC, and there is some scepticism, at least within the Commission, about the claims in favour of Inuit. In particular, it is said that the so-called "traditional way of life" is largely a myth (MIA, 1986).

EC Relations with Canada and Norway

The possible repercussions of a ban on EC relations with Canada and Norway were of considerable concern to the Community, particularly to the Commission and certain Council Members. The subject appears to have been of much less concern to the Parliament, which hardly raised it in its debates.

As mentioned elsewhere, after the Parliamentary vote on the Maij-Weggen Report the Commission gave priority to opening negotiations with Canada and Norway, in the hope that these two countries would agree to impose their own ban on the seal pup hunt and thus avoid the necessity of a Community ban. The Commission was particularly concerned that Canada might be provoked into reprisals against the EC's fishing industry.

The Council's insistence that the Commission should continue to negotiate right up to the time that the ban was imposed in October 1983 is also an indication of the Council's reluctance to take a step which could damage relations. It is understood that the countries showing most resistance in 1983 were the United Kingdom and Denmark. The United Kingdom has closer relations with Canada than the other EC countries, while Denmark has particularly close relations with Norway. It was

pressure from the United Kingdom and Denmark that persuaded the Council to impose the first ban for a period of only two years. In 1983, the hope was that during the two-year period Canada would take steps to make a renewal of the ban unnecessary (MIA, 1986).

Canadian Dealings with the EC: A European Perspective

After the vote in the European Parliament on the Maij-Weggen Report in March 1982, the EC Commission engaged in discussions with Canada and Norway. As Mr. Narjes had explained to the Parliament, this was a necessary procedure in the light of the co-operation agreement with Canada and the GATT (EC, 1982c). The Commission was also concerned that a unilateral import ban could lead to reprisals, such as the banning of European fishing vessels from Canadian waters.

In October 1982, the Commission reported to the Council that "consultations with Canada and Norway with a view to bringing about a prohibition of the killing of baby seals have not had positive results" (EC, 1982b). It therefore proposed a ban on importing young harp and hooded seals.

The Council was reluctant to take such a step – the Danes and the British were particularly reticent – and therefore asked the Commission to continue exploratory talks. These talks took place in January and February 1983. It was in the course of these discussions that Canada proposed that the Community join a "humane killing panel", and an international convention to manage seal stocks. The Commission rejected these proposals because it did not wish to be involved in managing the seal pup hunt, and because it considered that conservation could be handled in already existing bodies such as NAFO. On the conservation front, the Commission did express willingness to continue talks with Norway and Canada to bring about "a substantial reduction in the take of the hooded seals," but on the main issue of the seal pup hunt, as the Commission reported to the Council, the conversations had not "introduced elements which would enable the doubts expressed by public opinion . . . to be dissipated" (EC, 1983a). The Council therefore adopted a Directive in March 1983, which was to come into effect in October 1983, unless the Commission was able in the interim to negotiate a solution with the countries in question.

Subsequently, however, no serious negotiations with Canada took place. In reply to a Commission invitation to resume discussions, Canada sent a *note verbale* on 30 May (Canada, 1983), saying that its government would be willing to enter into discussions provided that the Commission agreed to base its report to the Council "exclusively on scientific considerations". This the Commission refused to do. In August the Commission reported back to the Council that further contacts with Canada and Norway "did not bring about a situation which would make the application of the Directive superfluous".

When the Directive came into force in October 1983, Canada confined itself to deploring the action and calling on the Community to withdraw the ban as soon as possible. It stated that it did not see much point in talking to the Commission as long as it was not willing to withdraw the ban before October 1985.

In November 1984, Canada informed the EC Commission that the Royal Commission on Seals and the Sealing Industry in Canada had been set up and was to report in September 1985. It asked the EC to take account of the Royal Commission's findings before deciding on an extension of the ban beyond October 1985. The Commission replied that, because of the timing, the Royal Commission's report could only partly be taken into account.

Following the renewal of the ban for a further four years in October 1985, Canada notified the Commission that it proposed to raise the matter in the GATT. At the time of writing, Norway, which had threatened to take action if the ban was renewed for more than one year, has not yet decided what steps, if any, it will take.

Talking at Cross-Purposes

The "Canadian Commentary" on the Commission's report to the Council of August 1983 includes the words:

> *Canada remains convinced that the creation of an international sealing convention would be a legitimate response to the Resolution of the European Parliament of 11 March 1982.*
>
> *The action taken by Canada to meet these objections to the killing of newborn seals was to explain in private and*

> *public fora the irrationality of these objections and to propose an international organisation to explore these issues further. (Canada, DFO, 1985, Appendix XL).*

The "Canadian Commentary" also points out numerous "errors", "omissions" and "misinterpretations" contained in the Commission's report.

The official Canadian point of view apparent in this Commentary is that the EC's concern can be met by measures to ensure that stocks are scientifically managed, and that the hunt is conducted in a humane manner. As shown above, this response was virtually irrelevant to the overwhelming issue of the public outcry against the "slaughter of baby seals".

MIA (1986) considered it difficult to judge whether the Canadian negotiators deliberately pretended to misunderstand or genuinely did not understand what the Community's real concerns were. They may have believed that they had nothing to lose by taking this approach, since the only Canadian response which would have satisfied the Commission would have been an official and permanent ban on the seal pup hunt. On the other hand, Canada may have been misled by the wording of the Council's Directive of March 1983, into believing that an investigation into the "scientific" aspects of the hunt was a sufficient response. The relevant words of the Directive are:

> *Whereas further investigation into the scientific aspects and consequences of the culling of pups of harp and hooded seals is desirable; whereas, pending the results of such investigations, temporary measures in accordance with the resolution of the Council and of the representatives of the Governments of the Member States of 5 January 1983 should be taken or maintained . . . (EC, 1983b).*

The Commission's Communication to the Council of 23 August 1983 (EC, 1983a) does, in fact, suggest that Canada interpreted the wording of the Directive as indicating a "shift of emphasis" in the direction of relying purely on "scientific considerations". In reply the Commission agreed that more emphasis was being put on scientific considerations, but this did not mean that other considerations were of less importance.

The Canadian side may also have been misled by the Commission's willingness to discuss the conservation issue. As explained above, conservation, although largely irrelevant to the "baby seal" issue, was a subject in which the European Community considered that it had a legitimate interest.

Whatever the reason, the fact is that these discussions at cross-purposes appear to have helped create considerable frustration and bad feeling on both sides.

Appraisal of the Canadian Approach

MIA (1986) concluded, on the basis of their review, that Canada could not have prevented the imposition of the EC ban except by imposing an official and permanent ban itself. This move would have had to be made in conjunction with Norway. MIA concluded that there was a good chance that Norway would have agreed, since it had decided in early 1983 to cease the whitecoat and blueback hunt. A Canadian decision would preferably have had to be taken before 1983. A promise to introduce a ban for the 1984 hunt would not have been sufficient to prevent the EC ban coming into force in 1983.

Once the Directive came into force, there was no possibility of its being withdrawn before it expired in 1985. There was also very little chance of it not being extended after October 1985, whatever Canada had done (MIA, 1986).

According to some EC Commission officials, the Canadian approach was rather heavy-handed in some respects (MIA, 1986). Attempts by Canada to denigrate people in the anti-sealing campaign, such as Brian Davies, were not well received and tended to promote the idea that Canada did not have a very strong case. Canada's complaints that anti-sealing campaigners had too easy access to the Commission and the Parliament were not well received either. It was pointed out that the Commission is an open house, and it is no secret that members of the Intergroup for Animal Welfare of the European Parliament worked closely with outside representatives of the anti-sealing campaigns such as the Eurogroup for Animal Welfare, which they had a perfect right to do (MIA, 1986).

The fundamental problem with the Canadian approach, however, as already mentioned, is that it failed to address itself to the real concern of the European Community: the public outcry against the "massacre of baby seals".

Prospects: A European Perspective

MIA (1986) concluded that to repeal or modify the Directive, before it is due to expire in October 1989, would require a qualified majority in the Council. As things stand, there is absolutely no chance of this happening. The likelihood is that the Directive will be prolonged in its present form, probably for an indefinite period after 1989, although it is dangerous to make predictions so far ahead.

Although the Parliament did not achieve all it wished, that is, a ban on the taking of all harp and hooded seals under the age of one year, there is no real pressure to insist on this point. The Seal Protection Group in the United Kingdom has called the extension of the ban a "victory" and appears well satisfied (MIA, 1986).

Public debate will resume, however, as the time comes up for renewing the ban in 1989. This debate is likely to be low key unless there are new developments which provoke the anti-sealing movement into action.

The following two sections examine what the reaction in the European Community would likely be in the event either of more intensive efforts by Inuit to market seal products or of attempts by Canada to market the products of seal culling which might be carried out in the future to control the population of harp seals.

Inuit Seal Hunting

The position of the European Community, as expressed in the Parliament and by both the Commission and the Council, is that there is no wish to harm the traditional hunting by aboriginal peoples. On the contrary, there is a positive wish to protect aboriginals as shown by the fact that traditional Inuit seal products are specifically exempt from the import ban. Moreover, as already shown, the European Commission considers that the ban is in the interests of Inuit. Therefore no official obstacles would be placed in the way of Inuit trying to market the product of their traditional hunt more effectively. The term traditional, however, which is used in the Directive, implies that the Community would not find it acceptable for Inuit to increase their hunt for hooded seals, for example, to the extent that it posed a threat to the seal population.

It is less easy to forecast what might be the reactions of public opinion and the anti-sealing movement, in the event of increased marketing efforts for Inuit seal products. In the view of MIA (1986), it seems unlikely, unless Inuit started killing seal pups, that the various animal-welfare groups would consider public opinion could be aroused against a revived Inuit hunt. It is, of course, an entirely separate question whether there would be a market for the products of such a revived hunt.

Culling Seal Populations

According to European Commission officials, as they expressed their views to MIA (1986), the European Community would not be opposed to culling seals provided that:

- irrefutable scientific evidence could be produced to show that culling was necessary to protect the fishing industry;
- the culling was conducted in as humane a manner as possible and under official supervision.

Given these conditions, it would be difficult, in the opinion of MIA, for the EC to ban imports of the products of the culling operation, especially if to do so meant that the carcasses would simply be abandoned.

However, MIA (1986) considered that it would be very difficult to obtain consensus within the EC on the necessity of culling. Not only is the subject very complicated scientifically, but it has also become highly politicized.

If seal pups were culled, the cull would probably generate the strong suspicion that it was being used as a means of subverting the Community's ban. Extremely convincing arguments would be needed to show that culling pups, rather than adults, was necessary. MIA (1986) concluded that, as far as animal-welfare groups and public opinion are concerned, a large-scale culling operation involving pups and/or their mothers could arouse a similar level of opposition to that aroused by the commercial whitecoat hunt, and that protection of the fishing industry would probably carry little weight with this opposition.

A renewal of the controversy about sealing, which would almost inevitably be provoked by large-scale culling of seal pups, risks damaging any revived market for Inuit products (MIA, 1986).

The EC Ban: A Canadian Perspective

During the mid-1960s, the Canadian High Commission in London and most of Canada's embassies in Europe were besieged with letters protesting the seal hunt. The hunt was becoming a matter of some embarrassment for Canada. Canadian officials wrote letters to newspapers and periodicals that had been carrying critical reports of the hunt. In dealing with the European press, considerable emphasis was placed on the Canadian sealing regulations introduced in 1964 and amended frequently thereafter.

Matters became worse for Canada in 1965, with the screening in Germany of the Artek film "Les Phoques". The official Canadian protest was confined to commenting to the media on the inaccuracies contained in the film. (See Chapter 9.) The letter-writing campaigns continued throughout 1965 and 1966. In 1966, an article appeared in a Bonn newspaper calling for a world-wide ban on Canadian seal products. The fur associations in the Netherlands and Germany were becoming increasingly concerned and made these concerns known to the Canadian embassies.

Canada first responded on a government-to-government basis in January 1967. A question was raised in the Dutch Parliament concerning the inhumaneness of Canada's sealing operations. The Dutch Ministry of Foreign Affairs requested Canada's assistance in responding to the question. In a note to the Dutch government, Canada explained the resource-management objectives of the hunt and the humaneness of the killing method. Canada also tried to correct the false impression left by "Les Phoques" (External Affairs files).

Through diplomatic notes, Canada urged Denmark (on behalf of Greenland) and Norway to adopt the sealing regulations as amended prior to the 1967 hunt. They responded with notes indicating their approval in March 1967.

The protest campaign mounted in Europe by the ecology and animal-rights organizations during the late 1960s and the 1970s was highly effective. It involved an annual barrage of letters sent by the general public to Canadian officials abroad and to politicians in Canada, demonstrations outside Canadian embassies and consulates, and considerable media exposure in Europe of Canadian sealing operations. The European market for seal products weakened considerably in 1977, in the wake of the media exposure. Thereafter the protest groups concentrated their energies on damaging the market for sealskins. (See Chapter 9.)

The Canadian Response to Actions by EC Member States

Public pressure to ban seal-product imports was brought initially to bear on national governments in Europe. It met with some success, notably in Italy, the Netherlands and the United Kingdom. Thereafter, the campaign focused on the European Community.

Italy was the first European country to impose a formal ban on the importation of seal products. On 8 June 1978, by ministerial decree, the importation of the skins of phocid seals was made subject to ministerial authorization. Trade was authorized in skins of adult seals not considered to be threatened under international conventions. Trade in skins under 50 centimetres in length with a hair length of more than 2.5 centimetres was prohibited. (This restriction was supposedly designed to prevent the import of whitecoat and blueback skins, but these skins are usually longer than 50 cm.) The Italian government maintained that the decree was based on conservation grounds, while the policy of not licensing the import of the skins of seal pups was based on grounds of public morality.

Canada responded to the Italian government on 8 September 1978, with an *aide-mémoire* protesting the ban. Among the points raised by Canada was the contention that the hunt was consistent with sound resource-management principles, and that seals were in no way threatened with extinction. Canada argued, too, that the hunting method was humane. It also raised questions with the European Commission regarding the legality of the Italian move in light of the Treaty of Rome. The Commission dissuaded Canada from asking it to pursue the matter in the European Court. It argued that the matter was better left to bilateral discussion between Canada and Italy (External Affairs files).

In the Netherlands, a voluntary ban on the import of sealskins had been in effect since 1970. In May 1980, External Affairs learned that a formal seal import-ban regulation was in the final stages of preparation by the Dutch. In spite of representations by Canada about the humaneness of the hunt and its consistency with resource-management principles, General Administrative Order No. 454 brought the ban into effect on 4 September 1980. The Netherlands justified the ban on conservation grounds, arguing that seals were endangered species.

In a *note verbale* delivered to the Ministry of Foreign Affairs on 19 November 1980, Canada contended that the ban was inconsistent with the Netherlands' obligations under GATT Article XI and Article II. Referring to

the Convention on International Trade in Endangered Species (CITES), Canada also took exception to the position taken by the Dutch that seals were endangered species. To suggest this, argued Canada, was to undermine the credibility of CITES (External Affairs files).

According to Canadian officials, the reason given by the Dutch for introducing the ban was political necessity (Gardner Pinfold, 1986). The Dutch government faced elections soon and did not want to add the question of the seal hunt to the list of issues. The Ministry of Foreign Affairs also indicated that the government was supporting a move to have seals included in the CITES list of endangered species. In response to this information, Canada offered to make scientists available to discuss the seal-population question and any related issues. This offer was welcomed. Canada pressed for a formal response to its note of protest, but the Dutch did not make a formal response. Although Canada took no further action, the matter did not end there. Greenland pursued an action against the Dutch for violating Article 36 of the Treaty of Rome. The European Commission was obliged to take the matter before the European Court.

The British government was under considerable public pressure in the late 1970s to introduce an outright ban on seal-product imports. It responded to this pressure by introducing the Trade Description Order, 1980, requiring that sealskin goods imported into, or made in, the United Kingdom on or after 1 January 1981, bear a mark of origin. To comply with the Order, the mark had to contain sufficient information to convey to persons acquiring the goods that they were sealskin goods, and in what country or geographical location the seals had been taken. Canada protested this action with an *aide-mémoire* to the British government, but the Order remained in effect.

The Canadian Response to the EC Ban "Movement"

The efforts by the European Parliament to introduce a ban on seal imports into the EC began on 17 April 1980, with a motion for a resolution on community trade in seal products. The seal hunt had been the subject of questions in the European Parliament (EP) since the mid-1970s, but this motion represented the first formal attempt to restrict trade. On 19 May 1980, the EP referred the motion to the Committee on the Environment, Public Health and Consumer Protection. On 30 May, Ms. Maij-Weggen was appointed rapporteur for the Committee. Work on the report was carried out over the next 18 months. The draft version of the "Maij-Weggen Report"

was considered by the Committee, in 1981, at its meetings of 13 May and 9 November. One of its main conclusions read as follows:

> *In view of the threat to the species and the barbaric hunting methods employed a community import ban on the skins of both hooded seals and harp seals, as requested in Mr. Johnson's resolution, seems appropriate (EC, 1981).*

The Report was adopted unanimously at the November 1981 meeting.

On 13 January 1982, the concern of the Canadian government about the Maij-Weggen Report and the draft resolution was expressed in a diplomatic note to the Commission. Canada advised that any action to ban seal products would be contrary to the EC's GATT obligations. Furthermore, a letter to the Directors General (of the Commission) for Fisheries and Environment requested meetings to explain the misunderstandings contained in the Report. A Canadian Mission officer, together with an official from DFO, attended the January session of the EP and distributed copies of a rebuttal to the Maij-Weggen Report. In addition, the Inuit Taparisat of Canada sent a telegram to the President of the EP, expressing opposition to the Report and requesting an opportunity to put its views before the Parliament (External Affairs files).

As a result of this lobbying, Ms. Maij-Weggen withdrew the Report from the January Parliamentary agenda. The Environment Committee, however, made some minor amendments to the Report and readopted it by a vote of 15 to two. It was agreed to place the Report on the Parliamentary agenda for the March session.

Canada continued to lobby against the proposed action throughout February and early March. In the weeks leading up to the EP's decisive 11 March vote on the resolution Canada intensified its efforts. A letter generally supportive of the hunt was sent to the President of the EP by the Speaker of the Canadian House of Commons. A letter outlining Canada's position on the hunt and expressing concern over how the proposed resolution might affect bilateral relations between Canada and the EC was sent by the Canadian Minister of Fisheries and Oceans to the Chairman of the EP's Environment Committee. The Canadian Ambassador to the EC sent a letter to all EP members, documenting support of the Canadian position on the seal hunt.

The Governments of Newfoundland and Labrador and the Northwest Territories were also active at this stage. In 1982, the Minister of Fisheries in the Newfoundland government, said that if the Europeans went ahead with the ban, his province would ask Ottawa to cancel the agreement which allows European fishermen to operate in Canadian waters off Newfoundland, noting that in his province seals are considered a species of fish. The Minister of Renewable Resources of the Northwest Territories, himself an Inuit, described the social and economic context of the hunt in Canada's North and sought consideration for excluding NWT sealskins and products from the proposed ban.

Canada's efforts were to no avail. On 11 March 1982, the EP adopted the resolution by a vote of 160 in favour and 10 against, with 20 abstentions, of a total voting membership of 434. The EP instructed the European Commission to propose to the Council of the European Communities a ban on the import into the EC of seal products. The proposal that went forward to the Council in October 1982, called for "a Regulation on rules for a prohibition to import skins of certain sealpups and products derived therefrom into the Community" (EC, 1982b).

The months leading up to the Commission's proposal to the Council were a period of intense diplomatic activity. The Commission wished to have detailed discussions with Canadian experts. The aim of the discussions was to arrive at a common view of the facts. The initial consultations were held on 15–16 April 1982.

In essence, the Canadian position was that the issue of the hunt for seals should be dealt with on a rational objective basis as a resource-management question. It was the Canadian view that the grounds on which the EP resolution was based were that population levels of the seal species affected were endangered, and that the killing method used (clubbing) was inhumane. Canada proposed to the Commission that jointly funded independent groups of experts study these two questions.

The Commission's response was that Canada must recognize the political pressure from Parliament to take action of the sort requested in the resolution. The Commission went on to point out that the issue transcended the question of resource management and was widely regarded in Europe as an area in which moral and humanitarian considerations must be applied. It agreed to refer the question of population levels to the International Council for the Exploration of the Sea (ICES), though without any commitment to await or respect the study's results. The ICES report was expected in November. The Commission was unwilling, on the other hand, to support a

study on the matter of killing methods. It was emphasized to the Canadian officials that some sort of Commission action was inevitable (External Affairs files).

The Commission asked Canada and Norway to prohibit the hunting of whitecoat (harp) and blueback (hooded) seal pups to meet moral and conservation concerns. More important, perhaps, it asked the five EC member states, that are signatories to the Washington Treaty, to request the CITES secretariat to take the necessary steps to have hooded and harp seals included in the CITES Convention. (See also Chapter 28.) It proposed that harp and hooded seals be placed in Appendix II (this would require the exporter, that is, Canada, to issue export licences). Inclusion in the Convention Appendices might have obviated the need for the EC ban. As it turned out, the attempt to have seals included in the CITES Appendices proved unsuccessful. The motion to include seals was put forward by West Germany at the 1983 CITES meeting in Gabarone, Botswana. After much intense lobbying by all concerned parties, the motion was defeated.

Canada stated its now familiar case that the hunt was consistent with sound resource-management principles, the killing method was humane and the hunt was of economic and social importance. The Canadian government emphasized that any action taken by the EC should be based on scientific, not moral, grounds. The European Commission explained the constraints under which it operated, most notably that it had to make a proposal to the Council of Ministers by the 15 October Parliamentary session if measures were to be implemented before the 1983 hunt. This meant that any proposal going forward to the Council would not have the benefit of the ICES findings (expected in November). While Canada recognized that the Commission was in a difficult position, it recommended that the proposal be based on the ICES report.

When Canada became aware that the Commission might approve a draft regulation at its 6 October meeting, further meetings with the Commission were cancelled, and a lengthy and strongly worded diplomatic note stating Canada's views on the matter was sent to the Commission on 24 September 1982. In a draft version of the summary, the note read as follows:

> *An interdepartmental assessment last week of EURCOM actions following the March, 1982 EURPARL resolution on trade in seal products led to agreement that the time had come to give the Commission as a whole a comprehensive statement on the Canadian Government*

> *position on this matter. That position, which needs to be enunciated clearly now that the EURCOM may be on the verge of taking further steps on the issue, is in essence that Canada will continue to base its policy re harvesting of seals on scientific, resource management considerations. We have offered EURCOM every cooperation for examining the subject in this light and are not prepared to proceed on a basis other than this, namely emotional perceptions of some parts of European public opinion that underlie EURCOM attitude and public statements. We also feel strongly about the prospect of any step that would abandon internationally accepted principles that serve as the basis for resource management and international trade and would call for GATT consultations if EURCOM recommended a trade ban or restrictions (External Affairs files).*

The note and intensive lobbying by Canadian officials had no apparent effect. On 6 October the Commission approved a draft resolution calling for the import ban on selected seal products. This resolution was sent on to the Council of Ministers for a decision. In his address to the EP, the Commissioner responsible for the Environment outlined the background of the proposed resolution citing the concern over the inhumane killing method and the threat of extinction facing seals. He went on to note Canada's objections, observing that the Commission had agreed to look at the ICES report, but that the report had not become available in time. He dismissed the argument that scientific grounds should be the only basis for making a decision, stating that trade could be halted as a moral imperative under GATT Article XX. Following a request by the Council on 29 October 1982, the proposed resolution was reviewed by the EP and amended to broaden its scope.

The Commission's October resolution was based largely on a report prepared by the Nature Conservancy Council based in the United Kingdom (NCC, 1982). The report was critical of the hunt and said that there was "a risk that the populations would be endangered by a continuation of present rates of exploitation". Canada responded at the time with a critique of the report, and this critique became the subject of an *aide-mémoire* to the Commission. The *aide-mémoire* was also sent directly to member states.

The Canadian Response to Actions of the EC Council

The decision whether or not to introduce a ban rested with the Council of Ministers of the European Commission. The Canadian strategy at this point was guided by the observation that although the Council members were aware of the wishes of Parliament and were, in theory at least, guided by the recommendations of the Commission, they were in no way bound to accept their proposals and had frequently made entirely different decisions in the past. In view of this situation, Canadian initiatives shifted from the Parliament and the Commission to the Council and the member states. The member states targeted for diplomatic activity were: the United Kingdom and France, which had expressed reservations about the ban; Denmark, which had jurisdiction over Greenland, the site of regular seal hunting; and the Federal Republic of Germany, which may have believed that access to Canadian fishing waters was at stake under the Canada/EC Long Term Agreement on Fisheries.

The Long Term Agreement on Fisheries (LTA) was ratified in September 1981, and came into effect at the beginning of 1982. It provides for annual fishing allocations to EC vessels in return for reductions in the EC import tariffs on fixed quantities of cod, herring and redfish in various product forms. The main beneficiary of the quotas is West Germany.

In November 1982, the ICES report (ICES, 1982) was released. Canada claimed that the report shows that the seal hunt was well-regulated according to scientific standards, and that the Canadian quota-management system was effective. On 19 November Canada sent an *aide-mémoire* to the European Commission, pointing out the ICES findings, and in particular, that there was no basis for believing that seals were threatened with extinction. (As the Royal Commission points out in the conclusions to this chapter and in Chapter 9, the Canadian government may have misconstrued the ICES findings about harp-seal population trends.)

Canada's Secretary of State for External Affairs sent a letter to the foreign ministers of all EC member states, expressing Canada's "considerable disappointment and concern" with the Commission's recommendation and asking the respective foreign ministers to give personal attention to the issue. The letter went on to describe the economic and social significance of the hunt and the recognized principles of resource management employed. It reminded the ministers of Canada's willingness to co-operate with the Commission on the questions of population levels and the killing method, but pointed out that the Commission had agreed to co-operate only on the population issue. Canada expressed its regret that, on this latter issue,

Commission had chosen to make its recommendation before the results of the ICES report were available (Gardner Pinfold, 1986).

Canada also expressed regret that the European Commission had refused to examine the humaneness of the killing method, "realizing perhaps that an objective study would find that the methods employed by the sealers were no less humane than the techniques commonly used in European or North American slaughterhouses." The letter expressed the view that, "As with animal resource management, Canada believes that international trade must be conducted on a rational and justifiable basis and not according to the emotional and politically expedient considerations which seem to underlie the Commission's actions." The letter closed with the hope that "An awareness of Canada's very strong and legitimate concern over this issue, and a dispassionate analysis of the principles involved will lead the Commission to withhold support from the proposed import ban" (External Affairs files).

The Canadian government instructed its representatives, in delivering the letter, to refer to the fact that the hunt in Greenland was exempt from the proposed ban, and that culling seals in Scotland continued to be tolerated. In Canada's view, this raised serious questions about the EC argument of public morality and pointed up the hypocrisy of the proposed ban.

Prior to the Brussels meeting of the Council of Environment Ministers in early December 1982, a Canadian delegation (composed of federal, provincial and NWT representatives) visited European capitals to lobby ministers and officials. Ministers were given a letter from Canada's Minister of Fisheries and Oceans describing the resource-management practices in Canada and pointing out that the killing method is humane. The letter also urged ministers to refer to the ICES report for guidance concerning the seal-population question. The Minister of Fisheries and Oceans suggested that the humaneness of the killing method be reviewed by an international panel.

On 13 December 1982, Canada sent an *aide-mémoire* to the Council, outlining new proposals for co-operation between the EC and Canada. An international sealing convention composed of the EC, Iceland, Norway and Canada was proposed. The convention would be a forum for consultation and co-operation on matters concerning the resource-management aspects of the hunt. It would rely on ICES for scientific advice on seal-population levels. Canada also proposed establishing an international panel to review the question of humane killing methods.

On the same day, the Canadian Minister of Fisheries and Oceans called in the ambassadors of the Netherlands, Ireland, Belgium, Greece and Italy for a series of half-hour meetings in Ottawa. The Minister outlined the Canadian position and called for a rational solution to the issue. He stated that it was "totally unacceptable from a Canadian point of view to envisage any measures in advance, or in the absence, of a solid scientific basis for taking action." He concluded by pointing out that "there was no doubt about the extent of pressure to which he would be subjected to retaliate against any harmful Community action" (External Affairs files).

The Council issued its resolution on 5 January 1983. The resolution did not call for a formal ban. It acknowledged the scientific uncertainty surrounding the population question. It also recognized that voluntary or statutory restrictions on seal imports were already in place in certain states. In view of these considerations, it called upon:

> *...the Commission to examine further, in collaboration with the authorities of the countries concerned, the methods, circumstances, and scientific aspects of the killing of pups of harp and hooded seals as well as the possibilities of identification by marking (EC, 1983a).*

The Council also called upon the Commission, "to pursue exploratory talks with the countries concerned in order to evaluate the possibilities inherent in the proposals put forward by Canada . . ." (The proposals referred to were those suggesting the formation of an international sealing convention and the establishment of an international panel to review the humaneness of killing methods.) As a matter of urgency, the Commission was asked to report in time for the Council to review these issues by 1 March 1983.

Canada was pleased that a formal ban was not put into place. Furthermore, Canada appears to have interpreted the resolution as an admission that scientific findings should be the basis of Community policy (External Affairs files).

During the latter part of December, the Commission began to act on the Council resolution. It proposed bilateral discussions (EC/Canada and EC/Norway). Canada preferred trilateral meetings; Canada and Norway had co-operated closely on the matter for some time. After some discussion, Canada agreed to bilateral discussions on condition they lead to a trilateral meeting. In its bilateral meeting with Norway, the Commission was report-

ed by Norway to have stated flatly that the killing of "baby" seals must stop before consideration could be given to the proposals put forward in Canada's *aide-mémoire* of 13 December.

Trilateral meetings were held in Ottawa on 31 January–1 February 1983. Canada regarded the meetings as not being very productive. No decision was reached on the sealing convention, and the Commission was unwilling to participate in the humane killing panel (Gardner Pinfold, 1986).

An *aide-mémoire* reporting the Canadian views of the trilateral meetings was sent to member states' Ministers of Foreign Affairs in mid-February. It was timed to precede the Council of Foreign Ministers meeting scheduled for 21–22 February. It made clear the Canadian position that the European Commission appeared to have made up its mind on the seal issue prior to the Ottawa meetings, and that this conviction is reflected in the Commission's report to Council. Canada maintained that the Commission did not give adequate weight to its proposals. Further, it was Canada's view that regardless of the results of the discussions, the Commission would recommend to the Council that it proceed with the ban unless the 1983 hunt for pups was called off. Canada went on to point out that, in view of the market situation, the catch of pups was unlikely to be at all significant in 1983, and therefore there was no point in proceeding with the ban (External Affairs files).

On 28 March 1983, the Council issued a Directive banning seal imports (EC, 1983b). Subject to a report to the Council by the Commission (due before 1 September 1983), the Directive banning the imports of specified seal products would apply from 1 October 1983 to 1 October 1985. The ban specifically exempted Inuit seal products as long as they did not derive from the pups of harp and hooded seals. The Directive was based on Article 235 of the Treaty of Rome, which deals with conservation and the need for a scientific basis for decisions. The Commission report to which the Directive was made subject was one to be prepared following "investigations into the scientific aspects and consequences of the culling of pups", and discussions with Canada and Norway on "solutions which make restrictions on imports dispensable".

At a meeting between Canada and the Commission, held on 13 April 1983, the Commission expressed the hope that Canada would co-operate in further discussions. Canada responded that any restriction on sealskin imports was incompatible with the GATT, and took the view that the terms of the Directive and the Council's recourse to Article 235 of the Treaty indicated a shift of emphasis toward relying purely on scientific considera-

tions. On the question of continued discussions with the Commission, Canada reserved its position.

On 30 May 1983, Canada delivered a *note verbale* to the Commission, specifying two conditions for continued involvement in the discussions: that a joint request be made to the Scientific Council of NAFO asking it to take on responsibility for management of seal populations; and that future recommendations and actions of the EC be based solely on objective scientific evidence. In response (by *note verbale* delivered to External Affairs in Ottawa), the Commission agreed that some form of international co-operation on management of seal stocks would be desirable. The Commission could not accept the second condition, arguing that its report must necessarily deal with all aspects of the question (External Affairs files).

There was no further communication between Canada and the Commission before the latter submitted its report to the Council on 23 August 1983. After examining available scientific evidence and meeting with Canada and Norway as requested by the Council, the Commission decided not to make a proposal to modify the Council's Directive of 28 March. It was of the opinion that the Directive should be applied for the envisaged period, and that the situation should be reconsidered by September 1985. The scientific evidence that it relied on in arriving at this conclusion included the ICES (1982) report and a study prepared by NAFO (1983).

In late September 1983, Canada delivered *notes verbales* to the EC and to member states, protesting the adoption of the Council's Directive and requesting that it be revoked. Canada argued that it was unjustified on scientific grounds and contrary to the EC's international trade obligations. Member-state governments were asked not to implement the ban because it imposed a view of public morality on the Canadian people. In spite of the protests, the formal ban was invoked on 1 October 1983.

On 6 October Canada submitted to the EC a point-by-point critique (generally referred to as "the Commentary") of the Commission's report (Canada, DFO, 1985, Appendix XL). Canada's motivation for so doing was that, "the report provided an inaccurate interpretation of the recent decision of the parties to CITES, and a biased interpretation of the recent NAFO Scientific Council's advice." The conclusion to the Commentary captures the essence of Canada's position on the seal issue generally:

> *The Canadian authorities are disappointed that the Commission's report to the European Council contains*

> *so many obvious errors and misleading conclusions drawn from objective scientific evidence. It is difficult, of course, to produce an objective and factual report when the issues have been prejudged from the outset, when the conclusion is irrational in terms of science and logic, and when the aim is to satisfy the demands of powerful pressure groups. The Commission may, at some time in the future, wish to proceed on a rational, objective and conservation-oriented basis to develop a reasonable international approach to seal management problems. Canada remains prepared to cooperate with the EEC and Norway on this basis (Canada, DFO, 1985, Appendix XL).*

In October 1984, Canada advised the EC and member states in a *note verbale* that a Royal Commission had been established to examine the whole question of seals and the sealing industry in Canada. The *note* included the terms of reference for the Royal Commission and background information on the Chairman and Commissioners.

During the semi-annual consultations between Canada and the European Commission held on 16 November 1984, Canada explained the nature and purpose of the Royal Commission and invited the participation of the EC in its deliberations. The Commission indicated that it welcomed the establishment of the Royal Commission, but regretted that, given the fact that any Commission proposal on the matter would have to be submitted to the Council several months before the end of September 1985, its results could only partly be taken into account. The European Commission recommended that Canada maintain its quiet diplomacy allowing for low-profile initiatives in the Commission and Council. The main conclusion that Canada drew from the meeting was that it was "out of the question to expect the EC to let the ban lapse" (External Affairs files).

In February 1985, the Environment Committee of the EP adopted a motion for a resolution calling on the Commission to submit proposals to the Council to extend the import ban for an indefinite period, and to widen it to include products of harp and hooded seals less than one year old. The report supporting this motion for a resolution was adopted by the EP in March 1985. The Canadian Mission in Brussels made representations to the Commission, urging it to make any extension of the Directive finite and not to broaden it. On 11 June the Commission presented the Environment Council with a proposal for a resolution that the ban be extended indefinitely.

At their September 1985 meetings, the Council of Environment Ministers was unable to reach a decision and passed the issue on to the Council of Ministers of Foreign Affairs. Through a diplomatic note Canada advised the Council of its intention to bring the matter before the GATT if the ban were extended. The Council of Ministers of Foreign Affairs was also unable to reach a decision and passed the issue on to the Council of Ministers of Fisheries. Canada sent letters to each of the Ministers reminding them that a decision to extend the ban would be inconsistent with sound resource-management policy and practices. Just three days before the deadline for action on the matter, the Council approved a resolution extending the application of the March 1983 Directive for four years.

That the ban was not extended indefinitely was seen by Canada as a partial victory. In response to the extension, Canada served the EC with notice of its intention to seek a remedy under the provisions of the GATT. The matter has been formally placed before the GATT, and initial consultations are expected to take place in 1986 (Gardner Pinfold, 1986).

Observations: A Canadian Perspective

On the basis of their review, Gardner Pinfold (1986) reached the following concluding observations:

> *The campaign by environmental and animal rights groups to stop the seal hunt was effective. It may have been flawed in terms of the soundness of the arguments put forward regarding the threat the hunt posed to the species and to the inhumaneness of the killing method, but in the minds of the public these issues, though not irrelevant, were arguably of secondary importance. The campaign was effective because it made a powerful appeal to conscience and the emotions. The message was simple: attractive babies were being killed, and killed for no other reason than to provide luxury goods for the rich.*
>
> *In its early stages, the protest campaign lacked the necessary leverage to be effective. Canada did not accept the arguments that the hunt threatened the species with extinction and that clubbing pups was inhumane. Canada maintained throughout that the hunt was con-*

sistent with scientific principles of resource management and that the killing method was as humane as possible. In and of itself, the public pressure protest groups were able to generate was insufficient to cause Canada to call the hunt to a halt. Only when they focused on the markets for seal products did the protest groups acquire the necessary leverage to stop the hunt. Europe was the main market.

Canada's handling of the seal issue has been the subject of criticism by those with a direct interest in the hunt. Much of the criticism has focused on Canada's inability to prevent the EC from imposing the import ban. Arguments have been put forward that Canada was not aggressive enough in its dealings with the EC, and that the Canadian effort lacked coordination. One can cavil about possible differences of opinion within federal departments or about how the "European offensive" should have been waged. Perhaps, as some have suggested, the outcome would have been different had Canada been more aggressive and taken retaliatory action.

Perhaps. But in the author's opinion, it can be argued those holding these views miss a very important point. The collapse of the market for seal products was achieved mainly through a direct appeal to the European public to stop buying seal products. This strategy was successful. As a purely practical matter, the ban itself can be said to have had little impact since the market had collapsed before it came into effect. Canada recognized this, and advised the EC that the whitecoat hunt was unlikely to be significant in 1983, and that there was therefore no point in proceeding with the ban.

From a market perspective, then, the ban can be characterized as a formality. Its real significance lay in its political context. Arising as it did from public pressure, the ban was a political statement expressing sympathy with the views held by a substantial number of the electorate.

If this line of reasoning has any merit, it follows that even if Canada's efforts to prevent the introduction of the ban had been successful, a resurrection of the market for seal products was by no means assured. Canada (or the European fur industry) would still have been faced with the task (as it had from the outset of the protest campaign) of dealing with the public's fundamental objections to the hunt. Canada would have had to have convinced the public that their emotional objections to the hunt were unfounded; that they were simply wrong in how they felt about the apparently brutal killing of defenseless babies. In this regard, Canada was confronted with an impossible task.

This is not to suggest that Canada's diplomatic efforts to persuade the EC not to introduce the ban were an academic exercise. Canada saw the ban as a reaction to public pressure and the legitimation of the tactics of powerful pressure groups. Canada took exception to the failure of the EC to base its decision on objective scientific evidence, particularly considering the ban was officially based on Article 235. In Canada's view there was an important principle at stake. This was expressed in the November, 1982 letter from the Secretary of State for External Affairs to the foreign ministers of the EC member states: "Canada believes that international trade must be conducted on a rational and justifiable basis and not according to the emotional and politically expedient considerations which seem to underlie the Commission's actions."

Conclusions and Recommendations of the Royal Commission

The EC Directive of 1983, banning the import of whitecoat and blueback sealskins and products, followed the collapse of the European market for seal pelts. To some extent the EC Directive could be viewed as but one more nail in the coffin of the commercial sealing industry: it was not the first nail. Despite genuine concerns about the state of some seal stocks, especially the hooded seal stocks, on the part of some EC advisers and European

parliamentarians, and despite the wording of the EC Directive about "doubts concerning the population status of the harp and hooded seals", the Royal Commission has concluded that the EC ban was fundamentally the product of an energetic campaign by animal-welfare and animal-rights groups.

The anti-sealing campaign and actions by a number of EC member governments had already resulted in the destruction of the European market for seal pelts. The arguments against the hunt that were raised during the campaign were varied and included the perception that seal pups were cruelly killed by the commercial hunters, that they were killed for the "luxury fur" market and that this market provided an inappropriate reason for the slaughter of seals. By some protesters, too, an ethical distinction was made between seals as wild animals that are a heritage of the world, and domestic animals bred in captivity for uses such as providing food and clothing.

While the wording of the EC Directive draws attention to the conservation of the harp and hooded seals, the EC ban was a political response to prolonged and emotionally charged media campaigns that included pictures of young seals being clubbed. Large numbers of the public did not like what they saw, heard and read. The European politicians acted accordingly.

The seals protected by the EC Directive were young harp and hooded seals, defined as "whitecoats" and "bluebacks". These were never significant objects of the traditional hunts of Inuit; hence no mention of Inuit hunts was really necessary in the EC Directive. Primarily for political reasons, however, and to emphasize the "validity" of the Inuit hunting life-style, the Danish representatives (acting for Greenland) had products of the Inuit traditional hunt explicitly excluded from the scope of the Directive.

Although the EC Directive was targeted only on young harp and hooded seals, several of the anti-sealing campaigns condemned the slaughter of any seals for any commercial purposes. The Government of the Netherlands took the most extreme public stance, banning the sale of all sealskins. The European furriers (mostly in West Germany) similarly stopped the purchase of all seal pelts, not for any ethical reasons, but out of concern that anti-sealing sentiments be prevented from spilling over into markets for other furs. In turn, all European markets for seal products were adversely affected.

The response of the Canadian government to the EC and individual bans by member governments ranged, over the period, from expressions of indignation to an emphasis on "scientific facts". Some "facts" may have been

exaggerated, such as Canada's claim that the ICES (1982) report had concluded that harp and hooded seal populations were increasing. Quite extensive "public education" campaigns, public relations projects and political representations were undertaken, as were diplomatic and low-key interventions. At other times, barely veiled "threats" of reprisals were made (those, for example relating to fish quotas within the Canadian 200-mile limit). Several reports were compiled, followed by the formation of this Royal Commission. The Canadian government has sought to keep the door open for future commercial seal hunts. Newfoundland and the Northwest Territories have sent representatives to Europe and, on a number of occasions, have argued forcefully that the sealers were, in their view, victims of hypocritical sensationalism; that there is no difference, on ethical grounds, between hunting seals and killing domestic animals. The Canadian government, over time, has placed more emphasis on the "scientific" aspects of seals and sealing, especially as they relate to conservation and humaneness. Its position took the details of the wording of the EC Directive in a serious and literal manner. The Royal Commission has learned that, in the eyes of some EC officials, this position appeared to be taken in "too dogmatic" a manner and was counter-productive.

On the face of things the analysis presented here would suggest that the EC ban had little or no effect on Canada or on Canadian sealers. The market for the products of whitecoats or bluebacks had been virtually closed before the EC Directive took effect in October 1983. This suggestion fails to consider the reasons why the protest movement was so successful in the years 1980–1983, while similar protests in earlier years had much less effect on the markets.

There are many possible reasons, including long-term shifts in the general public attitude to conservation and environmental matters, but one reason is that the protracted discussions in the various organs of the European Community provided useful occasions and targets for the protest movements. Protests are more effective in attracting the attention of the media, and hence of the public, if they can be tied to specific occasions. Letter-writing and similar campaigns are more effective if they are directed to those who have some obligation to react.

The debates in the European Parliament and the meetings of the Council provided excellent occasions for protests which would catch the eyes of the media, even if the protests did not directly affect the debates or the Council decisions. Letter-writing campaigns directed at individual MEPs were particularly likely to be effective because the seal issue was one of the

first issues, since the direct election of MEPs, on which the Parliament could take effective action more or less independently of the Commission.

Had there been no question of an EC ban, there would still have been protests, and these protests would have had some effect on markets. It seems likely, however, that the volume of protests would have been less, and possibly the impact on markets less catastrophic.

The Royal Commission concludes that the EC Directive was essentially a political response to emotionally based views that, rightly or wrongly, are unlikely to change. Seal pups have great public appeal. European politicians, the Royal Commission has concluded, are not going to "stick out their necks" and oppose the anti-sealing forces, whatever they may privately believe and confide to be their individual sentiments.

The continuation of the "traditional hunt" by Inuit is not in jeopardy *in principle*, but weak markets for surplus seal pelts present a major difficulty for those who depend on some cash returns from the hunt to provide fairly basic necessities of life and to furnish items for hunting other animals.

Whether the Directive is consistent with the GATT is arguable. The Canadian government (in 1985) has, in fact, provided formal notice to the GATT secretariat that Canada does wish to enter into consultations on the EC's Directive and its trade impairment significance. In 1986, when the Canadian government has finalized its case regarding GATT Article 23, such consultations appear likely to proceed. The scientific logic of the EC's Directive is clearly far from substantive; the interpretation of "conservation" is, at best, controversial. Some moral stands are, obviously, laudable, but this context has to be defensible. The very definition of "morality" (GATT Article 20A) is far from clearly spelled out. In the case of seals, it was learned that some governments (including that of the United Kingdom) are cautious about the validity of "morals" as the basis for the ban, both because this is believed to stretch the framework of the Treaty of Rome, and because it could open a floodgate for all kinds of other EC Directives to be constructed under similar umbrellas.

The strength of public feelings in the European Community against the seal pup hunt should have been more promptly acknowledged by the Government of Canada. There would appear to be little to be gained by continuing a lobby against extension of the Directive banning the import of whitecoat and blueback skins, and their products. Indeed, the great majority of Canadians appear to share with Europeans a similar aversion to the

"whitecoat" hunt, as shown in Chapter 11. European and Canadian officials were talking at cross-purposes, a confusion caused by faults in procedure on both sides of the Atlantic.

In Chapter 12, the Royal Commission makes recommendations to end the commercial hunt of whitecoats and bluebacks. Implementation of these recommendations would meet the concerns expressed in the EC Directive as well as those of most groups which campaigned against the seal hunt. In other chapters of the Report the Royal Commission makes recommendations to minimize the hardship suffered by Canadian sealers and to improve the management of Canadian seal populations.

In addition, the Royal Commission recommends the following:

- The Canadian government should offer to co-operate in the preparation of the report of the European Commission, which was requested by the 1985 Council Directive, and is to be concerned "in particular with, on the one hand, the developments in scientific data on the conservation and the population status of harp and hooded seals and, on the other hand, the development . . . of the market in seal skins derived from the Inuit's traditional hunting . . ."

Finally, as regards Inuit traditional seal hunting, there does not appear to have been any widespread intent in Europe to harm Inuit through the destruction of their markets, although there was clearly a substantial lack of informed understanding of their life-style and dependency on seals. The EC Directive, however, is worded carefully in this respect and, according to discussions with EC officials, for good reason. It is in recognition of this care that the Royal Commission recommends that:

- The Canadian government, recognizing that the EC Directives were explicitly not aimed at Inuit seal products, should assist Inuit organizations in exploring opportunities for marketing their traditional products in the European Community and elsewhere, and encourage co-operation among Inuit of Canada and Greenland, and between Inuit and European authorities.

- The Canadian government should encourage the development of community and co-operative enterprises in Inuit communities for processing and marketing sealskin clothing and other products. It should also encourage establishment of a recognizable trademark to identify products directly derived from traditional Inuit activities and

promote its widest possible public recognition in Canada and elsewhere. Care should be taken, however, not to encourage any commercial hunt that would endanger the traditional hunting for subsistence needs.

Appendices

Appendix 10.1 Council Directive, 28 March 1983

COUNCIL DIRECTIVE
of 28 March 1983
concerning the importation into Member States of skins
of certain seal pups and products derived therefrom

THE COUNCIL OF THE EUROPEAN COMMUNITIES

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 thereof;

Having regard to the proposal from the Commission;

Having regard to the opinion of the European Parliament[1];

Having regard to the opinion of the Economic and Social Committee[2];

Whereas the European Parliament adopted a resolution on Community trade in seal products, and in particular in products derived from the pups of harp and hooded seals;

Whereas, in several Member States, voluntary or statutory measures already exist to restrict the importation or marketing of the skins of whitecoat pups of harp seals and of pups of hooded seals (blue-backs); whereas one Member State already requires the marking of all seal products;

Whereas various studies have raised doubts concerning the population status of the harp and hooded seals and especially as to the effect of

of non-traditional hunting on the conservation and population status of hooded seals;

Whereas the exploitation of seals and of other species, depending upon their capacity to withstand such exploitation and with due respect for the balance of nature, is a natural and legitimate occupation and in certain areas of the world forms an important part of the traditional way of life and economy; whereas hunting as traditionally practised by the Inuit people, leaves seal pups unharmed and it is therefore appropriate to see that the interest of the Inuit people are not affected;

Whereas further investigation into the scientific aspects and consequences of the culling of pups of harp and hooded seals is desirable; whereas, pending the results of such investigation, temporary measures in accordance with the resolution, of the Council and of the representatives of the Governments of the Member States of 5 January 1983[3] should be taken or maintained;

Whereas it has been noted that the hunt of seals pups has already been limited to some extent; whereas the Council has requested the Commission to continue to seek, in the context of continued contacts with the countries concerned, solutions which make restrictions of imports dispensable;

Whereas the Council will reconsider the situation on the basis of a report to be presented by the Commission before 1 September 1983,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. Member States shall take or maintain all necessary measures to ensure that the products listed in the Annex are not commercially imported into their territories.

2. Member States shall forthwith inform the Commission of such measures.

Article 2

This Directive shall apply from 1 October 1983 to 1 October 1985, unless the Council decides otherwise, by a decision taken by qualified majority on a proposal from the Commission, having regard to a report to be presented to the Council by the Commission before 1 September 1983.

Article 3

This Directive shall only apply to products not resulting from traditional hunting by the Inuit people.

Article 4

This Directive is addressed to the Member States.

Done at Brussels, 28 March 1983.

For the Council
The President
J. ERTL

ANNEX

No	CCT heading No	Description
1	ex 43.01 ex 43.02 A	Raw furskins and furskins, tanned or dressed, including furskins assembled in plates, crosses and similar forms: – of whitecoat pups of harp seals – of pups of hooded seals (blue-backs)
2	ex 43.03	Articles of the furskins referred to in 1

(1) OJ No. C 334, 20.12. 1982, p. 132.
(2) OJ No. C 346, 31.12. 1982, p. 1.
(3) OJ No. C 14, 18.1. 1983, p.1.

Appendix 10.2 Council Directive, 27 September 1985

COUNCIL DIRECTIVE
of 27 September 1985
amending Council Directive 83/129/EEC concerning the importation into Member States of skins of certain seal pups and products derived therefrom

THE COUNCIL OF THE EUROPEAN COMMUNITIES

Having regard to the Treaty establishing the European Economic Community,

Having regard to Directive 83/129/EEC, and in particular Article 2 thereof,

Having regard to the proposal from the Commission,

Whereas Directive 83/129/EEC provides that Member States shall take or maintain all necessary measures to ensure that the products listed in the Annex thereto are not commercially imported into their territories;

Whereas Directive 83/129/EEC expires on 1 October 1985;

Whereas the European Parliament has adopted a resolution requesting a prolongation of Directive 83/129/EEC;

Whereas the negative consequences to be expected from expiry of Directive 83/129/EEC should, in the interest of all parties concerned, be avoided; whereas, although the Inuits' traditional hunting is in itself compatible with a constant increase in the harp and hooded seal populations, doubts still exist on the effects of non-traditional hunting on the conservation of those species;

Whereas in accordance with Article 2 of Directive 83/129/EEC, the Commission sent a report to the Council on 26 August 1983, followed by a supplementary report on 14 June 1985;

Whereas Directive 83/129/EEC should be amended so that it remains applicable after 1 October 1985;

Whereas it will be necessary to review the situation on the basis of a report that the Commission will submit to the Council by 1 October 1987 at the latest, together with, where necessary, appropriate proposals, it being understood that this report will concern itself in particular with, on the one hand, the developments in scientific data on the conservation and the population status of harp and hooded seals and, on the other hand, the development, which on the basis of information available is negative, of the market in seal skins derived from the Inuits' traditional hunting and of the market in other seal skins which are also excluded from the scope of Directive 83/129/EEC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

In Article 2 of Directive 83/129/EEC the date '1 October 1985' is replaced by '1 October 1989'.

Article 2

This Directive is addressed to the Member States.

Done at Luxembourg, 27 September 1985.

For the Council
The President
R. STEICHEN

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Chapter 11

Public Opinion on Sealing

There can be little doubt that the public of Canada, and the publics of other industrialized countries of Europe and Asia, in particular, have developed new attitudes towards living marine resource husbandry over the past few decades (Fisheries Council of B.C., 1985).

Introduction

In Chapter 8 the Royal Commission reviewed the range of human attitudes towards animals, and considered how these attitudes relate to the problems presented by seal hunting in its various forms. It has also considered, in Chapter 9, the efforts that have been made by the anti-sealing groups to influence public opinion in the direction of opposition to seal hunting, particularly to the hunt for harp seal pups, and the responses by pro-sealing organizations.

In the present chapter the Royal Commission reviews the information available to it concerning the present state of public opinion on these questions. The anti-sealing campaign has been conducted not only in Canada, but also in the United States and in Western Europe, where it was important in bringing about the European Community's (EC) ban on the sale of products from harp and hooded seal pups. This review has therefore been extended to include the United States and a number of European countries.

Since the purpose here is to obtain an unbiased picture of the state of public opinion, the Royal Commission has drawn its information from professionally conducted public opinion polls, rather than, for example, considering the numbers of letters and postcards which have been addressed to politicians and public servants in response to the campaigns of the anti-sealing groups. The Royal Commission undertook its own poll on a number of questions relating to the sealing controversy; it used for this purpose the services of Canadian Gallup Poll Limited and affiliated organizations. It has also been given access to the results of several other professionally conducted surveys sponsored by bodies interested in sealing issues.

Material Available

The results available to the Royal Commission were obtained from:

- the Royal Commission's own poll, referred to as the Royal Commission poll (Canadian Gallup Poll Limited, 1986a, 1986b);
- a poll conducted for the Canadian Sealers Association (the CSA poll) (Research Dimensions, 1985);
- a poll conducted for the International Fund for Animal Welfare (the IFAW poll) (Ryder, 1985a, 1985b);
- a poll on public attitudes towards wildlife in the United States conducted by Kellert and Berry (the Kellert poll) (Kellert and Berry, 1980);
- a review of the importance of wildlife to Canadians: highlights from a 1981 national survey (the CWS poll) (Canada, CWS, 1983).

The Royal Commission Poll

The Royal Commission poll was conducted by Canadian Gallup Poll Limited in Canada, the United States, the United Kingdom, France, West Germany and Norway during February 1985. It was conducted as part of a multi-subject (omnibus) survey, using sampling and interviewing techniques identical with those used by the company for predicting the vote in general elections. All interviewing was done in person, at the homes of the respondents, who were 18 years of age or older. The sample sizes in the countries surveyed were:

Canada	1,060
U.S.A.	1,557
U.K.	1,042
France	1,000
West Germany	947
Norway	929

Nine questions were asked; they were directed towards determining:

- the attitude of the respondent to the killing of animals in general;

- his/her awareness of, and attitudes to, seal hunting and the reasons underlying these attitudes;
- his/her knowledge of seals and sealing;
- his/her perceived sources of information about seals and sealing.

Some questions were "closed" questions in which the respondent was asked to select one (or more) of a number of options presented by the interviewer; others were "open ended" questions in which the respondent could reply in any way he/she wished.

The CSA Poll

The CSA survey was conducted for the Canadian Sealers Association by Research Dimensions of Toronto. Interviews were conducted by telephone in December 1984. Respondents in various parts of Canada numbered:

Western Canada	220
Central (Ontario)	201
Quebec (French)	201
Maritimes	201

Respondents were between 18 and 70 years of age. The choice of respondents was highly selective because the avowed aim of the survey was to "reflect the views and opinions of potential *consumers* of seal skin in original products". (Emphasis in original). For this reason the following categories of persons were excluded from the survey:

- anyone who was a member of, or who had ever donated to
  - Greenpeace, International Fund for Animal Welfare;
  - World Wildlife Fund;
  - Canadian Wildlife Federation;
  - any other animal-rights organization;
  - any other wildlife-conservation group;
- any person whose occupation was hunting, trapping or fishing;
- any person who objected or disapproved in principle to the use of animals (such as farm or wild animals) for food or clothing.

Of 1,092 contacts, the following numbers and percentages were disqualified on the basis of:

Association	199	18%
Views on animal use	59	5%
Occupation	11	1%
Total	269	25%

The process of selecting respondents may have introduced a bias into the results of the survey compared to the views of the population as a whole, but it is impossible to say to what extent. Many of those potential respondents who were rejected as being members of animal-protection bodies and conservation associations would be likely to oppose the seal hunt. Some of these bodies, however, have publicly supported the hunt, and their members might be expected to concur in these views. The smaller groups engaged in fishing, hunting or similar activities, or disapproving in principle of the use of animals would probably be supporters or opponents of the hunt respectively.

A major purpose of the CSA poll was to ascertain the views of the public about ownership of goods made of fur or leather and, in particular, of goods made from sealskin as compared to other skins. Nine of the 20 questions asked in the survey were directed to this topic. Most of the other questions were more directly related to the matters of concern to the Royal Commission. Respondents were asked to

- identify the social, economic and environmental issues (including the seal hunt) of most concern to the respondent;
- identify those aspects of the seal hunt seen as either beneficial or wrong;
- indicate whether killing of wild animals was acceptable and, if so, under what circumstances;
- indicate whether more information, and of what kinds, could assist the respondent in forming an opinion about the seal hunt;
- identify those who should provide such information;
- suggest how further information on certain topics would influence the respondent's views about the hunt.

The IFAW Poll

The IFAW poll was conducted in four national sections, as follows, with interviews of respondents 18 years of age and over:

Canada	January 1985	1,058	personal interviews
West Germany	December 1984–January 1985	881	personal interviews
U.S.A.	December 1984	1,004	telephone interviews
U.K.	November 1984–December 1984	1,989	telephone interviews

Only three questions were asked. These were:

- whether respondents had seen or heard about the harp seal hunt;
- how respondents felt about the killing of baby seals;
- how the idea of the hunt affected respondents' feelings about Canada.

For about half of the U.K. sample, only the last question was asked.

IFAW had also conducted a poll in Canada in 1982 (Ryder, 1985b). In this poll 1,040 persons were asked in personal interviews whether they favoured or opposed the seal hunt and their reasons for their opinion. Both IFAW polls were included in omnibus polls conducted by the Gallup organization.

The Kellert Poll

The Kellert poll was part of a study of "American Attitudes, Knowledge and Behavior toward Wildlife and Natural Habitats", funded by the U.S. Fish and Wildlife Service. The main topics examined were:

- knowledge and awareness;
- species preference;
- attitudes towards animals.

On account of the breadth of the study, only a few of the questions were directly relevant to the work of the Royal Commission.

The survey was carried out by professional organizations throughout the United States in 1978. A total of 3,107 respondents, 18 years of age and older, were interviewed personally.

The respondents were first asked how much they knew about a selected set of eight wildlife issues, including "killing baby seals for their fur." None of the other questions among those intended to test knowledge of wild animals related to seals. In the study of species preference, seals were not included in a list of 33 animals, ranging from dogs to cockroaches, which respondents were asked to rank in order of liking. Walruses were included and were ranked seventeenth by respondents, exactly in the middle, and immediately below whales.

The remaining nine questions were designed to determine which of a set of ten possibilities best described the respondent's basic attitude to animals. These individual attitudes were called:

- naturalistic
- moralistic
- utilitarian
- ecologistic
- scientistic
- dominionistic
- neutralistic
- humanistic
- aesthetic
- negativistic

It was considered that an individual could be oriented toward more than one of these attitudes. These attitudes as defined by Kellert and Berry (1980) are listed in Table 11.3. They bear some, but not a clear, relation to the attitudes identified in the Royal Commission's poll, since the latter dealt specifically with attitudes to killing animals. They also bear a rather general relation to the attitudes discussed in Chapter 8.

The CWS Poll

The poll conducted by the Canadian Wildlife Service (CWS) was directed towards obtaining information on attitudes to wildlife, participation in wildlife-related activities, and related expenditures. It was organized by the Canadian Wildlife Service and a number of other interested bodies, both governmental and non-governmental. It was conducted by the Special Survey Group at Statistics Canada and incorporated with the Labour Force Survey in February–May 1982. Questionnaires were distributed personally to 99,601 individuals aged 15 years and over; 76,201 of these were returned. There was thus some selection among the responses, since it is not known

whether those persons who did not return questionnaires would manifest the same opinions and behaviour as those who did. The organizers of the survey implicitly assume that there was no difference, but there is no good evidence on this point.

The only material from this poll which has been found directly relevant to this chapter is that concerning the geographic distribution across Canada of attitudes to animals.

Results

Awareness of, and Concern about, the Seal Hunt

Questions aimed at finding out whether respondents were aware of, or concerned about, the seal hunt were included in the polls conducted by the Royal Commission, the CSA, the IFAW and Kellert.

In an open-ended question the Royal Commission poll asked respondents to name the animals whose killing for food and other products caused them concern. In all countries seals were most frequently named by groups of respondents ranging from 16% in Norway (where 60% were not concerned about any animal), to 63% in West Germany. In Canada 33% were concerned. In Canada, the United States, the United Kingdom and France, whales were the animals next most frequently nominated, but in West Germany and Norway other fur-bearing animals occupied second place. The detailed results are given in Table 11.1.

In the CSA poll respondents were asked to identify their degree of interest (great, some, little, none) in a specified set of issues of public concern, including the Canadian seal hunt. The following data show the percentages recording "great", and "great" plus "some", interest in these issues:

	Great	Great + Some
Capital punishment	62	91
Conservation of our national resources	53	90
Nuclear waste disposal	65	89
Wildlife management	29	74
Acid rain	33	71
Use of animals in scientific & medical experiments	28	67
Humane treatment of farm animals	26	66
Canadian seal hunt	30	65

Table 11.1
Concern about Killing Animals

	Canada	U.S.A.	United Kingdom	France	West Germany	Norway
Number of respondents	1060	1557	1042	1000	947	929
Responses[a]						
Concerned about killing of:						
Seals	33	36	38	51	63	16
Whales	12	22	21	25	–[b]	1
Deer	11	11	7	8	9	3
Others listed: wild fowl, lambs, horses, pigs, dogs	13	24	27	26	47	11
Other fur-bearing animals	10	9	20	20	30	11
Other animals	11	20	13	26	12	20
No concern; don't know; can't say	46	36	33	29	25	60
Total response[c]	134	158	159	180	187	122

Source: Royal Commission poll (Canadian Gallup Poll Limited, 1986a, Table 1).

Question: " In countries round the world, man kills a variety of animals living on land and sea to obtain meat, skins, oil and other products. Are there any animals in particular whose killing causes you concern?"

a. Entries are percentages of respondents.

b. Included in "other animals" category.

c. Percentages may not add exactly to totals because of rounding.

The seal hunt appears at the bottom of the CSA poll list on the basis of "great" and "some" concern combined, but it is one of a group of five issues, all relating to the treatment of animals or to the environment, about which roughly one-third of Canadians are greatly concerned, and another third have "some" concern. On the average, each respondent named rather more than three issues which were of "great" concern to him/her.

The IFAW 1985 poll asked two questions bearing on this issue. The first was, "Have you seen or heard about the harp seal hunt, sometimes known as the baby seal hunt off the east coast of Canada?" The percentages responding yes to this question were:

Canada: 88 U.K.: 84 U.S.A.: 71 West Germany: 81

The second question asked for the respondent's feeling about the hunt; the results, expressed as percentages of those who responded yes to the first question, were:

	Canada	U.K.	U.S.A.	West Germany
Strongly in favour	11	1	1	3
Somewhat in favour	24	12	4	1
Somewhat opposed	22	24	23	10
Strongly opposed	38	54	67	84
Don't know	5	9	5	3

The proportion of Canadians opposed to the hunt (60%) in the IFAW poll is similar to, but rather lower than, the proportion recording "some" or "great" interest in the CSA poll (65%). The proportion of respondents in the former poll who are strongly opposed is, however, rather greater than the proportion expressing "great" interest in the CSA poll. The 1982 IFAW poll also found that 60% of Canadian respondents were opposed to the seal hunt (Ryder, 1985b).

In the IFAW poll the hunt was categorized as the "baby seal hunt"; the possible effect of this identification on the response will be considered later.

The Kellert poll, which was conducted in only the United States, asked respondents to classify their knowledge of each of a set of designated wildlife issues on a scale from "very knowledgeable" to "never heard of it".

The proportion regarding themselves as very knowledgeable or moderately knowledgeable about the seal hunt was, in sum, higher than that scored for any other issue; the first group represented 14.7% and the second 28.5%, with a total of 43.2%. The next highest scores were for "effects of pesticides such as DDT on birds" and "using steel leg-hold traps to trap wild animals", with totals of 42.0% and 38.3% respectively. In this survey the seal hunt was defined as "killing baby seals for their fur". The 43.2% of respondents who considered themselves very or moderately knowledgeable may be compared to the 36% of U.S. respondents to the Royal Commission survey who expressed concern about seals. The 12.5% who responded to the Kellert survey with "never heard of it" is significantly lower than the 20% in the United States who replied similarly to the IFAW poll. This response suggests either some increase in public awareness of the seal hunt between 1978 and 1984, or a difference in the methodology of the polls.

Attitude to Animals

Questions bearing on the general attitude of respondents to animals or the killing of animals were asked by the Royal Commission, CSA and Kellert polls.

The Royal Commission poll asked respondents to identify themselves, if possible, with one of four views on human relations with animals. The extremes were:

- that man has the right to use animals in any way he wishes; or
- that all use of animals by man is wrong and should be stopped.

One intermediate position required that any killing should be controlled to prevent suffering or extinction; the other added that use should be for non-trivial purposes, but dropped the need to prevent extinction. The detailed results are given in Table 11.2. In all countries, 87%–97% of respondents identified with one of the four views, with the great majority (83–88%) taking one of the intermediate positions. Only 2% (West Germany) to 5% (Norway) thought that man was entitled to use animals any way he wished, as against 2% (West Germany, Norway) to 7% (United Kingdom) who adhered to the fully protective view. In Canada, the United States and Norway the first intermediate position was preferred, but in France, the United Kingdom and West Germany, there was a majority in favour of the second intermediate position.

Table 11.2
Different Attitudes to Relations Between Humans and Animals

	Canada	U.S.A.	United Kingdom	France	West Germany	Norway
Number of respondents	1060	1557	1042	1000	947	929
Responses						
Man has the right to use animals in any way he wishes	4	3	4	3	2	6
The use or killing of animals should be properly controlled to minimize suffering and prevent extinction	48	47	41	27	37	42
Man should kill animals only when needed for important non-trivial uses and then only if there is little or no suffering	40	38	44	58	46	41
All use of animals by man even for food or vital medical research is wrong and should be stopped	5	5	7	5	2	2
None of them	1	1	1	1	3	1
No views on animals; can't say	3	7	4	5	10	11

Source: Royal Commission poll (Canadian Gallup Poll Limited, 1986a, Table 2).

Question: "The following statements represent different attitudes to the relation between man and animals – which one comes nearest to your own views?"

Note: Entries are percentages of respondents. Percentages may not add exactly to 100, because of rounding.

In the CSA poll, respondents were asked to agree or disagree with a number of statements as to conditions under which the killing of animals would be acceptable. The questions were phrased to refer to animals in general, but were presented under the heading of attitudes toward the seal hunt, and were inserted among other questions specifically related to the seal hunt. In the following data, the questions have been arranged in such an order that the left-hand column of percentages represents a diminishing degree of support for an activity involving the killing of animals. The level of support ranges from 90% of respondents agreeing that it is acceptable to kill animals for survival or livelihood, down to 21% who do not consider it wrong to kill animals for sport.

	Agree (%)	**Disagree** (%)
The killing of wild animals is acceptable if a person's survival or livelihood depends on it.	90	4
It is important to maintain a balance in the population of wild animals by controlling their numbers.	81	12
It is acceptable to hunt and kill wild animals provided it's done humanely.	76	16

	Disagree (%)	**Agree** (%)
Wild animals should not be used for luxury fur products.	32	54
Whether or not the animal is an *endangered* species, it is *wrong* to kill wild animals for commercial purposes.	29	58
The killing of wild animals for sport is wrong.	21	73

The summarized results of the Kellert poll, as they relate to attitudes to animals, are reproduced in Table 11.3. These categories cannot be directly related to responses to the questions in the Royal Commission poll (Table

Table 11.3
Attitudes Towards Wildlife among U.S. Citizens

Attitute	Estimated % of American Population Strongly Oriented towards Attitude[a]	Common Behavioural Expressions	Most Related Values/Benefits
Naturalistic	10	outdoor wildlife-related recreation – backcountry use, nature birding and nature hunting	recreational
Ecologistic	7	conservation support, activism and membership, ecological study	ecological
Humanistic	35	pets, wildlife tourism, casual zoo visitation	companionship, affective
Moralistic	20	animal welfare support/membership, kindness to animals	ethical, existential
Scientistic	1	scientific study/hobbies, collecting	scientific
Aesthetic	15	nature appreciation, art, wildlife tourism	aesthetic
Utilitarian	20	consumption of furs, raising meat, bounties, meat hunting	consumptive, utilitarian
Dominionistic	3	animal spectator sports, trophy hunting, animal training	sporting
Negativistic	2	cruelty, overt fear behaviour	little or negative
Neutralistic	35	avoidance of animal behaviour	little or negative

Source: Kellert poll (Kellert and Berry, 1980, Table 24).

Note: This table is based on analysis of a series of questions.

a. Totals more than 100% as persons can be strongly oriented toward more than one attitude.

11.2), or to the categories developed in Chapter 8. It should also be noted that because a person may relate to more than one attitude, the percentages in Table 11.3 add up to much more than 100.

Probably the categories "dominionistic" and "negativistic" correspond roughly to the first category in the Royal Commission poll ("man has the right to use animals in any way he wishes"), and the proportion in the Kellert category (between 3% and 5%) is virtually the same as that in the Royal Commission poll in all countries. The other extreme category in the Royal Commission poll ("all use of animals is wrong") cannot be identified with a single Kellert category, but probably represents the extreme of the "moralistic" category. The rest of the Kellert categories would then correspond broadly to the two central attitudes of the Royal Commission poll. In general the Kellert results seem to correspond well with those of the Royal Commission poll in suggesting a rather symmetrical distribution of views on human relations with animals, with the very great majority of people occupying intermediate positions.

Reasons for Disliking the Harp Seal Pup Hunt

All the surveys dealt, either explicitly or implicitly, with attitudes to the "whitecoat" hunt, and questions as to public views on other seal hunts did not arise. The Royal Commission poll, the CSA poll, and the 1982 IFAW poll examined the reasons why the majority of the respondents disliked this hunt to some degree.

The results of the Royal Commission poll are given in Table 11.4. This poll posed a closed question, offering respondents specific alternatives.

Those respondents who objected to the hunt and could identify a reason for doing so usually identified more than one reason. In Canada the average number of reasons cited was something over two, and the number was higher in all the other countries except Norway. The two principal reasons for objection in all countries were that the respondents considered the hunt inhumane and that baby or pup seals were killed; the next most frequently cited reasons were the belief that the hunt endangered the species and objections to the use of the skins as the main product of the kill. There was also substantial objection to the hunt as "unnecessary". The percentages of respondents in Canada who objected on each ground follows; the percentage of each group among those who identified a reason for objection appears in brackets:

Table 11.4
Unacceptable Aspects of the Seal Hunt

	Canada	U.S.A.	United Kingdom	France	West Germany	Norway
Number of respondents	1060	1557	1042	1000	947	929
Reasons Given[a]						
The manner in which seals are killed, inhumane methods	47	51	65	58	66	28
The fact that baby or pup seals are killed	38	51	40	61	57	26
Endangers the species	26	43	25	39	39	16
Objection to use of skins as main product	21	26	30	35	43	13
Killing of seals is unnecessary	13	29	25	22	28	8
Objection to killing wild animals	7	13	16	21	6	6
Objection to killing all animals	6	12	13	17	12	5
Other reasons (volunteered)	1	1	2	6	11	13
Don't know; can't say	10	16	6	11	13	14
Nothing objected to; find all seal hunting acceptable[b]	13	2	2	3	1	21
Total Response[c]	181	244	224	268	266	138

Source: Royal Commission poll (Canadian Gallup Poll Limited, 198¢a, Table 5).

Question: "What is it about seal hunting that you find unacceptable? Please choose as many or as few as you wish."

a. Entries are percentages of respondents.
b. Exceeds the proportion shown in Table 11.6, since additional respondents mentioned this at this point.
c. Percentages may not add exactly to total, due to rounding.

Inhumane methods	47	(61)
Baby seals killed	38	(49)
Endangers species	26	(34)
Use of skins as main product	21	(27)
Killing unnecessary	13	(17)
Objection to killing wild animals	7	(9)
Objection to killing all animals	6	(8)

Since some respondents named more than one reason, the total is greater than 100%.

The CSA question on this point was open-ended, permitting more than one answer. The percentages among those who objected to the hunt and who named each of the principal bases for objection, appear to have been:

Inhumane methods	51
Killing for clothing	13
Endangers species	14
Baby seals killed	11
Sympathy	20

Because some respondents named more than one reason, the total is greater than 100%.

Again, the method of killing is the dominant source of objection; but the percentages of respondents objecting on the grounds of the killing of baby seals and on the use of skins and danger to the species are much lower. This applies even to the samples polled by CSA in Ontario and western Canada, distant from the area of the hunt.

The 1982 IFAW poll asked rather similar questions (Ryder, 1985b). In this survey it appears that all respondents included in the original table, where only one reason for objection was allowed, had objected to the hunt. Combining the results into categories of objection similar to those given above produces the following percentages:

Inhumanity, cruelty	41
Unnecessary, unneeded products	23

Killing baby seals	13
Endangers species	10
Objection to killing animals	14

The perceived cruelty is again the dominant reason for objection, and the other proportions are not dissimilar to those obtained in the CSA survey. The level of objection to killing baby seals is similar to the CSA figure and much lower than that in the Royal Commission poll. The relatively high response to killing baby seals in the Royal Commission poll may be because of the fact that this poll both identified this reason specifically as a possible source of objection and also allowed multiple responses; the CSA and IFAW polls did not suggest possible reasons and allowed only a single response. It seems, therefore, that the fact that "baby" seals are killed is less actively present in the minds of respondents than is cruelty as a reason for objecting to the hunt.

Benefits from, and Justification for, the Hunt

Only the CSA poll asked respondents specifically to identify worthwhile or beneficial features of the hunt; they were not prompted as to what features to consider. Only 70% of respondents found any beneficial features, but of those that did, a majority (56%) thought that providing jobs was a good feature. The other relatively high scores were for providing clothing (17%), controlling the seal population (13%), and putting money into the economy (11%).

The CSA poll asked 12 questions in the form of:

> *"How would you feel about the seal hunt if you knew . . . ?"*

The detailed results are reproduced in Table 11.5. The only suppositions which drew strong positive responses were:

> *"Every sealer is licensed and the established quota is watched closely by the Federal Department of Fisheries and Oceans"*, and
>
> *"There has been no commercial killing of baby seals for 2 years."*

Moderately positive responses were given for:

> *"The seal industry includes the use of seal oil and meat as well as fur and leather";*

"Fishermen and native people rely on sealing as an important part of their yearly income"; and

"Canada's policy on the management of seals is similar to its policies on the management of the entire fishing industry."

On most of the other propositions, a substantial majority of respondents did not feel differently on hearing the information. The proportion who felt differently on being told that: "Other countries including Norway, the U.S.S.R. and the U.S.A., also have a seal harvest" amounted to only about one-third of the respondents, but among these a significant majority believed that the knowledge would make them feel worse.

Table 11.5
Reactions to Knowledge of Details of Seal Hunt[a]

	Better	Worse	No Different	Don't Know	Don't Believe It
How would you feel about the seal hunt if you knew ...					
that harp seals are in no danger of becoming extinct	38	3	48	9	3
that harp seals eat as much fish as all European countries	20	9	58	10	3
that there has been *no commercial* killing of baby seals for 2 years	59	2	32	4	4
that overpopulation of seals *could* have negative effects on the ecological chain in the area	38	14	33	9	6
that some seal species carried parasites which infect fish stocks	35	20	32	8	5

Table 11.5
Reactions to Knowledge of Details of Seal Hunt[a] (continued)

	Better	Worse	No Different	Don't Know	Don't Believe It
that most sealers are actually fishermen who fish for other marine life during the fishing season	24	7	60	7	2
that fishermen and native people rely on sealing as an *important part* of their yearly income	49	4	40	6	1
that many fishermen who take or kill seals have made the same financial investment as Canadian farmers	25	6	57	9	3
that other countries including Norway, the U.S.S.R. and the U.S.A. also have a seal harvest	11	17	65	6	1
that the seal industry includes the use of *seal oil* and *seal meat* as well as fur and leather	54	4	38	3	2
that every sealer is *licensed*, and the established quota is watched closely by the Federal Department of Fisheries and Oceans	71	1	25	2	2
that Canada's policy on the management of seals is similar to its policies on the management of the entire fishing industry	47	4	39	8	2

Source: CSA poll (Research Dimensions, 1985, Table 23).

a. Entries are percentages of respondents.

A striking feature of these results is the desire to believe that the government is managing the hunt in a responsible way, but any interpretation must take into account the fact that a substantial number of people interested in the protection of animals and/or the environment, and a smaller number of professional fishermen and hunters have been excluded from the responding population.

The Royal Commission poll approached this problem in a rather different way, by asking respondents which of a set of specified hunts they found acceptable. The results for all countries are given in Table 11.6.

The proportion taking the extreme views of either accepting or rejecting all types of seal hunts are small and about equal. Nearly all the remainder accept subsistence hunting by aboriginal peoples, and about half also accept subsistence hunting by other local communities. The proportions accepting hunting for cash by the same groups are much smaller and, rather unexpectedly, even smaller if the cash is to be used to support other subsistence activities. This reaction may perhaps imply little general understanding of the essential economic structure of either aboriginal communities or the other isolated communities of the Newfoundland/Labrador coasts. These economies are examined at some length in Chapters 13 and 14.

Knowledge of Seals and the Sealing Industry

The Kellert poll asked respondents to assess their own level of knowledge of "killing baby seals for their fur". The percentages were:

	%
Very knowledgeable	14.7
Moderately knowledgeable	28.5
Slightly knowledgeable	24.9
Very little knowledge	19.3
Never heard of it	12.5

The Royal Commission poll, on the other hand, attempted to assess the respondents' level of knowledge objectively, and asked a series of questions for this purpose. The results for Canada and the United States are given on the following pages; the latter figures are given for comparison with the Kellert poll results.

Table 11.6
Acceptability of Specified Hunts

	Canada	U.S.A.	United Kingdom	France	West Germany	Norway
Number of respondents	1060	1557	1042	1000	947	929
Responses[a]						
Find *all* types acceptable	7	2	2	3	1	16
Hunting by native people, such as Eskimo and Inuit:						
• for food/clothing	81	81	77	80	58	72
• for cash	28	13	16	11	12	20
• finance hunting for food	19	13	15	9	10	8
Hunting by local communities in Newfoundland and Quebec:						
• for food/clothing	47	63	50	54	29	67
• for cash	19	11	8	6	5	17
• to finance fishing operations	17	9	10	7	5	6
Hunting by large-scale operations:						
• purely for commercial purposes	4	7	2	1	1	1
None of these types are acceptable	5	6	13	14	22	6
Have no views on this/can't say	4	6	4	6	13	2
Total response[b]	230	211	197	190	156	214

Source: Royal Commission poll (Canadian Gallup Poll Limited, 1986a, Table 4).

Question: "Seals are hunted by different groups of people for different purposes. Which, if any, of the following types of sealing do you find acceptable?

a. Entries are percentages of respondents
b. Percentages may not add exactly to total, due to rounding.

"What countries can you think of that are involved in seal hunting?" (unprompted)

Countries Named	Canada %	U.S.A.%
Canada	75	30
U.S.A.	17	30
U.S.S.R.	17	28
Norway	14	8
Denmark	5	3
Iceland/Greenland	5	5
Japan	4	13
Others	11	7
Cannot name any	19	34

This list omits Uruguay and South Africa, which have important sealing industries, but includes Japan, which takes only a few seals for subsistence purposes or as incidental catches in its fisheries.

"There are nine kinds of seals living in Canadian waters, can you name any of them?" (unprompted)

Species Named	Canada %	U.S.A.%
Harp	17	6
Grey	5	2
Harbour	6	2
Hooded	3	1
Northern fur	3	2
Sea lions	3	3
Others	5	5
Cannot name any	72	83

"How many seals do you think live in Canadian waters?" (ranges offered)

	Canada %	U.S.A.%
Over 10 million	4	2
3–10 million	13	10
500,000–3 million	24	13
50,000–500,000	19	18
50,000 or fewer	9	13
Don't know	31	44

"In 1983, about 60,000 harp seals were killed in Canada; what effect do you think this had on the seal population?"

	Canada %	U.S.A.%
No difference	23	12
Population increased	3	2
Population decreased	57	81
Don't know	17	6

According to the Kellert poll, 43% of respondents thought that they were moderately to very knowledgeable about the harp seal pup hunt. In contrast, in the Royal Commission poll, only 30% of U.S. respondents even knew that Canada hunted seals, and only 66% could name any sealing country; only 6% could name the harp seal, and only 17% could name any kind of Canadian seal; 44% could not make a guess at the number of seals in Canadian waters, and a further 31% thought the number less than 500,000 (i.e., less than 10–15% of the true number); finally, 81% thought that the harp seal population would have decreased under a catch of 60,000 in 1983, whereas it is virtually certain that it increased.

Although the Kellert and Royal Commission polls involved different respondents, both were based on random samples. It therefore seems probable that a large proportion of the Kellert respondents who regarded themselves as moderately to very knowledgeable about the seal hunt would, in fact, know very little about it, and that many of them would have substantial misconceptions.

The Canadian respondents to the Royal Commission poll scored significantly higher than the U.S. respondents in relation to all four of the above questions. A large majority of them knew that Canada was engaged in sealing, and their idea of the total size of the Canadian seal population was more or less symmetrically arranged about the true value. However, only 17% were able to volunteer the name of the harp seal, in spite of the vast amount of publicity that has been given to the hunt over the last two decades.

Sources of Information

The Royal Commission poll asked respondents where they thought they had obtained their information about seals. A very large majority identified the media in general as the source of their information. This group formed 87% of the Canadian sample, and between 70% and 88% of the sample in other countries. With one exception, only small numbers (1%–8%) identified any other source (e.g., seal protection organizations, sealing organizations, government, friends) as contributing to their knowledge. The exception was in France, where 35% named Brigitte Bardot and 8% Jacques Cousteau as their sources. Respondents were allowed to name more than one source of information, but except in France, only about 10% seem to have done so. Only 2.3% of Canadians viewed their information as coming from government sources.

Probably a large proportion of the news stories relating to seals that are carried by the media have originated in the activities of, or information put out by, special-interest groups such as seal-protection organizations, sealing organizations and the government, but it is apparent that the public sees the media as the channel by which information comes to it. Direct approaches such as mail campaigns conducted by the protection groups are not widely recognized as an important source of information.

The CSA poll took an inverted approach to the question of the public's source of information by asking whether respondents wanted more information about seals; if so, what kind of information was wanted, and who should supply it. Slightly more than half the respondents (54%) did want more information, and the kinds requested in response to an open-ended question covered a wide range of interest.

	%
Use of seals killed	21
Methods of killing seals	20
General knowledge of conduct of hunt	17
Reasons for hunt	16
Number of seals killed per year	15
How many seals are there?	14
Danger of kill to survival of the species	10
Both sides of the story	8

An open-ended question asking who should provide the information discovered a large majority (66%) who considered that provision of information was a government responsibility. Small (8%–11%) proportions thought that the special-interest groups should take this responsibility, and the interests named were fairly well balanced among protectionist, sealing and conservationist groups.

Demographic Differences

Differences among Countries

Most of the information concerning differences among countries came from the Royal Commission poll, but some was also derived from the IFAW poll.

As already noted, seals were most frequently nominated in all countries examined as the animals whose killing caused concern. (See Table 11.1.) France and West Germany showed a considerably higher percentage concerned about seals, and Norway a much lower percentage. Other animals giving rise to high levels of concern were whales in countries other than Norway and West Germany, other fur-bearing animals (especially in West Germany), and deer (except in Norway).

There were no great differences among countries in the distribution of attitudes to animals in the Royal Commission poll. In all countries 83%–88% of respondents fell into the two central categories. Within these two

categories the proportion regarding it as important that animals not be used for trivial purposes was much higher in France (68%) than elsewhere; in the other countries this proportion was: West Germany: 55%; United Kingdom: 52%; Norway: 49%; United States: 45%; Canada: 45%.

The reasons for objecting to the seal hunt were summarized in Table 11.4. Norway and Canada are the only countries in which an appreciable number of respondents (21% and 13% respectively) find no reason to object to the hunt. Among all countries the three dominant reasons for objection are the perception of an inhumane method of killing, killing of baby seals, and endangering the species; they occur in that order, except that in France rather more people are concerned about the killing of baby seals than about the method of killing. This reaction in France may well be a particular consequence of the Brigitte Bardot campaign.

That the proportion who did not object to the seal hunt was higher in Canada than in the United Kingdom, the United States and West Germany was confirmed by the IFAW poll; this poll did not investigate opinion in France or Norway.

In response to the Royal Commission poll's question asking which countries were engaged in sealing, Canada was most commonly named in all countries except the United States and Norway. In the United States only 30% of respondents knew that Canada undertook sealing, the same figure as for the United States itself (presumably based on knowledge of the Pribilof operations). In Norway a very large proportion (83%) knew of Norway's own sealing operations, while relatively few (46%) knew of Canada's.

Ability to name any species of seal was poor among respondents in all countries; the number who could name even one species ranged from 35% in Norway to 11% in France. Harp seals were most commonly named in Canada (17%), West Germany (22%) and Norway (18%). The high percentage able to name harp seals (recorded as *Sattelrobbe*) in West Germany seems remarkable, but it was consistent in all sections of the population. The only other species commonly named were harbour and hooded seals in Norway (both 11%) and grey seals in the United Kingdom (17%). This last result was to be expected in view of the publicity given to the culling of this species in the United Kingdom in recent years.

In the Royal Commission poll's question about the number of seals in Canadian waters, the Norwegians represented the largest group of respondents who chose the right category (3–10 million). In all other countries except the United States, the distribution of the selections was centred on

the 500,000 to 3 million range; in the United States the most common selection was 50,000–500,000. The proportion of respondents unable to make a guess ranged from 31% in Canada to 56% in West Germany and Norway.

The final question which examined the respondents' knowledge of seals asked for their expectation of the effect of killing 60,000 harp seals in 1983. At one extreme was the response from the United States, where 94% thought that they knew the answer; of these, 81% of the whole sample thought that the population would decrease. At the other extreme, in Norway, only 61% had a view on the question, and the greatest number of these respondents (31% of the total) thought that there would be no effect; 26% thought that the population would decrease. Canada, the United Kingdom, France and West Germany stood in intermediate positions; even in Norway only 4% gave the answer consistent with generally accepted scientific information, that the population would increase.

In general it appears that the proportions of respondents, and therefore, presumably of the population, who take a highly protective view of seals and seal hunting is highest in France and West Germany, and only slightly lower in the United States and the United Kingdom. It is lowest in Norway and slightly higher in Canada. Such a statement can, however, be made only in very general terms, since there are quite marked inconsistencies among the responses to different questions when they are viewed in this way. Knowledge of the seal populations tends to be lowest in the United States and highest in Norway and Canada; the other countries occupy an intermediate position.

Differences among Provinces

Both the Royal Commission poll and the CSA poll examined the differences among provinces in the responses to the various questions. The percentage composition of the responses by province for the Royal Commission poll is summarized in Table 11.7. Although there is little variation among provinces in the attitudes to animals, there are other quite substantial differences among provinces, but they do not seem to follow any clear-cut pattern.

In all provinces seals are the animals whose killing causes most concern. The percentage of respondents concerned about them increases westward, but concern about other animals, particularly other fur-bearers and whales, increases more sharply.

Table 11.7
Differences among Provinces in Responses to the Royal Commission Poll[a]

	Atlantic	Quebec	Ontario	Prairies	B.C.
Species causing concern:					
Deer	13	12	9	11	8
Seals	25	22	40	30	44
Other fur-bearers	2	5	13	11	18
Whales	3	5	13	11	31
Acceptable use of animals:					
Any use	6	4	2	5	3
Prevent extinction, minimize suffering	42	47	50	50	45
Non-trivial use, minimize suffering	46	37	39	38	45
No use	1	4	6	3	4
Countries known to take seals:					
Canada	87	63	81	74	71
Norway	23	9	15	15	17
U.S.A.	9	14	22	17	16
U.S.S.R.	11	6	22	23	26
Japan	1	1	5	5	11
Acceptable hunting:					
Native people					
Food & clothing	85	69	86	84	81
Cash	27	22	29	32	32
Cash for hunting	15	15	20	27	16
Local communities					
Food & clothing	51	35	50	52	56
Cash	21	15	20	23	20
Cash for fishery	22	11	17	20	20
Large-scale commercial	8	6	1	3	3
Object to seal hunt because of:					
Inhumaneness	43	28	52	49	54
Killing pups	27	31	42	44	40
Unnecessary	5	8	18	11	22
Use of skins	19	14	21	21	36

Table 11.7
Differences among Provinces in Responses to the Royal Commission Poll[a] (continued)

	Atlantic	Quebec	Ontario	Prairies	B.C.
Endangers species	23	22	25	30	36
Killing wild animals	3	7	8	4	8
Killing all animals	7	4	9	4	4
Seals identified:					
Harp	27	4	20	14	44
Hooded	13	3	1	0	4
Harbour	10	5	3	3	19
Grey	13	2	6	2	6
Northern fur	0	4	1	1	10
Steller sea lion	3	1	2	1	11
California sea lion	4	1	3	0	9
Numbers of seals:					
Over 10 million	6	5	4	2	3
3 million to 10 million	16	11	17	10	8
500,000 to 3 million	33	17	24	26	32
50,000 to 500,000	20	21	20	15	18
50,000 or fewer	6	6	11	10	9
Don't know	18	39	24	37	30
Effect of killing 60,000 harp seals:					
No difference	35	23	24	23	12
Increase	7	2	3	3	1
Decrease	49	49	59	62	68
Don't know	9	25	14	11	18

Source: Extracted from Canadian Gallup Poll Limited (1986b).

a. Entries are percentages of respondents.

Knowledge that Canada and Norway are engaged in sealing is greatest, not surprisingly, on the Atlantic coast. Similarly, knowledge of the sealing activities of the United States and the U.S.S.R., which are involved in taking northern fur seals, is highest on the Pacific coast; so also is the belief that Japan is taking seals.

The kinds of hunting which are found acceptable vary little among provinces, although Quebec shows a lower level of acceptance of sealing in local communities, whether aboriginal or not, than does any other province. Acceptance of large-scale commercial hunting is not quite as low in the Atlantic provinces and Quebec as elsewhere.

There is a tendency for the proportion of respondents objecting to the seal hunt on each of the various grounds, except as part of an objection to killing all animals, to increase westward. The proportion objecting on the grounds of inhumaneness is particularly low in Quebec.

Knowledge of the various species of seals is best, broadly speaking, in British Columbia and, for the local species, in the Atlantic provinces. It is low in Quebec, where, surprisingly, only 4% of respondents named the harp seal. Views on the size of the Canadian seal population showed no significant difference among provinces. In general, a protective attitude towards seals tended to increase westward, but it was lowest in Quebec.

Part of the CSA poll results were also available broken down by regions, and some of the most significant figures are summarized in Table 11.8. In this table the Maritimes apparently are taken to include Newfoundland, while the West includes both the prairie provinces and British Columbia. In this poll, also, there is a general tendency for a protective attitude towards seals to increase westward, although Quebec shows a high level of concern about the effect of the hunt on the survival of the species.

The CWS poll gives some information about the distribution of attitudes to wildlife across the provinces and some results are summarized in Table 11.9. The belief that preventing extinction of species is important and the participation in non-consumptive activities relating to wildlife, such as bird-watching, both show a strong tendency to increase towards the West.

Table 11.8
Differences among Provinces in Responses to CSA Poll[a]

	Maritimes	Quebec	Ontario	West
Some or great interest in seal hunt	83	80	91	89
Benefits of seal hunt:				
Jobs	55	28	42	44
Clothing	9	17	11	10
Meat/food	14	10	5	2
Controls seal population	21	10	5	12
Disadvantages of seal hunt:				
Cruelty	33	30	51	46
Killing for clothing	6	7	12	14
Endangers species	7	15	9	15
Killing pups	5	7	11	10

Source: Extracted from Research Dimensions (1985).

a. Entries are percentages of respondents.

Participation in consumptive activities such as hunting shows no simple trend, although there are quite strong differences among provinces. This suggests that the tendency for a protective attitude to seals to increase westward, shown by the Royal Commission and CSA polls, is not a simple matter of distance from the main seal hunt, but a reflection of a more deep-seated trend in attitude.

A rather similar tendency for knowledge to increase from East to West was shown in the United States by the Kellert poll. There the level of knowledge of animals in general was much higher in the Rocky Mountain and Pacific states than in the northeast and north central states. It was highest of all in Alaska.

Table 11.9
Attitudes of Canadians to Wildlife

	A	B	C
Newfoundland	77.9	71.4	39.1
Prince Edward Island	78.3	76.8	26.3
Nova Scotia	83.1	81.1	32.4
New Brunswick	77.6	79.3	36.6
Quebec	75.5	82.6	29.5
Ontario	83.3	81.5	22.1
Manitoba	81.8	83.8	28.4
Saskatchewan	84.0	84.7	33.8
Alberta	88.4	86.5	29.7
British Columbia	89.1	87.0	24.1

Source: Canada, CWS (1983, Tables 5.12, 5.21, 5.22).

Note: Percentage of Canadians relating to wildlife as:
A = believe preserving endangered species important;
B = take part in non-consumptive wildlife activities;
C = take part in consumptive wildlife activities.

Other Demographic Attributes

The results of the Royal Commission poll were analysed by the Gallup organization on the basis of a number of other attributes of the respondents: sex, mother tongue, income, level of education, age, occupation and size of community (Canadian Gallup Poll Limited, 1986b). The following paragraphs refer to the analysis of the Canadian responses.

Concern about seals is mentioned more often by women than by men, by young people more often than by older people, by those with a high school education more often than by those with either a public school or a university education, and by anglophones more frequently than by francophones.

In attitudes to animals, women considered that animals should be taken only for important uses rather more often than did men.

Canada was recognized as a sealing country more often by men than by women and more often by respondents at higher rather than lower levels of income and education.

Men generally found hunting by Inuit and local communities to be acceptable more often than did women. The exception was hunting by Inuit to provide food and clothing, which was equally acceptable to men and women. Large-scale commercial hunting was equally unacceptable to a great majority of both men and women.

The proportion of respondents finding the seal hunt unacceptable was higher for women than for men, for younger as compared with older age groups, for those with higher levels of education rather than lower, and for anglophones as compared with francophones.

Ability to name any of the Canadian species of seals tended to be higher among men than among women, at higher levels of education, possibly at higher income levels, and among anglophones as compared to francophones. The remarkably small number of people in Quebec who could name the harp seal is reflected, again, in a similarly small number of francophones naming this species.

Men and people with higher levels of education were most willing to guess at the size of the Canadian seal population, but men also tended to underestimate it to a greater extent than did women.

Probably the strongest difference between the sexes was in the expected effect of a catch of 60,000 harp seals in 1983. Many more women than men thought that this catch would reduce the species population.

No very clear-cut differences were found among respondents from rural communities, communities of 1,000–100,000 people, and communities of over 100,000 people.

Discussion

This chapter has compared the findings of several different polls as indicators of public opinion on most of the important issues related to the hunting of seals in Canada. In general, these results have shown a substantial degree of consistency among the polls, and where differences have been apparent, it has been possible to ascribe them reasonably to differences in timing or in details of the particular questions asked. This consistency

must add to the confidence with which the results of these inquiries can be viewed.

Awareness and Concern

The public awareness of, and concern about, the "seal hunt" can be considered here from three points of view. These are:

- awareness that the hunt exists and knowledge about it;
- level of concern about the hunt as compared with other broad issues of interest to the public;
- level of concern about the killing of seals as compared with the killing of other animals, both wild and domestic.

In this context, the "seal hunt" can safely be interpreted as meaning the killing of harp seal pups in Canada by clubbing. Knowledge of, and concern about, other aspects of hunting seals in Canada are probably very small by comparison.

The level of awareness of the seal hunt and of self-assessed knowledge about it is undoubtedly very high in all countries examined. The IFAW poll found that 88% of Canadians and 71% of U.S. citizens were aware of the hunt, and the Kellert poll found the self-assessed level of knowledge higher for seals than for any other wildlife issue examined.

The CSA poll found, however, that the level of interest in the seal hunt was much lower than that in three non-wildlife issues: capital punishment, conservation of national resources (wildlife might be seen as a component of these by some respondents), and nuclear waste disposal. It was about equal to the interest in a number of other animal issues: wildlife management, use of animals in scientific experiments, and humane treatment of farm animals.

The discarding by the CSA poll of nearly one-quarter of those approached because of their association with environmental activities could have had some effect on these results, but is unlikely to account entirely for the greater degree of selection of non-wildlife over animal issues. If all the people discarded had nominated the same animal/environmental issues as causing them concern and had not nominated any of the other issues, the proportions nominating the two groups would have been about the same, and

the most favoured animal/environmental issues would still not have scored significantly higher than the other issues.

The level of concern was specifically related to killing in the Royal Commission poll. Here the killing of seals caused concern to more people than the killing of any other animals. This was true in all the countries where the poll was conducted. In Canada one-third of those examined named seals as causing them concern; the next most frequently named animals were whales and deer, which were named by 12% and 11% of respondents respectively; 46% of respondents did not name any animal as causing them concern.

The IFAW poll examined support for, or opposition to, the hunt and found a very high level of opposition. In Canada 38% of respondents were strongly opposed, and 22% somewhat opposed; only 5% had no views. In the United States, the United Kingdom and West Germany, the percentages opposed were even higher. At first sight there seems to be some inconsistency between this result of 60% of respondents opposed to the hunt and the Royal Commission poll in which only 33% identified seals as animals whose killing caused them concern. The difference probably arises from the fact that the Royal Commission poll did not prompt respondents by suggesting what animals they might nominate – indeed, at the time the question was asked, respondents did not know that the poll was about seals at all – while the IFAW poll asked specifically: "How do you feel about the killing of baby seals?" The response to the unprompted question probably reflects more accurately the extent to which the issue is in the minds of Canadians. About one-third are sufficiently aware of, and concerned about, the harp seal pup hunt to identify it without being reminded of its existence. About another third state concern after they have been reminded that the hunt occurs. This division is consistent with the CSA poll, in which about one-third of respondents expressed "great interest" in the seal hunt and one-third expressed "some interest".

Attitudes to Animals

All the evidence indicates that within the broad spectrum of views of humanity's relation with animals (Chapter 8), the great majority of people take an intermediate position. The proportions who believe that any use of animals is permissible, and, at the other extreme, that any use is wrong, are both under 8% of the population in all the countries examined. Within the middle ground, minimization of suffering, prevention of the extinction of any

species and use only for non-trivial purposes are generally regarded as important limitations on the use of animals.

The CSA poll also indicated a high level of acceptance (81%) for killing animals to maintain the balance of the population; if all the potential respondents who were discarded on account of their environmental affiliations had been included, and if all those included had been opposed to this view, the percentage supporting it would have been reduced to about 66%.

Aspects of the Hunt Causing Concern

Information on this point was drawn from the Royal Commission, CSA and IFAW polls. The results agree in identifying the perceived inhumaneness of the hunt as being much the most common reason for objection to it. They also agree in identifying three other reasons as important; these are that baby seals are killed, that the species is endangered, and that the skins are used for a trivial or unnecessary purpose, such as providing luxury clothing. There is no consistency among the three polls on the relative frequency with which these three reasons were identified. The frequency probably depends on the precise wording of the questions and the context in which they are presented. It may, for instance, be significant that the killing of baby seals was named considerably more often in the Royal Commission poll in which this reason was specifically offered to respondents than in the CSA poll which was open ended.

The proportions of Canadians responding to the Royal Commission poll by recording an objection to killing wild animals or killing any animals were 7% and 6% respectively, not much greater than those who, in replying to a previous question, considered all use of animals wrong.

The CSA poll was the only one which specifically elicited views on clubbing as a method of killing seals. The proportion of respondents who considered that clubbing should be banned (presumably because it was thought to be cruel) was 79%, and only 12% disagreed; the other 9% had no views. To the subsequent proposition that killing with rifles was more humane than clubbing, 60% agreed and only 22% disagreed.

Good Features of the Hunt

The only polls which asked for reasons that influenced respondents favourably toward the hunt were the CSA poll and the 1982 IFAW poll (Ryder,

1985b). Both polls were open ended, and in both provision of jobs was seen as the principal beneficial feature. Across the country 39% of respondents to an open-ended question in the CSA poll thought that the job factor was a beneficial feature, as compared with 30% who thought that there were no beneficial features. Provision of food and/or clothing was much less frequently mentioned.

Social and Economic Bases of Seal Hunting

The Royal Commission and CSA polls explored in rather different ways respondents' attitude to the fact that communities may engage in seal hunting for a variety of reasons, and showed that the purpose behind the hunt may have a great effect on public reaction to it. The Royal Commission poll found strong support (81%) for sealing to provide food/clothing (i.e., for subsistence) for Inuit communities, and less, but still substantial, support (47%) for similar activities in "local communities in Newfoundland and Quebec." The CSA poll found that 90% of respondents agreed with the proposition that "killing of wild animals is acceptable if a person's survival or livelihood depends on it." There are two uncertainties about this response. First, the question refers to "animals" and not "seals", although it was inserted among other questions specifically relating to seals. Secondly, the term "livelihood" might be ambiguous; to some people it might be equivalent to subsistence (i.e., food or clothing); to other people it might include provision of the cash income on which a person lives. The CSA poll, at least, supports the view that there is strong public approval of taking seals for subsistence purposes.

As has been outlined above, the much lower percentages of people willing to accept hunting of seals by Inuit and other local communities to provide cash, and particularly to provide cash to enable them to undertake the hunting and fishing essential for their survival, suggests that the public has very little understanding of the socio-economic realities by which these communities survive.

Implications for Management

In a democratic country such as Canada, government policies and actions will normally have the support of a large part of the population or, at least, will not be opposed by a larger and more vocal group of the population than that which supports them. The seal hunt has been a rather unusual

issue in that it has aroused strong and conflicting feelings among quite large segments of the population while remaining essentially outside the realm of party-political debate.

In such circumstances the issues facing government are basically twofold: how it should modify its policies and activities to satisfy the wishes of particular sections of the public, and whether it should try to modify public opinion where it is internally inconsistent or based on false premises such as ignorance of the size of the seal populations. The surveys reviewed in this chapter provide examples of the kinds of information on public knowledge and opinion which should be helpful to the government in the development of policy regarding seals and sealing. The immediate implications of this knowledge to the development of present policy are discussed in later chapters, particularly Chapters 12 and 30. The concern here is with the problems of collecting and interpreting useful information on the state of public opinion.

The public opinion polls have confirmed what was already apparent: that there is a substantial segment of the public strongly opposed to continuance of the killing by clubbing of large numbers of harp and hooded seal pups for their fur. The bases for this view are primarily the apparent cruelty of the killing and, secondarily, that pups rather than older animals are killed, that the skins are used mainly for luxury goods, and that the hunt is believed to endanger the survival of the species.

If the large-scale pup hunt were discontinued, the major focus for opposition to seal hunting in general would be removed, and polls show relatively low levels of opposition to other aspects of the hunt. There is, in fact, strong positive support for continuance of subsistence hunting to provide food and clothing, particularly by Inuit, and opposition to the hunt as a means to provide cash applies much less to Inuit and local communities than to groups engaged in large-scale commercial hunting.

Whatever policies are adopted toward seal hunting, acceptance by the public is likely to be improved by increased knowledge of all the aspects involved, including the status of the seal stocks, the nature of the hunt, and the significance of the hunt to people who undertake it. The polls have shown clearly that the general level of public knowledge of all these aspects is extremely low. If public knowledge of seals in Canada is similar to that of the United States, then the results of the Royal Commission and Kellert polls would suggest that the Canadian public also know much less than they think they do. The CSA found that about half the respondents polled would

like to have more information about the seal hunt and identified all the aspects listed above as areas in which they would be interested.

Given the low level of public knowledge about seals and sealing, and the likelihood that raising that level should help to increase support for government policies on these matters, it is significant that the CSA poll showed that a substantial majority of people considered the government responsible for providing this information. Only a few people thought that this undertaking should be the responsibility of the special-interest groups on one or both sides of the debate.

It is also significant that in spite of the large amount of publicity material which has been directly distributed by the anti-sealing organizations, as well as much smaller amounts originating with other interested bodies, the overwhelming majority of respondents to the Royal Commission poll stated that they had obtained their information about seals from news items in the media. This statement seems to imply that if the government is to make a successful attempt to raise the level of public knowledge about seals and sealing, it should try to make as much use as possible of the media by providing information and drawing attention to events which the media will see as interesting to the public. There can be no doubt that much of the success of the anti-sealing campaign has come from the ability of the protest groups to use the media in this way. This success has been helped by the fact that to many elements of the media, controversy, "horror stories" and confrontations are much more newsworthy than the successful development of management policies for wildlife resources and their contribution to the prosperity of local communities.

The present study has added to the understanding of the feelings and knowledge of Canadians about seals and sealing. It has identified many of the matters which are of concern to them, as well as showing the deficiencies in their knowledge of the subject. It has therefore provided a basis on which programs of public information could be built to develop knowledge and understanding of future policies relating to seal hunting and the management of the seal populations; it is assumed, of course, that any such policies would have sound social, economic and biological bases. If such programs are to be effective, it will be essential to continue to monitor public knowledge and opinion on at least some of the critical issues. This undertaking will be necessary to determine what effect the program is having so that any necessary modifications may be made.

The Royal Commission recommends, therefore, that the government take more effective steps to ensure that the public is well informed on the

bases for any programs and policies it may develop in relation to seals; that it make as much use of the media as possible; and that it also undertake public opinion surveys at regular intervals to find out how opinion is changing on matters which may affect these policies.

Conclusions

1. Opinions on the killing of animals range from the view that any utilization of animals is permissible, to the view that all use by human beings is wrong. The great majority of the public hold intermediate views and accept the killing of animals to provide food and clothing, subject to the prevention of unnecessary cruelty and the preservation of species and populations.

2. The public is more concerned about the killing of seals than about the killing of any other animals, but this concern is exceeded by concern about a number of other issues, including some of an environmental nature, such as wildlife management.

3. The principal cause of public concern about seals is the cruelty believed to be involved; other important aspects are the killing of "baby" animals, survival of the species, and luxury use of the products.

4. There is considerable sympathy with the traditional hunting of seals for food and clothing, by both aboriginal and non-aboriginal peoples, and somewhat less for hunting seals to provide cash to support other subsistence activities.

5. Only a very small proportion of the public views large-scale commercial seal hunting as acceptable.

6. The public sees nearly all its information as coming from the media, rather than from either protest groups or the government; nevertheless, it strongly expects the government to be the primary source of information.

7. There are no major differences in the range of public opinion between Canada and the other western countries examined. There is, in general, greater support for the seal hunt in eastern Canada. This is partly

because of proximity to the communities directly affected, but may also be partly the result of a general tendency for sympathy for wildlife to increase westward across the continent.

Recommendations

1. The Canadian government should develop a more constructive approach to public information about sealing and should ensure, on a continuing basis, that public opinion is much more fully informed on the grounds of government policies relating to seals.

2. This approach should include facilitating greater balance in the public presentation of the views of the sealing communities and those of other interested groups.

3. The government should make the most effective use possible of the media in disseminating information about sealing.

4. The government should undertake regular studies to examine public knowledge and views regarding seals, both to assist it in taking account of these views in formulating Canadian seal management policies, and to enable it to ensure that its activities aimed at keeping the public fully informed about the issues underlying these policies are effective.

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Chapter 12

Should Seals Be Killed?

If we are to accept the killing of hundreds of millions of animals for human consumption, which, in spite of legislation, involves a degree of physical suffering and mental trauma far in excess of that suffered by the seal, then it seems difficult to understand how the proper killing of seals can be considered unethical (Hughes, 1985).

Introduction

In considering Canadian policy towards seals and sealing, it is clear that before examining details of policy (which will be done in Chapter 30) some broad questions of principle need to be addressed: Should all killing of seals be prohibited? And if some killing is permitted, under what conditions? Should these conditions be more or less stringent for different types of sealing? – large-scale industrial sealing; subsistence sealing; that based on older seals or on pups, and so forth.

Earlier chapters have shown that there is a wide range of opinions on these matters. At the same time it is also clear that by and large, those who would not immediately rule out all killing of animals as a matter of principle agree on certain limiting factors. These factors must be taken into account in determining whether a given operation that involves killing seals (or other animals) should be considered acceptable:

- the degree of cruelty inflicted;
- the conservation of the seal stocks and the environment in which they live;
- the importance of sealing and the products of sealing to those engaged in this activity, including the importance of any benefits to fishermen if culls of seals were undertaken to protect fishing interests.

In some circumstances, consideration of these factors will give clear guidance as to whether a particular type of sealing should be allowed. There is near unanimity that killing of seals should not be permitted if it involves excessive cruelty, or if it endangers the survival of the stocks, and these points can often be settled by reference to objective and verifiable facts, such as how much pain is inflicted, or what is the status of the stocks.

In many other circumstances the issue is much less clear cut. How important must the uses of the product from a given seal hunt be if the hunt is to be considered acceptable? Given that occasional pain is bound to be inflicted when large numbers of seals are killed, how much pain can occur in a given hunt before that hunt should be considered as unacceptable? In such cases appeal may have to be made, on the one hand, to moral and ethical considerations, and, on the other, to public opinion and examination of what, on other occasions, may have been considered important purposes or minor degrees of suffering.

In this chapter the Royal Commission examines the evidence for these criteria in order to reach a decision on whether seals should, in fact, be killed.

The Humaneness of the Seal Hunt

The Commissioners state categorically that if seals are to be killed, for whatever purpose, this action must be done "humanely". Unfortunately, humaneness was frequently of little concern during the very large-scale hunts of the 1800s. During the past two decades, the Government of Canada has intervened extensively to improve the conditions under which the hunting of whitecoat seals is permitted, and the methods by which seals are killed. Still, there continue to be practices that the Commissioners find to be unacceptable. The netting of seals is a method of kill that results in slow suffocation and protracted suffering. Again, some sealers shoot seals in the water with the intent of wounding the animals so as to assist in recovering them before they sink. Both practices are inhumane, and the Royal Commission has made recommendations concerning them. (See Chapter 20.) The shooting of seals on land or ice, or even in the water is as humane as, and in most cases more humane than, much big game hunting. Unfortunately, there are known to have been instances where, because of ice conditions and/or unskilled hunters, seals have not been killed outright by shooting. The same can be said of deer and many other species of game animals and birds.

Most public attention has focused on the whitecoat hunt. At the outset, it must be recognized that there are two perspectives on the humaneness (or lack of it) of clubbing seal pups. One perspective is that of the pain caused to the victim, that is, the seal pup. The other perspective is the effect on the witness, that is, the general public. These two perspectives are addressed in turn.

From the perspective of the victim, the clubbing of seal pups involves little if any suffering when done "properly". (See Chapter 20.) The kill itself is virtually painless, as the animal is rendered instantly unconscious. Virtually no stress occurs prior to the kill, and there is little evidence of stress to the mother seal or to other seals when the pup is clubbed. Various estimates have been given about the proportion of seal pup killing that has not been done properly in recent years. That percentage does not seem to have been large in most years (with some serious exceptions, such as when the seals came close to Prince Edward Island in 1981). It is nevertheless disturbing.

From the perspective of the bulk of the North American and European general public, the clubbing of seal pups presents a brutal and, literally, bloody image that is extremely shocking to those seeing pictures on television or in magazines. Whatever the actual degree of pain and stress inflicted on the individual seal, the impact on the public is wholly negative. Clubbing is widely viewed as unacceptable, whatever the arguments about its "humaneness" and the actual pain involved.

Conservation

Some basic principles of conservation have been set out in the World Conservation Strategy (IUCN, 1980). The function of this strategy is:

- to maintain essential ecological processes and life support systems;
- to preserve genetic diversity;
- to ensure the sustainable utilization of species and ecosystems.

Seal hunting has not always been consistent with these principles. (See Chapters 21 and 22.) Until the application of quotas in the 1970s, the harp seal stock was declining. Earlier the fur seal stock was severely depleted before international conservation measures were introduced in 1911.

The grey seal stock is now increasing fairly rapidly. It is not clear why its numbers were so low in the 1930s, since there are references in descriptions of the early days of European settlement in Canada which suggest that grey seals were then reasonably abundant. It is therefore possible that we are seeing the later stage of the recovery of the grey seals from an earlier time of severe overexploitation.

The present situation is different. Where there has been significant exploitation, catches have been controlled to approximate the sustainable yield or less, and it is clear that no species or stock is endangered. The only seal for which significant concern about its continued existence might be justified is the northern fur seal. (See Chapters 22 and 23.) There has been a continued decline which, while not yet threatening, could lead to a low and dangerous stock abundance, if it is not halted. However, the decline seems the result less of hunting than of entanglement in debris or other circumstances.

Similarly, bearing in mind the non-selective nature of the hunt, there seems no threat to the genetic diversity of any seal stock in Canada, nor does present sealing threaten the maintenance of essential ecological processes. (See Chapter 27.) There is therefore no reason, on conservation grounds, to prohibit any current type of sealing, though as a matter of principle, any activity involving the killing of significant numbers of seals should be accompanied by a monitoring of the resource to ensure that conservation objectives are satisfied.

It should be noted that the protest movement against sealing can have an effect on the successful implementation of conservation principles to other wildlife or environmental issues. While the conservation movement is supported in most of Canada and the rest of the world, it is not supported in some areas where sealing is carried on. To many people in those areas the anti-sealing movement is seen as an attempt, by people remote from the seal areas, and often badly informed about seals and sealing, to impose inappropriate urban values on others, often much poorer than themselves. This adverse reaction to this aspect of the conservation movement has had the effect of reducing the credibility of all conservation activities in regions such as Newfoundland. (See Chapter 9.)

The Importance of Sealing

Many argue that the ultimate use of many sealskins to make luxury coats or other products which the wearer could well do without is an impor-

tant consideration in determining whether seals should be killed. When judged only by such end uses much sealing can be seen as trivial and thus, from several viewpoints, unjustifiable. This seems a narrow view, for a broader view would take account of all those involved, from the seal hunter, to the processor, to the ultimate user.

The actual amount of cash earned by all but the most economically successful sealer may appear small by the standards of the average Canadian per capita income, but for many sealers it is of great consequence. Moreover, when allowance is made for all the relevant factors – the value of the meat and skins consumed by the sealer and his family, the low average income in most areas in which sealing occurs, and the absence of alternative employment, especially during the sealing season – it is clear that sealing is very important, and that the cash returns grossly underrepresent the real economic and social importance of sealing to communities directly concerned. There may be exceptions but in general, if the serving of a significant practical purpose is a criterion of the justification for the killing of animals, most current forms of killing seals are equally justifiable or more so than most other occasions of human killing of animals. The killing of seals to protect fishing interests is a more complex issue. Few would deny that in most communities, fishing is an important activity. It is often less clear whether the expected benefits to fisheries from a cull are sufficiently large or have been demonstrated with sufficient certainty to justify a cull. This issue is considered in Chapters 29 and 30.

In summary, therefore, consideration of the three factors identified earlier indicate that with some minor exceptions, sealing in Canada appears to avoid undue cruelty, not to threaten the stocks, and to serve important purposes. Nevertheless, it may still be argued that sealing is unacceptable in principle on ethical or moral grounds. These arguments will now be examined.

Ethical Considerations

Several presentations to the Royal Commission stressed that the question of the acceptability of killing of seals should be treated as an ethical and moral issue. Two versions of the basic ethical argument against sealing were put forward:

- the absolutist view that killing of seals was in itself, regardless of cruelty or conservation considerations, wrong (e.g., Hamilton, 1985); and

- the judgmental view, that the interests of seals should be taken into account, and that killing of seals could be acceptable only if benefits to humanity from sealing exceeded the harm inflicted on the seals (e.g., Singer, 1985).

Few people supported the absolutist view but it is important to examine it, since if it is followed, further consideration of the actual conditions and importance of sealing is irrelevant, as any sealing would be unacceptable. It is therefore examined at some length. It has been most clearly stated in respect of killing farm animals for food (e.g., Clark, 1977). Those holding this view believe that all killing is wrong and therefore abstain from eating meat. Applied to domestic animals, this approach can be internally consistent, and opponents of sealing who hold these views avoid the complaints against those who protest sealing and then go home to eat meat.

Application of the absolutist viewpoint only to wild animals meets logical problems. To be consistent, any human act leading to the death or suffering of an animal should be opposed. As noted earlier, deliberate killing is only one element, and in most cases only a minor element, of humanity's impact on the numbers and well-being of wild animals. Urbanization, clearing of forests, ploughing of grasslands for agriculture, and spraying to protect crops all have much more harmful effects on the ecosystem and the general welfare of animals than have properly controlled levels of hunting. It is questionable, therefore, whether even if the absolutist view were generally adopted – and it is held at present by only a very small minority of the population – it would really be of much net benefit to animals. Some philosophers (e.g., Frey, 1983) therefore reject this view, and the views that animals should necessarily be considered as having "rights". They point out that the occurrences – some kinds of factory farming, or animal experimentation – that give particular offence to those holding absolutist views and, indeed, to many ordinary members of the public are better tackled directly on the well-established grounds of prevention of cruelty and animal welfare.

Adoption of an absolutist attitude also implies at its logical extreme that animal rights always take precedence over human interests. Most upholders of animal rights would reject this concept. Thus, even Singer (1985), one of the foremost spokespersons of the animal-rights movement, in his submission to the Royal Commission stated:

> *It is not necessary, for the arguments that follow, to give the* same *weight to the suffering of seals and humans; all*

> *that is required is that we accept that nonhuman animals should not be killed or made to suffer significant pain except when there is no other way of satisfying vital human needs. (Emphasis in original.)*

If "vital" does, in fact, mean "matters of life and death" this statement would appear to rule out virtually all sealing, including occasions when killing seals may be the only alternative to going hungry and possibly suffering a period of malnutrition. It would seem to imply putting the interests of seals at a level at least as high as those of humans. If a less narrow interpretation of "vital" is used, the question becomes one of judgmental ethics, and of determining which interests of humankind are sufficiently "vital" to justify killing seals. This view of the ethical or moral questions – that the issue is essentially one of balancing harm to seals against benefits to humans – was clearly put by Sumner (1982, 1985).

This "bookkeeping" approach has the attraction of appearing objective and scientific. In practice the lack of any common scale on which both costs to seals and benefits to mankind can be measured and weighed against each other makes the value of this approach questionable. If one's mind is already made up in favour of seals, it is easy to believe that the slaughter on an immense scale in a vast open-air abattoir, together with the doubts about conservation issues and the degree of pain inflicted, outweigh the minor marginal contribution to the economy of the province. If one holds preconceived views in favour of sealing, the weights on the costs side will be reduced by the possibility that death by clubbing may be less painful than other forms of death that a seal faces; and that its life expectancy (as distinct from its potential life span of 25–30 years) is relatively short: about 10 years for an adult and less for a pup. Similarly, the elements in the benefits side can be given greater weight by noting the importance of sealing to many inhabitants of small isolated communities, in their annual cycle of activities. Stop sealing, and the whole cycle is disrupted. In both cases what may be intended as an objective assessment can easily become no more than confirmation of existing prejudices.

Ethical and moral considerations, therefore, necessitate balancing the interests of humanity and seals, but even this approach is of little help in determining, in any particular case, whether killing of seals should be permitted. In this situation appeal to the public offers one way of determining what should be accepted.

Public Opinion

National and international public opinion on any issue certainly exercises a powerful influence on governments. Governments elected to serve their constituents ignore widely held views at their peril. That is the nature of the democratic process. This reality, therefore, dictated a serious examination of public opinion. This examination was conducted in two ways: directly through opinion polls and indirectly by examining the conditions under which the public accepts the large-scale killing of other species of animals, domestic and wild.

The public opinion poll conducted by the Royal Commission (Chapter 11) indicated that the great majority of Canadians (88%) accept, in general, the killing of animals. This high percentage, however, must be qualified. Canadians are concerned that any use or killing of animals be properly controlled to minimize suffering and to prevent extinction of the stock and that animals be killed only when such killing serves non-trivial uses. Similar majorities were found in the other five countries where the Royal Commission conducted a poll.

Logic might presumably dictate that this conclusion applies equally to the killing of seals. There appear to be few, if any, reasons why seals should be viewed differently from other sentient animals, such as hogs, sheep, cattle and deer. The Royal Commission poll indicated that a small minority (5%) of Canadians and a somewhat larger, but still small, percentage (6%–22%) of people in the other five countries surveyed find all killing of seals unacceptable. It also indicated that a sharp distinction is drawn between killing of adult seals and the clubbing of harp and hooded seal pups. Only 7%–11% of Canadians accept the clubbing for commercial purposes of harp and hooded seal pups. As reported in Chapter 11, other countries share the aversion to the seal pup hunt. Further, there is no evidence that changing the method of killing (e.g., to use of the Hughes pistol) would make the hunt more acceptable. Public opinion against the seal pup hunt is strong, and it appears unlikely to change in the foreseeable future. Of course, large numbers of cows, pigs and other domestic animals are killed in slaughterhouses for food, and large numbers of deer and other wild mammals, as well as birds, are shot for sport. While there are those who oppose all these killings as matters of principle or ethics, the killings appear to be generally acceptable to the Canadian public. Judged by the criteria of conservation, cruelty or importance, however, many of these killings would appear to differ little, if at all, from sealing.

It is clear that the public tends to take a more protective attitude towards seals, especially young seals, than they take towards other animals. Before examining the implications of this attitude for future policy, it is worth considering why this distinction might occur.

Why Seals?

A number of studies, such as those made by zoologist Desmond Morris and the Walt Disney interests in modifying the original form of Mickey Mouse, have investigated the attributes, explicit or implicit, that make an animal attractive. An attractive animal is well rounded, with big eyes, a large head and short limbs. Add dark eyes and white fur, and you have the ideal animal. You also have the whitecoat pup. Further, add white ice, red blood and a sealer with a large club and a skinning knife, and you have a picture that will give rise to widespread public concern. It is this public concern that is one of the major factors in the sealing issue. It exists quite apart from any evidence concerning the state of stocks. It is also distinct from scientific evidence about the pain felt by the seal, the time taken for the animal to reach unconsciousness or death, or the intensity of bonds between mother and pup. The concern is also strengthened by the perceived brutality of clubbing. It is serious because sealing, unlike, say, killing in a slaughterhouse, takes place in the open and potentially under the public eye and the eye of the television camera. Attempts to reduce the publicity by denying observers access to the sealing grounds would probably be unsuccessful and almost certainly counter-productive.

Another source of a sealing problem, over and above objective concerns with conservation of the stocks or undue suffering, is the lack of knowledge of a large segment of the public, particularly in the towns, of what life in the wild is really like. It would be exaggerating to imply that men or women living in Montreal or Toronto believe that in nature no seal would ever suffer or be killed, but there does seem to be a lack of appreciation that violent death is an inseparable part of the natural system.

A related, but more understandable, misconception is that killing of individual seals is incompatible with an interest in the long-term preservation of seals as a species or stock. Here the animal-rights, "thou shalt not kill" view, which would imply leaving animal populations completely undisturbed, and would seem to encourage the notion that humans should somehow separate themselves from nature, is in many ways directly opposite to the general view of the ecology or green movement, which stresses that

humans are part of the natural system and must behave as responsible members of that system, in respect of all their activities.

The latter view has a much sounder scientific base. In killing seals and other wild animals humans are behaving like another predator, albeit a well-equipped and sometimes a ruthless or short-sighted one. Natural predators co-exist with their prey, since any predator that exterminated its prey would soon follow it into extinction. In many cases, indeed, predation has little effect on the abundance of prey, which is more closely related to food supply or other environmental factors than to predation. Provided that humans behave like prudent predators, there is no reason why substantial sealing and large seal stocks cannot co-exist indefinitely. This is no mere theory, but is backed up by the practical experience of the only sealing operation – that in Uruguay – that has been controlled virtually since its beginning, shortly after the first coming of Europeans to the Americas, and has continued successfully ever since. (See Chapter 28.)

There are circumstances in which the opposition to any form of killing can be harmful to the cause of conservation and to the interests of the animal population as a whole. Destruction of habitat is a much greater threat to the survival of a species than all but the most intense and uncontrolled harvesting. Policy makers are best persuaded by economic arguments, and the existence of a sustained and economically valuable harvest can often provide the best ammunition for those wishing to preserve a sensitive habitat against the threats of "development". Many scientists, for example, believe that the best chance of preserving African wildlife, outside a few national parks, is to emphasize its economic value as a source of meat.

Given these factors affecting the public attitude to sealing and particularly the killing of seal pups, it is not surprising that the public makes a distinction between the clubbing of baby seals, and the shooting of adults. The former practice seems to be wholly unacceptable to current public opinion and would probably remain unacceptable however often it might be explained that the pups suffer little if at all, and that the hunt presents no threat to the stock. The reasons for the public's antipathy may be emotional, but the reasons are real, and they have to be taken into account in setting Canadian policy.

The public seems to make less distinction between the shooting of older seals and the killing of other animals. The hunting of adult seals is therefore, on the whole, no less, though no more, acceptable than hunting or

the slaughtering of domestic animals. The results of the Royal Commission poll indicate, however, that the public does make some distinction in the acceptability of different forms of hunting for older seals. (See Chapter 11.) The hunting of seals for subsistence by aboriginal peoples is widely acceptable, while the balance of public opinion is opposed to seal hunting in Newfoundland and Quebec for purely commercial purposes.

Conclusions

At the beginning of this chapter two questions were raised: Should all sealing be prohibited? And if some sealing is to be permitted, under what conditions?

The Royal Commission can answer the first question unequivocally. A complete ban would be justified only if the extreme ethical viewpoint that all killing of animals is unacceptable were adopted. This view is held by only a very small minority. To adopt it in relation only to seals would be inconsistent with the Canadian policy towards domestic and game animals. The Royal Commission therefore rejects the concept of a ban on all killing of seals. Some forms of sealing should be allowed to continue as legitimate activities. Any sealing that is permitted should, however, be allowed to proceed only if certain conditions are satisfied:

- There should be no undue suffering.
- The seal population must be properly conserved.
- Sealing should serve an important purpose and should involve a minimum of waste.
- The form of sealing should be broadly acceptable to general Canadian opinion.

The rejection of a comprehensive ban on sealing does not imply that the Royal Commission believes that seals should be treated only as an economic resource to be used for commercial purposes. Indeed, the consideration that sealing should serve an important purpose implicitly recognizes that the interests of seals must be taken into account.

If the killing of seals is therefore acceptable in principle, the specific circumstances of each occasion on which seals are killed need to be examined

to determine whether or not they satisfy the conditions listed above. To do this for each type of sealing would be a lengthy process, and will not, with one exception, be attempted here, though the circumstances relating to some hunts including culling of harp and grey seals are discussed later, in Chapter 30 on Canadian management.

The exception is the whitecoat hunt. This hunt has attracted far more attention than any other aspect of sealing. It is clear that the clubbing of young harp seal pups (and also that of hooded seal pups) is not acceptable to the mass of the Canadian public, and that there would be wide public support of a formal ban on clubbing whitecoat and blueback seals. There are purely utilitarian reasons for supporting such a ban. As long as killing of baby seals continues or seems likely to be renewed, there will be protests. Some of them will be aimed at the market for seal products, and these, as recent experience in Europe shows, can cause serious loss of markets for products which were not the target, such as those from Inuit or other sealing.

It is likely that if the clubbing of seal pups ceases, protests against the seal hunt will die down, and the immediate public opposition to this form of sealing will weaken. If ever this form of sealing did recommence, however, the incentives for the protest will still exist, and the protests are likely to be as effective as before.

The Royal Commission wishes to stress that the proposal for such a ban is not based on consideration of humaneness or conservation. The Royal Commission believes that if a strong majority of the Canadian public is opposed to an activity, as appears to be the case for clubbing of baby seals, there need to be very strong arguments in favour of that activity, if the activity is to be permitted. No such arguments appear to support this form of sealing. The Royal Commission therefore concludes, albeit with some hesitation, that the killing of young harp and hooded seals (whitecoats and bluebacks) for commercial purposes cannot continue.

Recommendations

1. The killing of seals should be permitted only when subject to appropriate controls on the numbers killed, the methods of killing, and the purposes for which they are killed.

2. The commercial hunting of the pups of harp seals (whitecoats) and hooded seals (bluebacks) is widely unacceptable to the public and should not be permitted.

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PART IV

Economic, Social and Cultural Issues

Justice Malouf, we don't understand
Why your Royal Commission has come to our land,
But thanks anyway for allowing your time
And our story will tell you in this little rhyme.

Our fathers before us and their fathers too
Came to our island, a living to pursue.
They took stock of their riches, and what did they find?
They found birds, fish, and seals. Oh, God was so kind!

For hundreds of years we have harvested our lot
But if protesters win, then what have we got?
The jobs they are scarce and nothing comes free,
We don't want to burden our country.

We are hard working people, honest and strong,
To kill seals for a living, we see no wrong.
So, Justice Malouf, when your work is done
Think of the sealer who is also God's son.

The judgement you make we beg, hope, and pray
Will be for sealers to live his own honest way,
Cause if you recommend that sealing not be pursued
What's the next species will protesters use?

Now to conclude and to finish this song
It's not our intention to do things that's wrong.
But fighters for rights we are known to be
And will continue to do so throughout history.

Song presented by the Local Development Committee of Fleur-de-Lys. 1985. Lyrics by John H. Lewis.

Introduction

For many centuries the aboriginal peoples of Canada, particularly Inuit, have engaged in sealing for subsistence reasons. Early European presence in what is now Atlantic Canada was first motivated by the abundance of cod and whales, but interest in sealing soon followed. By the middle of the 19th century commercial seal hunting was a major enterprise. Until recently, with the exception of relatively brief periods, the Atlantic seal hunt has continued on a large scale. Seals and seal hunting have influenced where people lived and many aspects of the social and economic structures of the North and parts of Atlantic Canada, including coastal Newfoundland and Labrador, the north shore of the Gulf of St. Lawrence, the Magdalen Islands, and the northern part of Cape Breton Island.

Canadians living in communities that rely in part on seals have pursued a way of life which is hard for many in urban centres to understand and appreciate. Secondary industry in these remote communities is virtually absent, and agriculture is at best marginal or, in northern parts, impossible. These areas depend to a large extent on the renewable natural resources of fisheries and wildlife. While seals are not the sole means of support for northern Inuit, they are a vital component. In Atlantic Canada sealing fits into a natural annual cycle of fishing activities, at a time when there are few other employment opportunities.

Though sealing, for both Inuit and other groups of Canadians, is very much a traditional activity, it has been subject to continual change. The hunting equipment of Inuit has changed considerably as they have taken to using motorboats instead of kayaks, for example, and rifles instead of harpoons. For all sealers there have been changes in products and markets, with greater emphasis, for instance, on pelts rather than oil. This pattern of gradual or evolutionary change was shattered in 1982/1983, when the main market for seal pelts, that in Western Europe, abruptly collapsed. This brought about a condition of crisis in what were, for several reasons, already marginal economies.

This part of the Royal Commission's Report concentrates on three main matters: sealing as it existed in recent years; the changes that have occurred since 1982, including the reasons for these changes and their impact on the communities involved; and the outlook for the future, including measures that might be taken to alleviate the impact of recent changes on those most seriously affected. Because of differences in many aspects of sealing, the situation in the North and in Atlantic Canada will be discussed separately.

Sealing in the North

Hunting of marine mammals (seals, walrus and whales) has been, and continues to be, an integral part of the way of life of Inuit, as well as of some Indian groups. Sealing is carried out year-round, though there are seasonal changes in the methods of hunting and the species caught. Ringed seals provide the major part of the catch throughout the year, but in some areas harp seals, at the northern end of their summer migration, are important. Smaller numbers of bearded and harbour seals and a very few hooded seals are also taken. The seals killed are mostly adults or sub-adults, and there is no hunt by northern aboriginal people of harp or hooded seal pups.

In the past, the hunt was purely for subsistence; the sealer used the products of the seal hunt for food, clothing and the harnessing and feeding of dog teams. With greater contact between North and South, and especially the changes from harpoon to rifle and from dog-sled to snowmobile, the need for cash increased. Before resettlement into larger communities, moreover, Inuit lived close to the better sealing grounds. The sealer still uses the proceeds of previous hunts to travel to the next hunt, but by selling skins to buy fuel, rather than feeding seal meat to his dog team. When the price of seal pelts is favourable, fewer seals are required to fulfill the needs of the sealer and his family.

Because of the nature of the Inuit hunt, accurate figures on the number of seals killed are not available. Most statistics refer to the number of sealskins sold, which may considerably understate the total kill, especially in years when prices for skins are low. Annual kills probably have amounted to several tens of thousands, with considerable year-to-year variation.

For similar reasons it is very hard to put a dollar value on the seal hunt in the North. Only a part of the product of the hunt is sold for cash. The value of the meat and skins used by the hunter can be calculated on the basis of the labour and other costs involved in the hunt, or on the basis of the cost of equivalent store-bought clothing and store-bought food. To compare the value of purchased food to that of seal meat may be to underestimate the true value of the latter because much store-bought food has less nutritional value than seal meat. Moreover, the low standard of living in the North must be acknowledged; a given number of dollars in cash earned from sales of seal products will have a significance far above that of the same sum for the usually much more affluent urban Canadian.

Sealing in the Atlantic Region

The dividing line between the Arctic and Atlantic regions is not distinct, and sealing in much of Labrador and in some northern Newfoundland outports shares many features with sealing in the Arctic. Seal hunting in the rest of the Atlantic region, by contrast, is much more specifically directed to commercial purposes than that farther north. This focus has influenced the timing, location and nature of the hunt.

None of the species of hair seals in the North Atlantic collect in the dense breeding rookeries that made fur seals so attractive, and so vulnerable, to 18th and 19th century sealers throughout the world. Nonetheless, harp and hooded seals do collect in somewhat dispersed breeding patches. These patches provide the best opportunity for the high daily catch rates necessary for successful large-scale commercial operations.

Another factor favouring harvesting at the breeding patches is that, after the first week or so of life, the young pup has thick blubber as well as a valuable fur. From the commercial aspect, killing harp and hooded seal pups provides good returns in the production of both oil and skins. As a result, the large-scale commercial hunt in Atlantic Canada has always included a high proportion of seal pups.

While, in the public mind, the Atlantic hunt has been dominated by the whitecoat hunt, there are many other elements. The current situation can only be understood by looking at the individual components of the total hunt.

Three main groups of sealers are involved in the commercial hunt: landsmen, those on longliners and those on large vessels. Statistics of the recent hunt for each group are given in Table IV.1. The nine large vessels that participated in the seal hunt until 1981 – some until 1983 – were the inheritors of the great days of the seal hunt. A majority of these ships were more recently owned by companies or individuals located in St. John's, and they engaged in sealing only during a short season in early spring. The extra crew of up to 200 or more taken on for the seal hunt came largely from the outports of eastern Newfoundland, with some latterly from the Magdalen Islands. Most sealers were fishermen. The earnings per sealer on the large vessels were relatively high. The catch consisted almost entirely of seal pups, taken by clubbing on the breeding patches. By regulation, only 5% of the catch might consist of adult seals.

Table IV.1
Estimated Average Sealing Income, Atlantic Coast Seal Hunt, by Hunting Group, 1981–1984

Hunting Group	1981	1982	1983	1984[b]
Large Vessels				
Number of ships	9	8	3	–
Number of sealers	217	204	65	–
Estimated average sealing income[a]	$4,600	$5,100	$850	–
Longliners				
Number of ships	143	134	85	41
Number of sealers	577	628	371	152
Estimated average sealing income[a]	$2,500	$1,800	$690	$300
Landsmen				
Number of sealers[c]	2,500	2,500	2,500	1,000
Estimated average sealing income[a]	$750	$380	$250	$300

a. Estimates reflect incomes from pelts, meat and oil.

b. Large-vessel activity in 1984 was mainly for scientific research purposes. The catch of seals was very small, and no commercial sealing incomes have been estimated.

c. Averages are based on estimates of the number of hunters who participate on a commercially intensive basis. Total numbers of reported landsmen hunters were at least double the numbers shown above in each year, and numbers licensed (but evidently inactive) are far larger again. (See Table 14.1.)

Longliners are multi-purpose fishing vessels, up to 65 feet (20m) in length. In the last decade or two, the number of longliners participating in the hunt tended to increase, and in the peak seasons of 1980–1981, up to 150 of these craft, carrying 650 or more sealers took part. Longliners are not suitable for entering thick ice, where the main breeding patches are found, and catches were mainly of older seals killed by rifle. Sealing is conducted in the early spring before it is possible to go fishing. Though earnings may not

be high, they are gained when there are few other employment opportunities for vessels or men. The income earned is important in preparing for the summer fishing.

Landsmen depend on favourable ice conditions to bring the seals, especially the breeding patches, close to shore. The landsmen approach the seals either on foot or in small boats, and kill the seals usually by clubbing, occasionally by shooting and in some areas by capture in trap nets. The catch in most operations consists of both pups and adults. Participation of landsmen in the hunt is highly variable, depending on ice conditions. In recent years, participants numbered 5,000–6,000. Except in very favourable seasons many more people take out sealing licences than actually go sealing.

Longliners operated predominantly from northern Newfoundland, as did landsmen. For many of the communities in this area, sealing provided a significant part of annual earnings. Around St. Anthony, for example, sealing accounted for over a quarter of the total revenue of longliners in 1980 and 1981.

For all three groups of sealers, the main cash return has been from the sale of pelts, usually with the blubber attached. The oil rendered from the blubber contributed approximately 15% to the total earnings of the sealing industry. The seal meat is seldom wasted: a large proportion is retained by the sealers for their own consumption, some is sold locally on landing and some is canned for sale.

In northern Labrador, conditions are very similar to those in the Arctic: seals are available for most of the year, and hunting is pursued primarily for subsistence reasons. In southern Labrador, conditions become increasingly similar to those on the Island of Newfoundland: sealing is concentrated in the winter and early spring, and is undertaken primarily for commercial purposes.

In Quebec, along the north shore of the Gulf of St. Lawrence, sealers intercept the migration of harp seals to their breeding grounds in the Gulf. Sealing is particularly important along the lower north shore where nets are used, and in good years several thousand adult seals may be killed. Along the upper north shore sealers hunt from small boats, using rifles.

Sealing around the Magdalen Islands has been very similar to that based in Newfoundland. Frequently, the ice fields on which harp seals breed in the Gulf lie close enough to be accessible to landsmen hunting on foot or by small boat. In recent years one or two large vessels, based in Quebec and

Nova Scotia, but operating in the Gulf, have carried crews from the Magdalens as a condition of their sealing licence. A number of longliners also participate in the Magdalens seal hunt. Like the landsmen and large vessels, they have taken mostly pups. As in Newfoundland, the local consumption of meat and the sale of oil are significant supplements to the income from the sale of skins.

It would be misleading to attempt to assess the importance of sealing throughout Arctic and Atlantic Canada merely by looking at the total income generated or at the income per individual, even among the most active sealers. Few, if any, sealers obtained all their annual income or even the main part of it from sealing. Sealing is part of an annual cycle by which a livelihood is obtained from the sea and land. In the harsh environment characteristic of the areas dependent on sealing, this cycle provides an adequate livelihood only if each segment plays its part. The importance of sealing and the impact of changes in sealing need to be considered against the background of the entire way of life of the people involved, and in the light of possible alternatives to sealing in the annual cycle.

Processing

Sealskins go through a number of processes before they can be used in fashion furs or for other purposes. The final stages are undertaken by a few specialized companies, notably in Norway. In the North, the preliminary process of removing the blubber and stretching and drying the skin is done by the sealer and his family. In the Atlantic region, the sealer may do no more than remove the skin with the blubber attached, which then undergoes initial preparation of the skin and rendering of the oil in a sealskin-processing plant. Facilities for this purpose are located at Dildo in Newfoundland and at Blandford in Nova Scotia. Work in these plants has been an important source of seasonal employment in the local communities. Work in a plant for processing seal meat, at Comfort Cove in Newfoundland also provided local employment.

The Collapse of the Sealskin Market

In the last few years the pattern of sealing has changed dramatically, with very serious consequences for many sealers. The principal market for seal pelts has been Western Europe, especially since the closure of the U.S. market following adoption of the U.S. *Marine Mammal Protection*

Act of 1972. The market for seal pelts has always been variable, in accordance with the whims of fashion, but in 1982/83 it collapsed completely. Sealskins and furs are almost unsaleable in Western Europe today.

For many people in Canada this collapse is associated with the Directive issued by the European Community (EC) in October 1983. This Directive banned, for member countries, the import of products from the pups of harp and hooded seals. In fact, however, the market for those and for ringed-seal products had collapsed before the Directive took effect, as a result of public support for the sustained anti-sealing campaign. The nature of this campaign and its relation to the European ban are discussed in Chapters 9 and 10.

The impact of the collapse of European markets on Canadian sealing has been traumatic. Very few people now find it worthwhile to continue sealing. Despite the much reduced catches, prices for seal pelts are very low. The landed value of pelts in Atlantic Canada in 1984 was less than 10% of that in 1981, reflecting a sharp drop in both price and landings. In the Northwest Territories, the income from sealing in 1983/84 was only about 15% of that in 1981/82.

It may be too early for a proper assessment of the economic and social effects of this situation, especially if it continues for a protracted period. There are already reports that the decline of sealing and the switch to store-bought foods is having a serious effect on nutrition and health in some Inuit communities. The effects in parts of the Atlantic region may be equally serious. Without cash income from sealing at the beginning of each fishing season, the ability of many fishermen to equip their boats properly is undermined. If there are no alternative employment opportunities in early spring, the long-term viability of whole communities may be destroyed.

The Issues

The collapse of the market raises several questions. The ethical or biological issues are discussed elsewhere in this Report. The possible obstacles to renewed sealing, and the public attitudes to different types of sealing, which can have a critical impact on future markets, are also discussed in other parts of the Report. In this part, the Royal Commission examines the market for seal products as it appears at present, and the economic and social consequences of severely depressed conditions for the industry. Economically viable alternatives to sealing, especially those that

might replace sealing as the early spring element of a complete seasonal cycle, are then broadly assessed. This part of the Report concludes with an examination of some development and compensation options to assist individuals and communities in the North and Atlantic Canada. The experience of Norway and Greenland is discussed, to determine whether or not the approaches they have adopted toward their sealing industries in similar circumstances might be applicable to Canada.

PART IV

Economic, Social and Cultural Issues

PART IV a

The North

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Chapter 13

Sealing in Northern Communities

Portrait of the North

> *This is the way I think. A person is born with animals. He has to eat animals. That is why the animals and a person are just like one (P. Oktik, quoted by Brody, 1976).*

The Northern Environment

The Canadian North covers a vast area from the Yukon-Alaska boundary to the eastern coast of Baffin Island; from the more southerly regions of James Bay and the Labrador coast to the high Arctic, including the settlements of Resolute and Grise Fiord. The terrain differs significantly over this extensive territory. James Bay is surrounded by boreal forest, while most of the rest of the North is above the tree line. The north shore of the Yukon and the Northwest Territories slopes fairly gradually toward the sea, while the coast of northern Baffin Island is mountainous.

Weather patterns also differ, as one might expect, from the more southern areas to the higher North. The main difference is the length of the seasons; generally speaking, the winters are longer in the higher North than in areas such as James Bay and the Labrador coast.

Consistent with variations in topography, vegetation and weather, wildlife also varies throughout the North, in type and abundance. This variation in turn affects the economic activities of Inuit and Indian hunters. While some groups focus their hunting on land mammals, others are more oriented toward marine mammals. As this Chapter will indicate, however, hunting is an adaptive activity in which people vary their approach to meet environmental conditions and to take account of the relative abundance of particular species.

Marine mammal hunting has dominated Inuit economies for thousands of years (Giddings, 1967; Bandi, 1969; Morrison, 1983), and the geographical distribution of whales and seals has been the determining factor in Inuit settlement patterns until quite recently (Boas, 1888; Manning, 1943). Ringed seals gradually replaced the bowhead whale as a staple (Wenzel, 1986), and Europeans' destruction of whale stocks in the 19th century increased Inuit dependence on seals (Anders et al., 1967; Kapel and Petersen, 1982). Of the more than 20,000 Inuit of Labrador, northern Quebec and the Northwest Territories (Labrador Inuit Association, 1985; Makivik Corporation, 1985, p. 20, 43), one-half the adult work force hunt seals for all or part of their livelihood (Canada, DIAND, 1985).

Seal hunting is less intensive for the Cree of Hudson Bay and James Bay, the Naskapi and Montagnais of Labrador and the Gulf coast of Quebec, and the aboriginal peoples of the B.C. coast. On the other hand, these groups hunt seals to supplement their regular diets, and this dietary resource can be especially significant at times when other food sources, such as moose or fish, are not readily available.

This Chapter will examine seal hunting and other economic activities of aboriginal peoples in greater detail in the sections to follow.

Inuit and Indian Cultures

> *My name is Christopher Aningmiuq. I am 10 years old and I am in Grade 5 here in Attagoyuk School. I am an aboriginal man and as an aboriginal Inuk I would want to be able to hunt seals and live the traditional hunting life style of a hunter when I grow up.*
>
> *My name is Ilean Kilabuk. I am 9 years old and I am in grade 4. I am an aboriginal woman, the skills of the aboriginal woman should not be forgotten or vanish because our ancestors lived that way for survival and we are still Inuit and we must not forget and would like to be able to carry on the tradition from generation to generation. (Two students from Attagoyuk School, Pangnirtung, NWT before members of the Royal Commission.)*

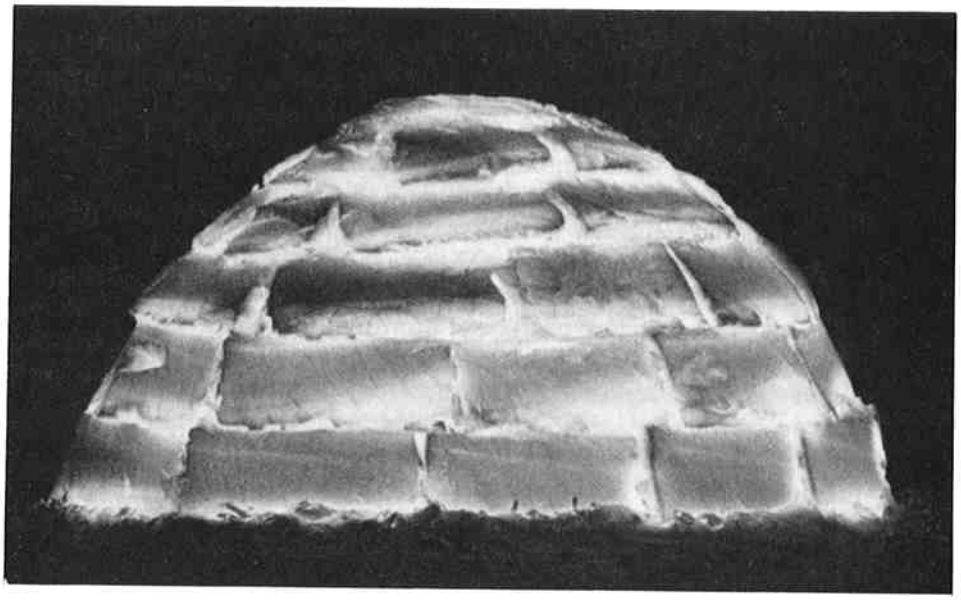
The Commissioners were convinced of the importance of bearing in mind the social and cultural context of the lives of Inuit and Indian people when approaching the issue of sealing in the North. Moreover, it is not possible to generalize concerning different aboriginal groups, since each group is unique in its history, social organization, culture and economy. The differences provide people with their own sense of community and guidelines for daily living. In addition, each culture has its own special relationship with the land it occupies and uses, a relationship that has existed for many generations according to the requirements imposed by a harsh environment.

Geography is the most obvious factor distinguishing one aboriginal group from another. The Quebec-Labrador peninsula is home to the Naskapi, Cree and Montagnais Indians, all of whom inhabit the interior; it is also home to the Inuit, who live along the coast on the east and west sides of the peninsula. As the Labrador Inuit Association points out, however, both Indians and Inuit have access to the territories of the other group (Labrador Inuit Association, 1977, p. 311). This mutual accommodation has enabled the development of an adaptive pattern of hunting for both land and marine mammals in order to supplement the primary food source, especially during periods of scarcity. Cree territory covers much of the Province of Quebec and includes the eastern shores of Hudson Bay and James Bay, where the Cree continue to engage in some seal hunting. The remainder of the North – the Arctic – is Inuit land.

It is fair to say that although Inuit and Indian groups have experienced varying degrees of change in technology and values, they remain closer to the land than do most Canadians. Almost every community in the North depends to a significant extent on hunting, fishing and trapping. The products derived from these activities may be consumed locally or sold for cash. In either event, the benefits typically filter through a community by means of an established network (usually kin based) of exchange and support. As a result, it is unusual for more dependent individuals, such as the elderly, to be neglected in northern communities that rely on the land.

In light of the long-established importance to northern aboriginal peoples of hunting, fishing and trapping, it is understandable that much of their social organization and world view tends to be bound up with their close relationship to the land. This concept applies, for example, to household make-up, which traditionally is flexible in order to allow the maintenance of effective hunting units; in other words, families might unite for purposes of co-operative hunting and sharing (Guemple, 1976, p. 181–186). Similarly, the spiritual identification of Inuit and Indian people tends to be

oriented to the natural world, a fact that they do not perceive as conflicting with attendance at Christian churches. In these respects the aboriginal communities that are involved in sealing are much the same. The traditional identification with the land remains strong, and this was emphasized for the Commissioners during public hearings in the North and through written submissions.



Igloo at night (circa 1960)

Nevertheless, while general similarities exist among northern communities, there are specific differences in terms of the ways in which they have dealt with externally imposed changes, and the extent to which they have maintained their relationship to the land in terms of economic and social organization.

Recent Changes in the North

The 1960s and 1970s saw unprecedented industrial development in the North. Oil and gas exploration, along with mining and highway construction (e.g., the Dempster Highway), were consistent with the view widely held among representatives of government, industry and the social

sciences that development was the key to the future well-being of aboriginal peoples. For its part, the federal government encouraged corporations to develop the North. Moreover, in the 1950s, the government began to implement a program of Inuit resettlement, whereby people were induced to move from their camps and small settlements to larger, more central communities. The program's rationale lay in a need perceived by Ottawa to provide readily available health and education services. Critics of the program have maintained that resettlement was established partly to allow the federal bureaucracy to manage the Inuit population more easily, as well as to contribute to Inuit "Westernization" (Brody, 1975; Wenzel, 1983, p. 82). Besides being more open to the importation of southern goods and services, resettlement communities such as Frobisher Bay have majorities or large minorities of inhabitants of European origin, many of whom emigrated from southern Canada.

As Wenzel points out, resettlement "at least in part, formed a background for the widespread acceptance of new technological items, a greater susceptibility to external market forces, and the need for a diversified employment environment" (Wenzel, 1983, p. 82–83). The removal of Inuit from their usual hunting and trapping areas necessitated an increased reliance on transfer payments and wage income in order to survive. Dependence on the latter opened the door to "remote site labour"; that is, men travelling away from home for extended periods to work on industrial development projects such as mining. Resettlement and remote site labour have had an impact on the social organization of the people involved; the accompanying decline in hunting, for example, has resulted to some extent in the weakening of cooperative bonds linking families. By the same token, Inuit who have remained in or returned to their camps and smaller, more isolated settlements have more often managed to maintain the integrity of their own social and economic organization (Wenzel, 1983, p. 83). Accompanying this phenomenon has been the maintenance in the smaller communities of the Inuit language, knowledge of the land, technical skills, kinship and sense of cultural identity.

As the Commissioners discovered, and as will be elaborated below, the cash economy has become important, although to varying degrees, throughout Inuit and Indian societies. The critical issues are, however, the achievement of a balance among the components of the aboriginal economies (Brody, 1980, p. 16), and the assurance that a viable balance is maintained into the future. Seal hunting meets these needs by providing both subsistence and cash, as will be shown later in this chapter.

Sealing in the Northern Economy

> *To tell you in a few minutes about the significance of seals to our people is much like you having to explain to us the significance of agriculture for your civilization (Ernerk, 1985).*

The Extent of Northern Hunting

Unlike land mammals, seals are abundant, widely distributed and available year-round throughout the Arctic. While not always the largest or most preferred component of traditional Inuit diets, seals have generally been the most reliable, providing a "secure ecological base" that can support higher-risk hunting activities (Wenzel, 1986). They are particularly important in the spring and fall, when travel conditions over unsafe ice are hazardous, and in winter, when other marine mammals retreat from the advancing ice and wind, and when the cold and darkness limit the hunting range. At these times communities must rely on nearby wildlife, while in summer, when greater dispersal is possible, seals are taken more opportunistically to supply scattered hunting camps and long-range hunting trips (Wenzel, 1986).

Ringed seals are very nearly ubiquitous in the Arctic and resident year-round. Bearded and harbour seals occur in smaller numbers, mostly in the eastern Arctic (Braham et al., 1982; Kemp et al., 1977). During their seasonal migrations, harp seals and small numbers of hooded seals are also briefly available in the eastern Arctic, chiefly along the Labrador and southeast Baffin Island coasts (Freeman, 1977; Mackey, 1981). Although all five Arctic seal species are hunted, nearly nine-tenths of these animals are ringed seals (Canada, DFO, 1985, p. 100) as Table 13.1 shows. Ringed seals contribute up to two-thirds of the edible weight of all wildlife harvested in the eastern Arctic (the Baffin region), and in northern Quebec, where caribou are more readily available, they contribute one-sixth of that weight (Kemp et al., 1977; Wenzel, 1981; James Bay Northern Quebec Native Harvesting Research Committee, 1982; Kemp, 1971; Treude, 1977; Riewe, 1977).

Inuit must take advantage of the seasonal availability of all food resources (Freeman, 1983; Mackey, 1981). Winter hunting depends on ringed seal and bear, which are resident year-round and are usually found in

association; it may include fox trapping and fishing char through the ice. Summer (open water) hunting includes migrating mammals such as whales, bearded seals and caribou, as well as birds, hares, fish and migrating waterfowl, which are harvested for variety or in periods of scarcity (Freeman, 1982; Wenzel, 1981, 1986). While more varied, summer hunting also tends to be more opportunistic and less productive in caloric terms (Kemp, 1971). Animals' summer migratory routes vary with weather and ice conditions, and the community tends to disperse and forage over a much greater area (Wenzel, 1981, 1986; Freeman, 1977; McCarthy, 1985).

Table 13.1
Estimates of Inuit Seal Harvests

Region	Year	Ringed	Bearded	Harp	Harbour	Hooded
Northern Quebec Inuit	1980	9,297	1,098	102	52	-
Baffin Region Inuit	1981	36,000	1,297	6,263	96	14
Keewatin District, NWT	1981–1982	1,462	667	56[b]	-	-
Kitikmeot District, NWT	1982–1983	4,869	687	18[b]	-	-
Baffin Region, NWT	1973–1982[a]	21,830	3,920	3,078[b]	-	-
All other NWT	1973–1982[a]	6,480	1,462	74[b]	-	-

Source: Canada, DFO (1985).

a. Average for the decade.
b. Assumed to be all or mostly harp seals where reported as "other seals".

There is also some degree of regional variability in animal stocks (see Table 13.2): whales and fox are somewhat more important in the west, caribou in the south, and seals and bears to the north and east (Freeman, 1976, Finley and Miller, 1980).

Figure 13.1 compares seasonal harvesting activity in Clyde River, in the eastern Arctic, with Grise Fiord, a high Arctic community (Finley and Miller, 1980). The "battleship curves" show how much of each species is taken by month, while the histograms indicate how much each species contributes to total edible weight of animals taken. Clyde hunters depend about equally on ringed seal and caribou, both hunted year-round. At Grise Fiord,

Table 13.2
Sealskins Sold to the Hudson's Bay Company, 1943–1984 (by region)

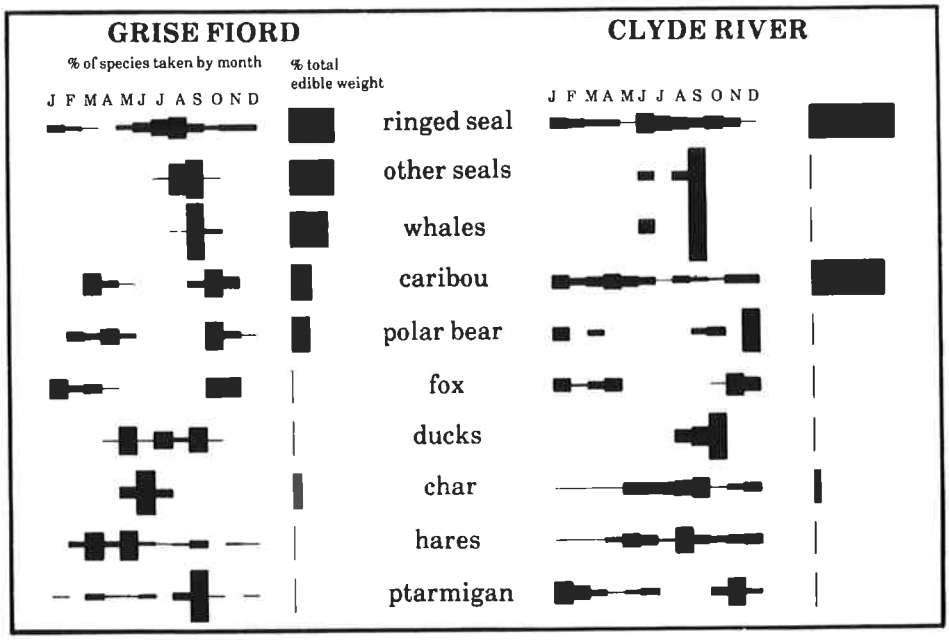
Period	Average Price	Northwest Territories			Quebec
		Western	Central	Eastern	
1943–1952	n.a.	94	387	4,080	1,792
1953–1962	n.a.	734	867	8,501	2,519
1963–1973	9.09	8,185	6,302	24,348	7,197
1973–1982	17.79	4,043	2,283	23,506	2,075
1983	11.92	1,154	184	9,376	46
1984	8.43	372	23	4,084	13

Source: Hudsons's Bay Company employee (pers. comm.).

greater use is made of summer migrations of relatively more abundant whales and bearded seal, but their economy is accordingly also more sensitive to seasonal factors such as late summers or changing migratory routes. Harp seals are significant only for Labrador Inuit and for Pangnirtung on Baffin Island (Baffin Regional Inuit Association, 1982; Labrador Inuit Association, 1985).

Some hunters "specialize" in caribou or char, but nearly all take seals (Finley and Miller, 1980). Depending on seals' relative importance regionally, Inuit may require up to 10 seals per capita yearly for food (Anders et al., 1967; Brakel, 1977). In Holman the average was 38 seals per hunter yearly until sealskin markets collapsed in 1983 (Holman H.T.A., 1985). Seals' large but regionally varied role is suggested by figures for three eastern Arctic communities, as recorded in Table 13.3. The total Inuit seal harvest is not reliably known. Harvest figures have been based on observations by RCMP officers or on questionnaires distributed to a sample of hunters (Brakel, 1977; Boles et al., 1983; Freeman, 1977; Finley and Miller, 1980). Data from pelt sales are particularly unreliable, since the number of pelts sold compared to the total number of seals taken depends on prices (Miller et al., 1982). Three sets of estimates based on hunters' reports are summarized in Table 13.3.

Figure 13.1
Seasonal Use of Wildlife in Two Inuit Communities



Source: Finley and Miller 1980

Although by far the greatest use of seals is made by Inuit, many other aboriginal peoples also hunt seals for subsistence; among these groups are the Micmacs in Newfoundland, the Innu or Naskapi-Montagnais of Labrador and the Gulf coast of Quebec, the Cree of northern Quebec on Hudson and James Bays, and coastal peoples of British Columbia. Virtually no harvest figures are available except for the Cree of Quebec, who report taking an average of 657 seals of all species yearly (Moses, 1985). This represents only about 5 kg per capita, compared with as much as 100 kg per capita on Baffin Island, but the importance of occasional seal meat in coastal Indian diets should not be disregarded. In places where, as in British Columbia, the bulk of the country food available is fish, seal meat can be an indispensible source of iron and vitamin B, besides contributing variety to an otherwise monotonous diet. Pacific coast aboriginal peoples commonly eat dried salmon with seal oil, which adds fat-soluble vitamins as well as flavour. In the east, seal supplements diets in the winter and spring, when other meats, such as caribou and moose, are not readily available. The role

of seals in coastal Indian economies deserves further study. For the time being, no regulatory regime should be implemented for sealing in these areas without conscientious and public assessment of the potential effects on Indian subsistence.

Table 13.3
Estimated Harvest Levels for Three Baffin Region Communities, 1979

	Average Number Taken per Hunter		
	Clyde River	Grise Fiord	Pond Inlet
Ringed seal	54.4	31.2	20.4
Other pinnipeds[a]	0.2	9.1	0.6
Whales[b]	0.1	1.3	1.2
Polar bear	0.2	1.1	0.1
Char	33.0	38.2	38.4
Caribou	11.4	3.4	9.4
Furbearers	5.8	17.5	2.5
Birds	8.3	36.9	10.6

Source: Finley and Miller (1980).

a. Other seals and walrus.
b. Beluga and narwhal.

The Mixed Economy: The Importance of Cash and Hunting

Early 19th-century whaling stations offered some limited wage opportunities for Inuit, but they had largely disappeared by 1900 (Anders et al., 1967). Post-war construction of airbases, weather stations and the DEW Line also brought a decade or two of cash prosperity. Now mining projects offer temporary employment, but nearly half of all work is found at government facilities, and the ratio of casual to steady employment has doubled (Kemp et al., 1977; Brakel, 1977; Baffin Regional Office of Economic Development and Tourism, 1985). In Holman only one-third of adults are regularly employed, but nearly half of all hunters participate in some casual work (Holman H.T.A., 1985). According to the Northwest Territories Bu-

reau of Statistics (1985), only 37% of employable Inuit over the age of 15 years worked at all in 1984, compared with 78% among non-Natives.

Northern development emphasizes capital-intensive mineral-extraction industries which produce small numbers of temporary jobs in remote places. Most steady work involves either rotation periods away from home (remote site labour) or permanent relocation. Rotation work is analogous to men's absence during prolonged hunting trips and may be less disruptive of family and community life, but long absences and relocation are associated with loneliness, frustration, increased frequency of family breakup, and domestic violence (Kleinfeld, 1981; Kleinfeld et al., 1983; Hobart, 1982a, 1982b; Kruse, 1982; Klausner, 1982). Hence while northern employers often rate Inuit higher than non-aboriginal employees, staff turnover is very high (Hobart, 1982a, 1982b). Inuit women tend to be somewhat more successful than Inuit men in finding steady work in larger towns (Kleinfeld, 1981; Kruse, 1982), but they also suffer more from unemployment because town living leaves them unable to fall back on traditional community responsibilities (Hobart, 1982a).

Casual employment does not eliminate the social or nutritional incentives for hunting, and may actually increase the intensity and efficiency of hunting by providing capital for more equipment (Freeman, 1977; Hobart, 1982a, 1982b; Kruse, 1982; Wenzel, 1983). Employed Inuit have less time to hunt, however, and this restriction encourages shorter winter trips targeted on cash species such as polar bear (Kemp et al., 1977), short summer open-water hunts for seals (Anders et al., 1967), and greater use of nearby caribou and fish as food (Kemp et al., 1977; Brakel, 1977; Hobart, 1982b). Increased emphasis on cash hunting may lead to greater waste (Kemp et al., 1977; Anders et al., 1967) and less co-operative enterprise (Wenzel, 1981). The scarcity of steady work increases income inequalities among hunters (Kruse, 1982; Freeman, 1982). Those few Inuit able to invest "large amounts of time in wage-labour and who have access to money and, therefore, capital and expendible forms of equipment must, by virtue of their projected needs and limited time, restrict access to equipment from those men who are most able to invest time in harvesting" (Wenzel, 1986).

For many communities, handicrafts are an important secondary industry derived from sealing. In Holman, for example, the local "Co-op" employed nearly all of the women to sew at home on a piecework basis, and about half of their work involved sealskins. This project required about 1,000 skins yearly, or half the skins taken by Holman hunters. Ninety-six seamstresses, together, earned a total of $60,000 yearly, or three to four times the primary value of the pelts used (Holman H.T.A., 1985). Whale

bone and ivory carvings were briefly successful, but prices collapsed after closure of the U.S. market to marine mammal products in 1972. Soapstone carvings were popular in the 1970s, but markets now suffer from competition with imported counterfeits. Prices for the unique prints produced at Co-op studios in Holman, Cape Dorset, Clyde and Pangnirtung have remained high only because of a strict limit on the number of prints and copies released each year. As a whole, Inuit fine arts may enjoy highly priced markets, but these markets are small and unpredictable.

Conditioning sealskin by chewing it (circa 1951)

Social assistance will pay rent and fuel for qualifying Inuit households, as well as a cash allowance based on family size and cost of living, often administered through an account at the Hudson's Bay Company store. For instance, an Inuit family of five living in Holman, receiving assistance

from the Department of Social Services of the Northwest Territories government, could be credited $541 a month at the Bay. This is equal to about $3.60 per capita per day. This amount of money will buy about 0.47 kg of meat – not nearly enough to replace a normal Inuit diet – or a bare adequacy, in caloric terms, of breads and sugars. But the problem is not merely nutritional. Everywhere the Royal Commission travelled in the North, people emphasized that they were "proud Inuit" and reluctant to accept any more government benefits. If financial aid is necessary, most would prefer direct support for hunting, such as fuel vouchers, rather than unrestricted cash grants.

Inuit economies today, therefore, are typically "mixed". Baffin Inuit have derived up to half of their cash income from wages, one-fourth from fur sales, and one-fourth from transfer payments (Anders et al., 1967). For Labrador Inuit, wages, transfer payments and fur sales each contribute equally to cash income (Labrador Inuit Association, 1985). In the relatively industrialized western Arctic community of Inuvik, only one-tenth of households still depend on hunting alone, while in Holman, a more isolated town, the proportion is one-third (Brakel, 1977). In all cases, however, employment and transfer payments help to maintain the hunting economy by providing the necessary cash "grubstake" for motorization and by reducing the risk inherent in relying entirely on wildlife for survival (Cox, 1985). Usher (1982), for example, estimated that Labrador Inuit invested $1.5 million in hunting and produced $3 million in food products, but only $1 million in cash. Hunting is economical in real terms, but requires a cash source if it is to continue.

Human Resources, Equipment and Technique in the Seal Hunt

In winter seals must be shot at their widely dispersed breathing holes (*aglu*), in spring they can be stalked while basking (*uutuq*) on the ice, and in summer they may be pursued swimming in open water. A study of Baffin Inuit found that hunts on the ice tended to be longer (lasting about a week), farther from the hunter's base (69 km per seal taken), and more efficient, with eight-tenths of the seals fired upon being taken. Open water hunts were brief (lasting about three days), nearer the hunter's base (38 km per seal taken), and relatively wasteful, with more shots fired at each seal and up to two-thirds of the seals lost (Anders et al., 1967). Wenzel (1986) similarly found that Clyde hunters fired 1.1 shots per seal in *aglu* hunting, 2.6 hunting *uutuq*, and 3.5 in open-water hunting. After fasting through their spring moult, seals are lean and sink quickly (Smith, 1973; McLaren, 1962). One-fifth of ringed seals and as many as half the harp seals are lost

after being shot in open water (Anders et al., 1967). Indeed, because harp seals are wary, fast swimmers, sink quickly and are not highly valued as food outside Labrador, few Inuit pursue them (Freeman, 1977).

Since ringed seals prefer dynamic land-fast ice for maintaining *aglu* and birth lairs, their numbers depend on the complexity of the coastline and annual fluctuations in ice conditions (McLaren, 1958; Kapel and Petersen, 1982; Freeman, 1984; Smith and Hammill, 1981; Stirling et al., 1977). "Inuit knowledge of sea ice conditions allows efficient utilization of those areas most likely to contain high densities of seals [such as] near the mouths of fiords, near grounded or trapped icebergs, and off points and near islands where currents and winds produce dynamic ice" (Wenzel,1986; see also Anders et al., 1967). An Inuk may cross several thousand square kilometres of land and sea ice yearly, but obtain most of his seals from a few productive and relatively reliable hunting areas less than one-tenth as large (Wenzel, 1986; Freeman, 1984). "The Eskimos know the seal as well as a seal might" (Pryde, 1972, p. 134).

Weather conditions affect the availability of seals. The ice is unsafe for weeks or months during freeze-up and break-up, depending on the vagaries of the weather (Wenzel, 1981, 1986). "The ice is like a mean dog," an Inuk explains. "He always waits for you to stop watching him and then he tries to get you" (Nelson, 1969, p. 129). Even when the ice is stable, a warm day causes melting and hinders travel (Boles et al., 1983). Wind can make winter travel miserable and summer transportation on open water extremely dangerous, reducing the duration and distance of hunts (Freeman, 1984; Anders et al., 1967). Moreover, seals prefer to bask on calm sunny days. Haul-outs are fewer, briefer and less visible when there is a brisk wind (Smith, 1980; Smith and Hammill, 1981).

European tools and clothing became generally available to Inuit after the Second World War, and firearms, powerboats and snowmobiles were adopted in the 1960s (Wenzel, 1981; Kemp et al., 1977; Anders et al., 1967). Imported technology "did not permit the Inuit to exert any greater degree of physical control over the ecosystem", however (Wenzel, 1981, p. 76). The Arctic environment is simply too variable. Moreover, many innovations involve trade-offs. Rifles reduce stalking time as compared to harpoons, for example, but increase sinking losses. Greenlandic Inuit actually opposed the use of rifles for this reason until powerboats improved the speed of recovery of shot animals (Kapel and Petersen, 1982). Greenlandic Inuit also prohibited hunting from powerboats or snowmobiles to reduce pressure on wildlife and to discourage townsmen from engaging in part-time hunting for cash (Kapel and Petersen, 1982).

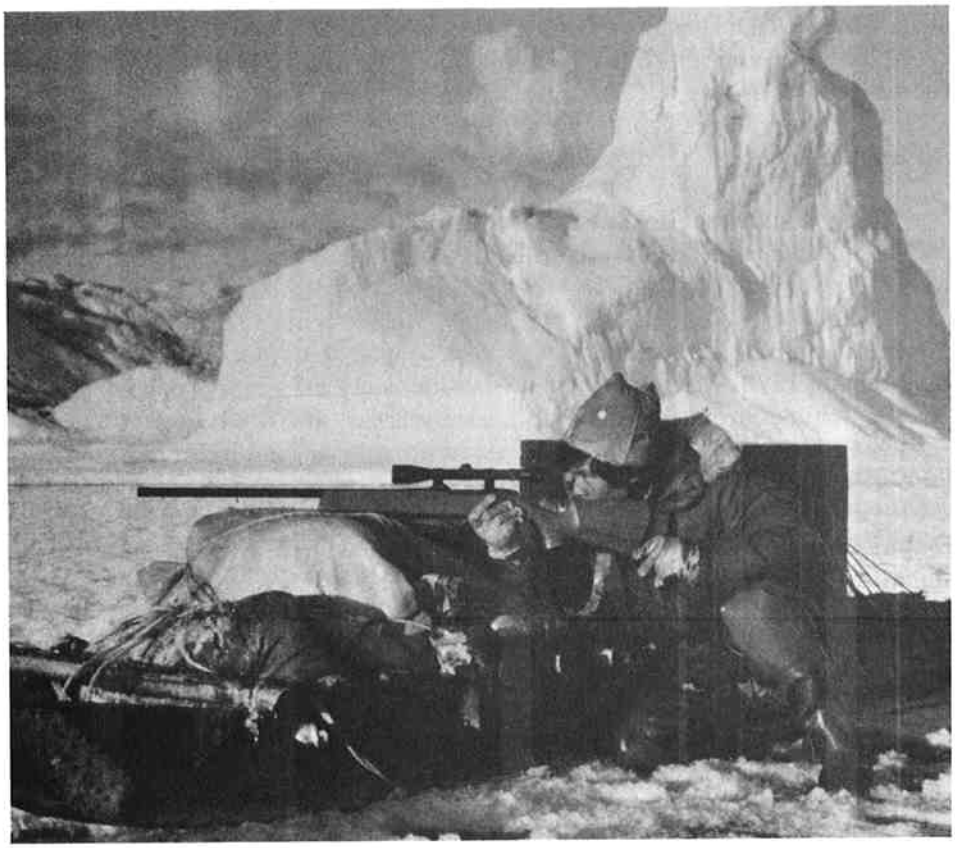
Despite the increased speed of snowmobiles, Inuit hunters have not expanded their annual range appreciably or changed hunting areas (Wenzel, 1986; Freeman, 1983). Rather, Inuit have used motorization to compensate for their resettlement in centralized communities (Freeman, 1984; Smith, 1973). Centralized towns place hunters farther from traditional hunting areas. Moreover, since towns are relatively noisy, seals avoid them. Hunters therefore need speed to cover a greater distance. Speed also improves hunters' ability to track and pursue bear and fox (Freeman, 1984), and reduces wastage of ammunition from missed shots (Baxter, 1981). Snowmobile hunters can rush basking seals, avoiding the need for time-consuming stalking on foot with little loss of efficiency (Wenzel, 1981, 1986; Smith, 1973). With speed, an Inuk can participate in wage employment for part of the week and still hunt over weekends (Kruse, 1982; Hobart, 1982a; Freeman, 1977; Riewe, 1977). In this respect, motorized hunting supported by fur sales and wages represents a necessary development following Inuit resettlement.

Use of snowmobiles involves trade-offs. Although a smowmobile can cover a course across smooth ice in one-tenth the time of a dog team, it can easily slow down to dogs' leisurely 3–4 kilometres per hour or less on rough terrain (Wenzel, 1981; Anders et al., 1967). The motorized hunter loses dogs' sensory aid in judging ice safety and locating prey (Freeman, 1984; Wenzel, 1981; Smith, 1973). Travel with snowmobiles may also be more hazardous. Heavy machines break ice that sleds easily cross, and breakdowns can be fatal because machines cannot be used for warmth or food in an emergency (Boles et al., 1983). Widespread reliance on snowmobiles may also involve health risks. Vertebral compression from vibration (Rode and Shephard, 1984) and hearing loss from engine noise (Baxter, 1981) have been observed clinically.

The financial costs of snowmobile maintenance under harsh arctic conditions are considerable (Wenzel, 1985). Motorization has more than tripled hunters' capital requirements (Riewe, 1977; Canada, DFO, 1985), as prices for fuel and spare parts continue to rise. Twenty years ago, East Baffin hunters spent about 35 cents on ammunition and $2 on petrol per seal (Anders et al., 1967). Since then prices have increased harply (Wenzel, 1978): snowmobile operation costs as much as $30 per day in Labrador (Boles et al., 1983) or $200 for a weekend hunt in northern Quebec that might, at best, produce 10 seals.

Although each dog used for transport purposes consumed some 400 kg of meat yearly, much of this meat consisted of by-products of animals taken for human use, particularly walrus and whales (Kapel and Petersen,

1982; Anders et al., 1967). Quebec Inuit told the Royal Commission that the traditional rule of thumb was two seals for the dogs for every seal taken home. This produced three skins, which could be sold to produce a cash surplus. With motorized transport today, the skins rather than the meat provide "fuel" for transportation, and each seal taken for food must have a pelt value of at least $20 simply to cover costs. This necessity can amount to a significant cost barrier and may encourage more harvesting of species taken for pelts or ivory, but little valued as food, such as harp seals, walrus and narwhal (Anders et al., 1967; Brakel, 1977).



Inuit seal hunter and sled

Despite the contemporary importance of firearms and snowmobiles, Inuit hunters continue to depend on a variety of locally made tools:

> *A typical hunter's outfit for a day on the ice would consist, along with his snowmobile and rifle, of a homemade harpoon, a caribou parka, a long-handled gaff or hook, a saw or snowknife, a cooking pot, and a set of tools for snowmobile emergency repairs. In addition, each hunter would carry gasoline, extra ammunition, extra drive belts and spark plugs, and spare mittens and boots. All these items would be carried on a homebuilt wooden* kamatik *(sled).*
>
> *As [this] shows, much of a hunter's equipment is locally made. Indeed, one of the keys to successful harvesting for Clyde Inuit is the development of expertise not only in the capturing of seals and other animals, but in the manufacture and/or maintenance of nearly all the artifacts which support harvesting activities. In general, the creation of a Clyde Inuk's basic outfit, including clothing, requires at least 150 hours of labour by the hunter and others (Wenzel, 1986).*

In addition, hunters frequently modify imported equipment for Arctic conditions, reboring snowmobile engine parts, painting snowmobile windscreens white to function like traditional *tilawak* or seal-stalking shields, and shortening rifle barrels (Wenzel, 1986).

Sealing: A Cultural Perspective

Hunting is more than subsistence. Most Inuit over the age of 40 grew up "on the land", moving from campsite to campsite in groups of several households. Many still remember building winter houses insulated with heather, lined with sealskins, and heated with seal oil. Many also remember periods of starvation and cold, when severe winters limited hunters' range, and concealed *aglu* under shifting snows (Worl, 1986). Although government programs and stores have reduced these risks, contemporary Inuit remain highly conscious of their physical environment and its power, and continue to relate to it and to conduct themselves in a manner fundamentally different from southern Canadians.

Small and relatively undiversified Inuit economies are highly vulnerable to the supply of wildlife (Brakel, 1977). While industrial economies

produce a cash surplus which can be saved, Inuit must rely on conserving and underexploiting wildlife as security against the uncertainty inherent in Arctic ecosystems. Social organization also helps to reduce these risks (Wenzel, 1981, 1983). The basic harvesting unit is the *ilaagit* or extended family, usually organized around a man who serves as *isumataq* (leader) and sons or brothers who owe him *nalartuk* (respect and obedience). Clyde Inuit view the role of *isumataq* as "keeping people out of danger, showing people how to do things, thinking [decision making], settling or preventing internal disputes, [and] taking care of food," including co-ordinating hunting and distributing harvests (Wenzel, 1986). *Ilaagit* share equipment and co-ordinate their efforts (Wenzel, 1981), and harvests are distributed widely (Wenzel, 1978, 1981; Freeman, 1977, 1982). As long as some hunters are successful, no one goes completely hungry.

Baffin Inuit food-sharing arrangements include *tuqugaujuk*, or the immediate distribution of harvested food within the *ilaagit* by the group's *isumataq* or leader; *tigutwinaq*, the right of more distant kinsmen to "take without asking"; *nirriyaktuktuk*, or invitational communal meals of boiled seal in winter, or fresh caribou, char or other important summer foods; *paiyuktuq*, sending food to a neighbour; and *ningiktuq*, dividing among the entire community scarce foods such as whale, walrus, bearded seal or bear (Wenzel, 1986). *Ningiktuq* reflects a more general conception of reciprocity that used to include hunting equipment, but is now "under considerable strain" because of rising costs; fewer Inuit can afford imported gear, and they are increasingly reluctant to share it (Wenzel, 1986). Similarly, centralized town living has increased the importance and frequency of *paiyuktuq*.

The Inuit universe teems with life, both physical and supernatural, all bound by ties of kinship and responsibility. Clyde Inuit, for example, explain that they share Baffin Island not only with seals and caribou, but also with five other races of intelligent beings: *inurajat* (caribou people), *inugagulligaarjut* (miniature people), *tariaksut* (invisible people), *iqalupaluk* (mermaids), and *qalipalik* (trolls). Some Clyde residents are considered descendants of "ordinary" people and caribou or invisible people, and members of the community may expect aid from these spirit kinsmen in times of distress (Worl, 1986). Other communities have traditions of marriages and alliances with seal people (e.g., Hall, 1975, p. 197).

Invisible people can appear and disappear at will, but otherwise "they live much the same way as Inuit people do." They are frequently seen visiting in the community and, like Inuit, live in houses, eat store-bought food and drive snowmobiles. Hunters report food taken by invisible people,

"but they never use up the meat" and often return the favour with good luck. "They have been said to take meat from a hunter – let's say twenty pounds – but when they finish, there will still be twenty pounds of meat left." Someone at Clyde recalled:

> *He was building a house by himself and these two people came to visit him. He felt like he was dreaming, but he was really awake, he cannot move though. He had been making some tea and these Invisible People had emptied the tea pot. He could talk to them, since they could talk to him too, but he couldn't move at all. And he was thankful of them for visiting him, because the other one had said there was a polar bear just in a site somewhere, and the next day he went there and got the polar bear (Worl, 1986).*

Two tribes of caribou people, one good and the other bad, also inhabit the interior near Clyde, and some of their Inuit descendants can transform themselves back into caribou people in times of danger. One man explained that, "His grandfather was very old, and he walked with a stick. He was very incapable of walking by himself, but when he would start chanting or singing, the streams, the small streams would start singing along with him, and he'd start to grow very big and could walk very well too." Others have been helped by caribou people: "He was up on the ice and got into open water, and he was starting to drown along with the skidoo, he shouted out to those people, and they came down to help him as in a form of clouds, they came in as a form of clouds" (Worl, 1986).

Not all sealing traditions have survived external influences. The *issuarq*, or smallest rib of the seal, is no longer placed on the heads of children to prevent them from growing "too big", for instance. Clyde hunters no longer release the spirit of the seal from the bone (*qannirq*) at the tip of the spinal cord, nor is the *qannirq* still used as a "tool" by novice shamans, although it survives in Inuit art as a symbol of the seal's power (Worl, 1986). "Nonetheless it is through the hunting of seals and their butchering and distribution that young people can readily be taught the virtues of co-operation, patience, sharing, and their responsibilities in the community," Peter Ernerk (1985) of Rankin Inlet told the Royal Commission. "Sharing is an important part of Inuit ethics, and in some parts of the Arctic seals are the chief product, which is shared among families and even sent from one community to another, to reinforce the bonds of solidarity among relatives."

"When our people hunt," explained Toby Andersen (1985) of Labrador, "they bring the whole seal back. Everything comes home. The only thing not used is the bones." If bones are left with a little meat on them, according to a Yupik story, they will cry because they were not appreciated (McCarthy, 1985). "The Inuit of Labrador did not harvest the seal to get rich," stated William Andersen III (1985) of the Labrador Inuit Association. "They harvested seals to maintain a social order."

Public education has had a significant impact on Inuit hunting ethics. Boys have far less time to spend with their fathers on the land, especially during the spring and fall, when most sealing on the ice is pursued. They may not begin hunting until they finish school, already have casual employment, and are less responsive to parental guidance. It has also been suggested that missionary activities and technological pragmatism have begun to erode traditional concepts of kinship and trust with animals (Kemp, 1971). Young and old alike object to changes imposed from the outside. "I feel, as many other people here and in other places must be feeling, that we have seen enough changes in our way of life," explained David Kilabuk (1985) of Pangnirtung, a member of the Advisory Committee to the Minister of State for Youth. "Putting a stop to hunting seals is one change we are not ready to live with."

Many Inuit see hypocrisy in growing southern opposition to wildlife harvesting. "The whale had been slaughtered by white people, including American whalers from New England," observed Jeela Moss-Davies (1985) of the Inuit Women's Association, recalling the 1972 U.S. import ban on whalebone carvings. "When the Inuit found a way to use the bones left by the whalers, their descendants passed a law which prevented [it]." "You don't know the pressure we are under to protect our culture," a Clyde elder concluded.

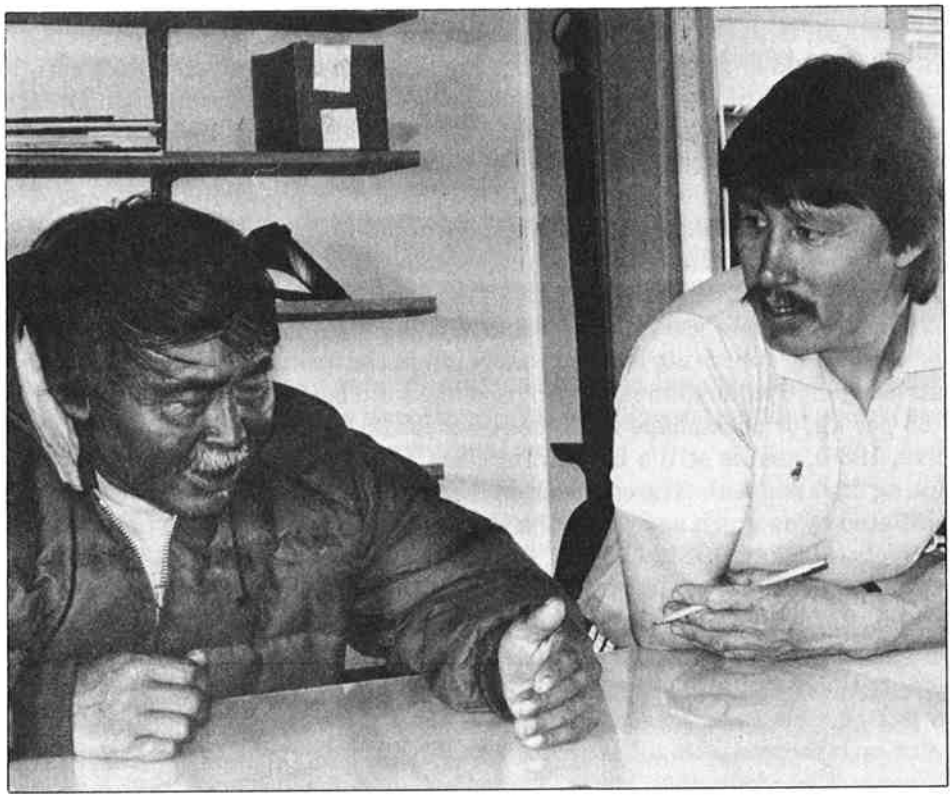
Benefits of the Seal Hunt

> *I was raised on seal in my days; today I still enjoy a good meal of seal meat (Papiglok, 1985).*

Economic Product of Sealing

Inuit were attracted to towns by the promise of medical services and educational opportunities (Duhaime, 1983), but town employment is inade-

quate to maintain traditional levels of nutrition and health, and is likely to remain so. Hunting is still an efficient use of labour, and even part-time hunting makes it possible for Inuit to enjoy a higher standard of living than would otherwise be possible in the Arctic. At the same time, part-time employment has become necessary to keep up with the rising costs of hunting. Sealing today, therefore, is part of a "mixed" economy in which wildlife-product sales, occasional wages and government aid each play necessary and related roles.



Naalak Nappaaluk (seal hunter) with Charlie Arngak

A survey conducted by the Holman Hunters and Trappers Association (1985) illustrates the diverse utilization of seal products by Inuit. Nearly all Inuit families in Holman sold sealskins to the local Inuit-owned Co-op, and 12% kept some skins for their own use. Some 67% used seal meat for dog food, 53% still used seal oil for cooking and heating fuel, and 75% shared seal meat routinely with relatives. Seal meat was also used to bait

fox traps. Hunters throughout the Arctic still prefer sealskin *kamiks* (boots) and are abandoning imported synthetics in favour of more traditional, but superior sealskin outerclothes (Wenzel, 1986). Many are also recognizing the enormous financial burden of imported heating fuel, which not only requires a cash income, but tends to be used less efficiently (Kemp, 1971).

It is difficult to place a cash value on Inuit food products, since they are not routinely bought and sold. The price at which they *would* be sold, or "shadow" price, might be estimated by observing occasional transactions, or by assuming that it would equal or exceed the cost of hunting. Using the first method, Brakel (1977) put the shadow price of ringed seal meat at 20 cents per pound or $8 per seal. Using the second, Anders et al. (1967) estimated the value of seal meat as three to seven cents per pound, which is about 20 cents per pound in 1977 dollars. The transactions method fails to account for the scarcity of money in Inuit communities, which depresses the price of all commodities traded among the Inuit themselves and thus makes all indigenous products appear of much lower value than imported products. The cost method estimates or, in Anders' case, ignores the value of labour and returns to capital.

Pricing substitute foods probably offers the most realistic estimate of seals' economic value to Inuit. With frozen ground beef selling in Holman for $7.58 per kg, or pork chops in Clyde River for $8.60 (Holman H.T.A., 1985; Borré, 1986), seal is still a bargain at costs of up to $150 per animal or six hunting days per seal. The comparison is rough because northern prices may be inflated by as much as 20% by the Hudson's Bay Company's virtual retail monopoly (Mackey, 1981; Canada, DIAND, 1984a; Kemp et al., 1977). It also assumes that Inuit would buy nutritionally equivalent foods if they were able to afford them. With these factors in mind, Clyde River Inuit, for instance, would need more than $1,200 per capita yearly simply to replace the nutritional value of ringed seals, using Wenzel's (1981) estimates of the number of seals consumed per family. This is about one-third of their per capita cash income from all sources, including wages, fur sales and transfer payments (Canada, DIAND, 1984a, Table 2).

The productivity of hunters' labour is another way of looking at the economic value of Arctic sealing. Wenzel (1981) estimated that hunters produced the equivalent in food of $37 at Clyde River and $9 at Holman for every hour spent hunting, including time travelling and repairing equipment. Expressed in other terms, a kg of seal meat costs hunters $1.55 in capital and 0.15 hours labour at Clyde, and $1.75 in capital and 0.55 hours labour at Holman. At these rates, sealing compares favourably with conven-

tional employment. In purely ergonomic terms, moreover, all forms of Inuit hunting produce a substantial energy surplus over human and mechanical inputs (Kemp, 1971; Truede, 1977; Riewe, 1977). Clyde hunters generally used more gear and worked less, indicating the effect of technology on hunting efficiency.

Sealing also provides cash for Inuit households, but most of it must be reinvested in maintaining or replacing hunting equipment (Anders et al., 1967; Wenzel, 1983). Seals replaced fox as the main source of Inuit hunters' cash income in the 1950s because of changing prices, but while the physical supply of seals has remained adequate, prices have been extremely variable, with highs in 1963, 1971 and 1981 of more than $12 and lows in 1967 and 1977 of $2.50 or less (Anders et al., 1967; Brakel, 1977; Wenzel, 1978). Few Inuit have earned more than $500 per year from sealing even at peak prices, while the costs of hunting equipment and fuel have increased by 50% to 100% over the past decade (Wenzel, 1978, 1983). The supply of other furs still taken by Inuit, such as bear and fox, varies greatly and is already fully exploited. Although a bear skin may fetch $1,000, there is a strict quota system, and a hunter is fortunate to obtain a single tag. Fox vary with the seven-year Arctic hare cycle.

Thus, in terms of subsistence and cash for the maintenance of subsistence hunting, sealing is important. As the following section shows, seal meat also holds considerable nutritional value.

Diet and Health

Arctic hunting continues to provide essential nutrients at a significantly lower cost than importing food from the south, and this is likely to remain true for the foreseeable future. Increased employment and social assistance payments simply have not made nutritionally equivalent southern foods affordable in the North. Moreover, Inuit who are already employed tend to use their wages to continue hunting. Wherever hunting has declined as a result of development, Inuit dependent on low-cost, imported carbohydrates and fats have experienced deteriorating health. By reducing hunting, the collapse of sealskin markets has served to jeopardize Inuit health.

There is considerable fluctuation in the amount and composition of foods eaten in Inuit communities (Draper et al., 1979). Some of these fluctuations simply reflect the seasonal availability of wildlife and the opportunistic nature of hunting; food preferences also vary regionally. In the central

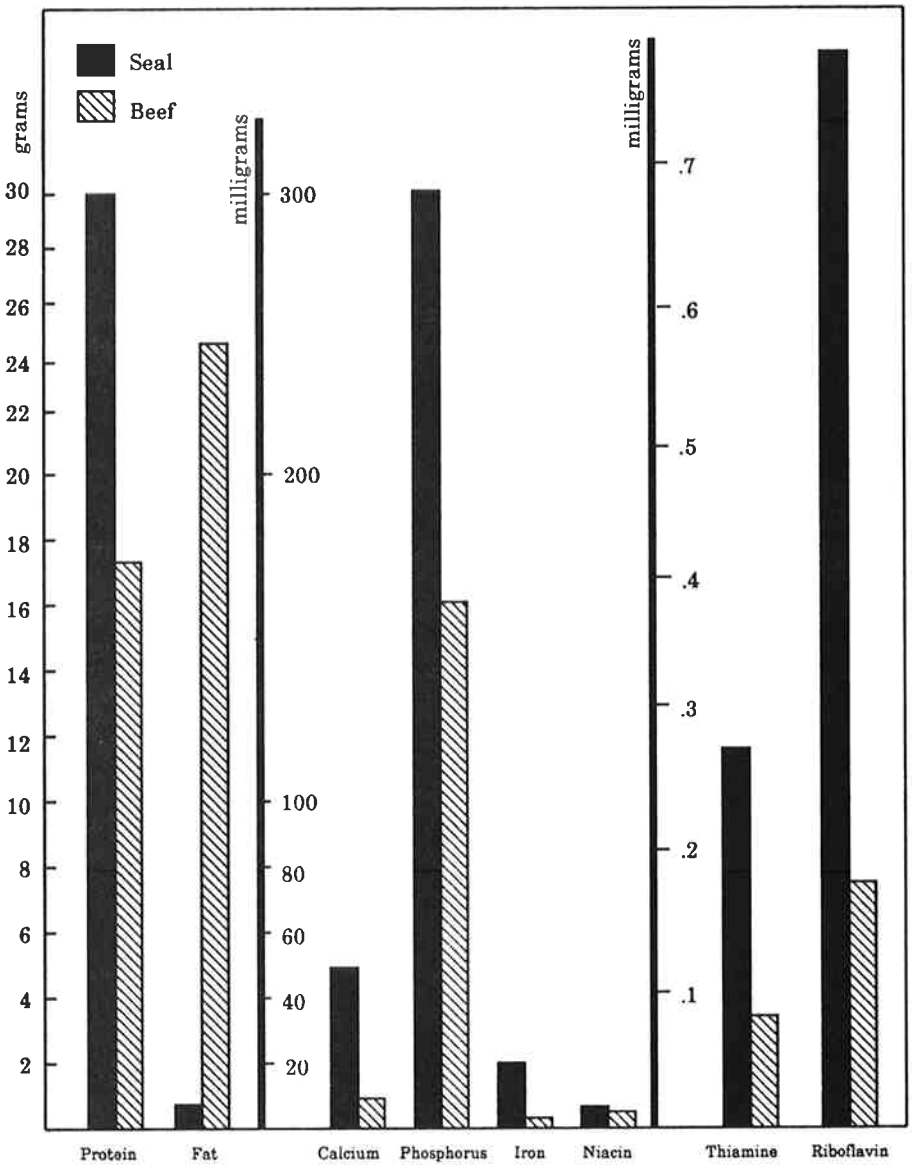
and eastern Arctic, for example, young ringed seals (aged one year) are the most favoured food, followed by older ringed seals, bearded seals, and other seals (Freeman, 1983; Boles et al., 1983). Western Inuit may prefer bearded seals (Geraci and Smith, 1979). Fresh seal is preferred to meat that has been frozen or cooked (Freeman, 1983). In any case, seal is the food of choice. "In winter, seal is eaten in nearly every household on a daily basis," writes Wenzel (1986). "It is common to be told by Inuit that only boiled seal (*uyuk*) with its rich broth (*kaiyuk*) can keep a person warm."

Euro-Canadians derive most of their metabolic energy from the breakdown of sugars and starches into glucose. Since country foods contain few carbohydrates, Inuit synthesize glucose from animal protein, or metabolize ketones synthesized from animal fats (Draper, 1977; Schaefer and Steckle, 1980; Draper et al., 1979). About 400 kg of seal meat or the equivalent per capita annually is necessary to meet minimum energy requirements. Caribou and seal contain less total fat and fewer saturated fats than "marbled" beef. Seal meat is 32% protein and 2% fat, for example, while beef is only 17% protein and 23% fat (Schaefer and Steckle, 1980; Draper, 1977; Hoppner et al., 1978). Moreover, humans store polyunsaturated marine fats without modification, but synthesize saturated storage fats from carbohydrates (Draper, 1977). The traditional Inuit diet is therefore associated with low blood-serum cholesterol levels and a low risk of cardiovascular disease (Anonymous, 1984).

Seal meat also contains (by weight) at least twice as much protein, calcium, phosphorus, iron, vitamin C, thiamine and riboflavin as beef (Figure 13.2; Boles et al., 1983; Hoppner et al., 1978; Schaefer and Steckle, 1980; Draper et al., 1979). This is important because Inuit absorb dietary iron more slowly than Euro-Canadians and require iron-rich foods to avoid anemia (Draper et al., 1979; Schaefer and Steckle, 1980; Hoppner et al., 1978). Seal-liver fat is rich in vitamin A, and like other marine mammal blubbers contains significant amounts of vitamin D (Draper, 1977; Rodahl, 1949; Rodahl and Davies, 1949). Indeed, Inuit avoid eating polar bear liver, which can contain toxic accumulations of vitamin A from the bears' seal-rich diet (Fay, 1960). Small quantities of vitamin E are also available in seal meat (Draper, 1977).

Vitamin C is seasonally available in small quantities from the contents of caribou rumen, berries and wild herbs, many of which are richer in vitamins A and C than spinach or citrus fruits (Schaefer and Steckle, 1980). The most consistent Arctic sources of vitamin C are seal liver, *muktuk* (whale skin) and, to a lesser extent, seal meat (Geraci and Smith, 1979;

Figure 13.2
Proximate Composition of Seal Meat and Beef



Sources: DFO 1985; Mackey 1981

Draper, 1977; Schaefer and Steckle, 1980). A traditional Inuit diet of 800 g–1000 g of seal meat daily is just sufficient to prevent clinical manifestations of vitamin C deficiency. Since cooking degrades these vitamins, eating raw meat is nutritionally best, but cooking eliminates parasites such as *Trichinella*, which occurs occasionally in seals and commonly in bears (Borré, 1986; Fay, 1960). Consuming the broth (*kaiyuk*) reduces the loss of nutrients (Geraci and Smith, 1979; Hoppner et al., 1978).

Chewing fish and animal bones, especially the soft bones of young seals, is still widespread (Borré, 1986) and may be the single most important traditional source of dietary calcium (Draper, 1977; Draper et al., 1979). Since traditional foods are relatively low in calcium and rich in phosphorus and magnesium, Inuit should suffer from osteoporosis, a gradual resorption of bone calcium that progresses with age (Draper et al., 1979; Jeppesen et al., 1984). Clinical manifestations of osteoporosis are rare, however. This suggests that more calcium is available physiologically in organ meats and bones than in the cereals eaten by Europeans, or that Inuit absorb dietary calcium more efficiently than Europeans (Schaefer and Steckle, 1980; Fraser, 1975). Magnesium-rich country foods may also be responsible for the reported infrequency of urinary calculi among Inuit (Jeppesen et al., 1984).

Seal meat is clearly beneficial to Inuit health. The negative health effects arising from the decline of the hunt are discussed in a subsequent section.

Social Organization and Culture

The Royal Commission was consistently informed in public meetings and through written submissions that seal hunting is required for the physical and cultural health of people who depend on it. For Inuit and Indians living in the North, social, cultural and economic issues are inseparable. Brody says of the Inuit:

> *For them, to be a person with prospects for a happy life in the future it is necessary to be, or to have children who are, practitioners of the hunting and trapping economy. This sense of general well-being, however, is inseparable, both in theory and as expressed by the people, from the strength of culture. The skills, the knowledge, the very language in which to communicate such skills and knowledge – these are integral to the economic practices,*

> *and they are the hallmarks of cultural strength. In communities or ethnic groups where the economic basis for distinctive identity has changed or disappeared, cultural issues stand alone. They are not therefore unimportant: distinctiveness of language, dress, education, and spiritual life represent vitally significant matters to many groups of people. To the Inuit of the Northwest Territories, however, whose economic basis for distinctiveness seems not to have been undermined in anything like a final way, protection of cultural distinctiveness cannot be conceived apart from the strength of its basis, the socio-economic system itself (Brody, 1980, p. 14).*

Seal hunting and other such pursuits affirm Inuit and Indian control over their land; wage labour or transfer payments, while they might be beneficial in some ways, sacrifice political and cultural control. Inuit concern therefore arises that this loss of control will sooner or later result in irreparable environmental damage and ultimately the destruction of their socio-economic system. Aside from the immediate benefits of sealing, then, the hunt is also a defence against future cultural catastrophe. Moreover, this defence is taken seriously by the Inuit: the Inuit Land Use and Occupancy Study (Freeman, 1976) found that seal hunting has always represented a substantial component of land use.

Impacts of the Market Decline

> *How do you replace seals for the Inuit? There's food, there's clothing, there's cash, and there's pride (Kupeuna, 1985).*

Background

The market for harp seal pelts began to decline in the 1970s as a result of changing fashions, hastened by public awareness of the anti-sealing campaign. Prices for ringed sealskin remained relatively strong and actually peaked in 1981, however, then fell dramatically in 1983 following the European Community (EC) directive (see Table 13.2). As of May 1985, there was "no demand" for hair seal pelts at Canadian fur auctions, although Inuit Co-ops and, in some communities, the Hudson's Bay Company were still

purchasing and stockpiling skins at reduced prices (Holman H.T.A., 1985). For the Northwest Territories as a whole, Inuit sealing revenue fell from $476,999 in 1981/82 to $76,555 in 1983/84 (Cournoyea, 1985; Struzik, 1985). In Labrador lost sealing revenue has reduced total Inuit income by one-third (Labrador Inuit Association, 1985). In Pangnirtung the Royal Commission was told that hunters' average income fell from $1,100 in 1981/82 to $202 in 1983/84. This drop in income has been aggravated by restrictions on the sale of whalebone handicrafts and declining consumer interest in soapstone carvings (Wenzel, 1983). The Bay's purchases of soapstone carvings have fallen by two-thirds since 1980.

Established hunters are having difficulty paying for fuel and spare parts (Table 13.4 indicates equipment costs). Young Inuit are finding it impossible to afford the capital costs of getting started. As a result, the number of Inuit hunting in the Northwest Territories fell from 1,286 to 562 over the past three winters, and social assistance payments rose by amounts that range from 176% at Clyde River to 443% at Hall Beach (Cournoyea, 1985). Inuit have reacted with surprise and anger. "The life has been taken away from the people, and they don't know why", protested David Omingmak (1985), Holman hunter. "We're not hurting anyone up here, we're just trying to live," added Jack Kupeuna (1985) of the Kitikmeot Inuit Association. "What are people from the outside trying to do to us?" No northerner can understand the point of banning sealskins, since skins are an unavoidable by-product of hunting seals for food and will otherwise go to waste. Many hunters also say that they have stopped sealing because taking enough skins, at today's prices, to pay for fuel would mean having to abandon and waste too much meat.

To continue hunting, many Inuit are going into debt for the first time in their lives. The Kangiqsujuak Inuit Co-op estimates that it extended one-third more credit in 1983/84 than in previous years. Snowmobiles are deteriorating, and men are increasingly reluctant to lend them to kinsmen (Wenzel, 1986). At Holman, hunters are doing more char fishing, because they can fish closer to the hamlet. All communities report increased use of dog teams, but only by the most skilled and dedicated hunters willing to move back out to camps, and there are few harnesses and teams yet available. The most widespread adaptation is increased reliance on welfare support to purchase cheap imported foods, chiefly biscuits and sugars. The negative effects have been extensive. Many Inuit attribute increased adolescent delinquency and suicide to hopelessness aggravated by the collapse of hunting opportunities (Borré, 1986).

Table 13.4
Cost of an Inuit Hunting Outfit, Clyde River, 1983/84

	Price Range[a] ($)	
	Lower	Upper
Capital Goods (fixed cost)		
Snowmobile	2,795.00	3,998.00
Canoe/boat	2,998.00	7,959.00
Outboard motor	1,595.00	4,300.00
Rifle	99.95	659.00
Sleeping bag	50.00	289.98
Camp stove	52.98	69.98
Tent	229.00	229.00
Spare Parts and Fuel (variable cost)		
Track assembly	388.98	489.98
Snowmobile ski	71.89	71.89
Slider rail	19.98	23.98
Crankshaft	499.00	499.00
Piston	79.98	112.73
Gasoline (per litre)	.64	.64
Oil (per litre)	2.92	2.92
White gas (per litre)	12.25	12.25
Ammunition (box of 20)	11.50	19.98
Entry and Operating Costs[b]		
Total fixed	8,552.98	18,036.98
Total variable	2,090.79	2,090.79
Total first year	10,643.77	20,127.77

a. Based on 1984 price list, Hudson's Bay Co., Clyde River.

b. Annual average from field observations, 1983–84 (Wenzel, 1986).

Canadian Inuit hunting cannot continue at current sealskin, fuel and equipment prices unless $1–2 million ($500–1,000 per hunter) in lost annual harvesting income is replaced as a minimal measure, at least temporarily. In 1984, the Department of Fisheries and Oceans instituted a seal-pelt price-support program, paying Inuit an average of $6.00 per pelt sold in 1983. This support has been matched by $5.00 per-pelt "compensation" payments from the Government of the Northwest Territories (Canada, DFO, 1985). The Province of Quebec has also been paying small cash bonuses to hunters for pelts sold, and in Greenland, where Inuit sealers have also been hard hit by declining markets, the Home Rule government has made a commitment to continue to buy pelts whether or not they can be resold. By paying for hunting, these programs tend to maintain the traditional food supply, while direct cash grants would encourage the purchase of low-cost, nutritionally poor substitutes.

The following sections examine the effects of the lost markets on diet and health, and social organization and culture.

Diet and Health

Centralization, wage-employment, transfer payments and contact with southern food preferences have led to an increasing proportion of imported store-bought foods in Inuit diets. While a nutritionally adequate diet can be assembled from southern foods, of course, all of the necessary elements are not always available or affordable in isolated northern communities (Mackey, 1981). One nutritional consequence of importing foods is increased dependence on carbohydrates and saturated fats for metabolic energy. Increased consumption of imported saturated fats has been linked with a 300% increase in serum cholesterol levels, cardiovascular disease and high blood pressure among Inuit (Draper, 1977; Schaefer et al., 1980; Schaefer and Steckle, 1980).

Obesity and acne are also increasingly widespread, and some physicians anticipate the future development of adult-onset diabetes, as among Indian populations in the south (Schaefer and Steckle, 1980; Mackey, 1981; Draper et al., 1979). A marked increase in gall-bladder disease among Inuit women may be linked to rising cholesterol levels (Schaefer et al., 1980; Schaefer and Steckle, 1980). The lower fibre content of processed foods may be associated with increased incidence of constipation, other gastro-intestinal complaints, and certain forms of cancer (Borré, 1986).

Sugar is replacing flour among the imported carbohydrates in Inuit diets. In one village, for example, sugar rose from 18% to 44% of calories from carbohydrates over the period 1959–1967, and Inuit now consume more sugar, on the average, than Euro-Canadians (Schaefer and Steckle, 1980). In some communities Inuit now derive as much as one-third of their calories from cookies, candy and soft drinks (Kemp et al., 1977). Dental caries, virtually unknown among Inuit a generation ago, have now increased to epidemic proportions (Mackey, 1981; Schaefer et al., 1980; Schaefer and Steckle, 1980; Draper et al., 1979; Mayhall, 1975). At Clyde River, for example, premature tooth loss is common among those under the age of 35 (Borré, 1986). Traditionally prepared dried and raw-frozen meats are tougher to chew than imported foods, resulting in healthier dentition generally (Draper et al., 1979).

Another result of relying on sugary imported foods is hypoglycemia. Metabolism of fats and protein is slow and maintains relatively constant blood-sugar and energy levels, while sugar metabolism is rapid. Sugary diets produce significant fluctuations in blood-sugar levels and energy, resulting in periodic spells of lethargy. In Arctic conditions, hypoglycemia can be lethal by causing sudden drops in body temperature. Early European explorers quickly learned to stay warmer by eating seals instead of the biscuits and sugars they carried with them.

Inuit lived for thousands of years without exposure to dairy products or fruit sugars. Both lactase and sucrase deficiencies are accordingly common, affecting up to two-thirds and one-fourth of adult Inuit respectively. One cup of milk at a sitting is the limit for most adult Inuit; greater lactose loads can result in discomfort and diarrhea (Draper, 1977; Draper et al., 1979). Sucrose intolerance can result in discomfort after consuming even small amounts of refined sugars in cakes or candies (Draper, 1977; Draper et al., 1979; Schaefer and Steckle, 1980). As a practical matter, this means that Inuit are less adaptable to low-cost imported foods, most of which contain sugar, and have difficulty using dairy products to compensate for vitamin deficiencies.

Vitamin and mineral deficiencies represent a serious problem. Store-bought foods contain fewer vitamins. Vitamin A deficiency, increasing among Inuit, has been attributed to eating fewer seals (Schaefer et al., 1980; Murray, 1975). Vitamin C deficiency is also increasing, except where vitamin-enriched fruit drinks have become popular (Schaefer and Steckle, 1980). Low vitamin C intake coupled with a high-protein diet can result in elevated serum tyrosine levels – already observed in Inuit – and there is

some evidence linking this change with developmental learning disabilities (Scriver and Clow, 1975).

The added salt in imported foods is not only associated with hypertension, but may also aggravate underlying calcium deficiencies (Goulding et al., 1983). Drinking tea may also be a concern with diets deficient in both calcium and vitamin D because the oxalates in tea precipitate calcium and may contribute to kidney-stone formation (Fassett, 1973). Lactase deficiency complicates the introduction of dairy products to compensate for reduced dietary calcium.

Compensation for iron deficiencies in imported foods is difficult because Inuit absorb dietary iron slowly (Schaefer and Steckle, 1980; Schaefer et al., 1980). Anemia is now a widespread problem in Inuit communities where employment has replaced hunting to a significant degree (Draper et al., 1979), and it is a particular concern for Inuit women (Schaefer and Steckle, 1980). Children, in whom chronic anemia may be associated with severe diarrhea (Hamilton, 1975) and learning disabilities (Bender et al., 1975), are also at high risk, and they consume the largest proportion of imported foods (Draper et al., 1979). Traditionally, Inuit children were fed premasticated meat and fish, beginning at four to six months of age, but an increasing number today are bottle-fed and then weaned on sugary cereals (Borré, 1986; Schaefer, 1975). While Inuit children eating imported foods tend to grow more quickly and achieve sexual maturity earlier, this more rapid development does not indicate improved overall health (Schaefer et al., 1980; Sayed et al., 1975).

These nutrition problems are aggravated by the poor water quality, inefficient sanitation and poorly ventilated housing of centralized Inuit communities (Freeman, 1983; Mackey, 1981), leaving Inuit much more susceptible to infectious and contagious disease than their southern Canadian neighbours (Schaefer et al., 1980). Increased bottle-feeding, which prevents the transmission of antibodies from mother to child, has been blamed for recent increases in infant diarrhea and childhood respiratory and ear diseases (Schaefer et al., 1980; Schaefer and Steckle, 1980; Baxter, 1981). Wage-earners tend to acquire smoking and drinking habits not commonly found among hunters (Rode and Shephard, 1984; Schaefer et al., 1980). In addition to their direct health consequences, tobacco increases smokers' vitamin C requirements, and alcohol abuse contributes to hypoglycemia (Borré, 1986).

Infant nutrition poses special problems. Even in relatively traditional communities such as Clyde River, where most infants are breast-fed,

adopted children usually must be fed substitutes. *Kaiyuk* (boiled seal broth), commonly used in the past, is giving way to packaged formulas such as Enfalac (Borré, 1986). Enfalac currently costs $807 per infant per year, or nearly one-fourth of household income, leading often to dilution or to replacement with plain powdered milk, which is considerably cheaper, but nutritionally less complete. While adults' main, midday meal still usually incorporates country meats or fish, children tend to be given store-bought processed foods and commonly snack on "junk foods" after school (Borré, 1986). Infants and children therefore bear the greatest impact of changing diets and limited income at the ages when nutritional adequacy is most critical.

Costs associated with imported foods have posed difficulties for northerners. The median income of Inuit households averages $3,000 to $6,000 per year, compared with $15,000 or more in mining settlements (Canada, DIAND, 1984a, Table 2), but a minimally adequate diet of familiar southern foods costs twice as much in Clyde River, for example, as it does in Montreal and would absorb more than one-fourth of Inuit households' income (Borré, 1986). Southern Canadians need to spend less than 15% of their disposable cash income on food (Canada, DIAND, 1984a, Table 3.2). Moreover, while flour, sugar, fats and oils cost twice as much in the North, fresh fruits and vegetables cost up to twenty times as much (Borré, 1986; Canada, DIAND, 1984a, Tables 12 and 13), a disadvantage aggravated by the Hudson's Bay Company's system of variable, rather than fixed percentage price mark-ups (Borré, 1986). The most costly imported nutrients are vitamin A, calcium, and vitamin C, all of which Inuit traditionally obtained from seals (Borré, 1986; Canada, DIAND, 1984a, Table 18.1).

As a whole, country food has greater "nutrient density" – that is, more nutrients per kg of edible weight – than the imported food that Inuit can afford to use. Table 13.5 compares the average nutrient density of the country and imported foods actually eaten by Clyde River Inuit households in mid-1985. As a whole, country foods make a greater contribution to Clyde River Inuit households' intake of protein, thiamin, riboflavin, niacin, vitamin A and iron than imports, while imports are important for folate, vitamin C and calcium, as seen in Table 13.6. Under these conditions, hunting is essential even if only to complement imported carbohydrates (Cox, 1985). "There is simply no practical, acceptable substitute for seals from a nutritional standpoint" (Borré, 1986, p. 26).

Judging from the Clyde River study (Borré, 1986), Inuit are aware of the nutritional effects of changing diets. Eating country food several times a week is generally considered necessary for good health; indeed, most Inuit

Table 13.5
Relative Nutrient Density of Country and Store Foods[a]

Nutrient	Unit	Relative Density	
		Country Foods	Store Foods
Protein	(kg/mJ)	.040	.010
Fat	(kg/mJ)	.008	.008
Saturated Fat	(kg/mJ)[b]	.002	.002
Vitamin A	(re/mJ)	91.490	31.966
Vitamin C	(mg/kJ)	2.989	3.649
Thiamin	(mg/mJ)	.580	.090
Riboflavin	(mg/mJ)	1.670	.220
Niacin	(mg/mJ)	6.280	1.200
Folate	(µg/mJ)[b]	.010	7.780
Calcium	(g/mJ)	.030	.560
Iron	(g/mJ)	.014	.001

Source: Borré (1986).

a. Based on a study of 12 Clyde River Inuit Households, June–August 1985.
b. Estimated.

over the age of 50 said that they would die without it. They explained that an Inuk raised on country food has thick dark blood like a seal's, and that store-bought food makes blood weak, thin and watery. They blame imported foods for weakness, sluggishness, depression, headaches and irritability (symptoms of anemia and hypoglycemia), as well as stomach aches and other gastro-intestinal problems. Instead of going to the nursing station for relief of these complaints, Clyde River Inuit prescribe more country food for themselves, especially seal. While Inuit enjoy fresh fruits and fruit juices and recognize their nutritional value, they simply cannot afford them. Reluctance to share purchased foods as freely as hunted meats is a poignant indicator of just how expensive they can be.

Table 13.6
Relative Contribution of Country and Imported Foods to Total Nutrition[a]

Nutrient	Unit	Actual Intake	Proportional Derivation	
			Country Foods (%)	Imported Foods (%)
Protein	(kg)	2,030.3	71.9	28.1
Carbohydrate	(kg)	1,823.0	0.2	99.8
Fat	(kg)	697.4	39.2	60.8
Saturated Fat	(kg)[b]	137.2	38.6	61.4
Cholesterol	(kg)[b]	1,676.4	0.3	99.7
Vitamin A	(re)	4,869,275.2	63.2	36.8
Vitamin C	(mg)	275,170.2	24.6	75.4
Thiamin	(mg)	24,664.7	80.3	19.7
Riboflavin	(mg)	68,485.9	82.0	18.0
Niacin	(mg)	279,518.9	75.5	24.5
Folate	(µg)[b]	667,331.7	34.7	65.3
Calcium	(g)	4,055.6	20.7	79.3
Iron	(g)	523.1	88.3	11.7
Sodium	(g)	20,255.1	17.7	82.3

Source: Borré (1986).

a. Based on a study of 12 Clyde River Inuit Households, June–August 1985.
b. Estimated.

Social Organization and Culture: The Similar Experience of Trappers

Comparing the effects of the decline in fur trapping and the decline in seal hunting is useful because the trapping experience has been going on for much longer, and the overall effects can be seen more easily. The comparison should serve as a warning.

Indians and Inuit had been trapping for fur long before the Hudson's Bay Company introduced cash exchange to the aboriginal economies. Furs had been used for a variety of purposes, primarily as clothing, and were the basis of substantial trading networks among tribal groups in various parts of the country. The arrival of the Hudson's Bay Company increased the demand for furs at a time when European colonization was reducing aboriginal territories. As the fur industry grew, it compensated for this territorial contraction by enabling hunters to earn cash from animals (or parts of animals) not previously fully exploited. At the same time, aboriginal communities became dependent on cash trading to maintain the new demographic equilibrium. The trapping industry flourished from the early years of the 19th century to the late 1940s, when the fur market began to decline.

There are many reasons for the decline, including the invention and mass production of warm synthetic materials and the vagaries of fashion. Since the late 1940s, fur prices have fluctuated significantly, thus making trapping a somewhat risky business. In addition, more recent problems have plagued trappers, such as inflation resulting in high fuel and equipment costs, declining animal populations in some areas as a result of industrial development, and public anti-trapping sentiment engendered by animal-rights groups. The effects of the decline in the fur market have been serious for Indians, who typically trap beaver, marten, mink and lynx, and for Inuit, who trap, primarily, arctic fox.

The impact of the decline can be identified within two categories: revenue and culture. Revenues from trapping vary with fluctuations in fur prices and the inflation rate. For example, in the Northwest Territories during the seven-year period from 1975/76 to 1982/83, the total nominal value of fur sales peaked in 1978/79 and was approximately the same in 1975/76 and 1982/83. Taking account of inflation and rising costs, however, average trapping income in the Northwest Territories actually declined, in real terms, to 58% of 1975/76 levels (Canada, EIC, 1984, p. 26). In 1982/83 only 36.3% of the trappers earned over $600 per year from this activity (Canada, EIC, 1984, p. 27).

Trapping has traditionally been one component of the mixed (subsistence and cash) economies of Indian and Inuit societies. Cash derived from trapping supplements family incomes to enable the purchase of consumer goods and the maintenance of other economic pursuits such as hunting and fishing. In order to fill the increasing gap created by declining fur prices and inflation, many families have been obliged to accept transfer payments from the federal government. Transfer payments represent a significant option for cash income, especially in view of the perennial scarci-

Inuit hunting camp (circa 1940)

ty of wage employment for Indians and Inuit in the North. Yet the acceptance of this kind of assistance has created a relationship of dependence that has led many aboriginal communities and organizations to attempt to find alternatives to transfer payments. The need to re-establish local economic productivity and to regain control of local economies is one of the major rationales underlying the recent stress that aboriginal peoples have been placing on the development of self-government.

Culture has been negatively affected by the difficulties posed for trappers. When social organization and cultural identity are intimately bound up with the land, as they often are in Inuit and Indian societies, weakening of ties to the land can easily result in cultural decline. One loss, for example, is in the educational aspect of fathers and sons trapping together. Not only are skills transferred, but the setting provides an opportunity to pass from one generation to another the history and values of a particular culture. It was pointed out to the Royal Commission that the same is true for the seal hunt.

Seal hunting and fur trapping are the same inasmuch as both pursuits have provided cash income for families and have contributed to the maintenance of a strong sense of cultural identity. In this regard, the importance of sealing and trapping for the mixed economy must not be overlooked.

Both activities enable Inuit and Indians to carry out other land-based enterprises, such as hunting, by providing cash for the purchase of equipment. Moreover, this process helps aboriginal peoples to avoid complete dependence on transfer payments and wage employment for their survival. It also enables the procurement of country foods which, as has been explained above, are significant in the maintenance of good health. It is these factors – land-based economic activities and good health – that provide the context in which aboriginal cultures will survive. The alternative is a dependent lifestyle for which aboriginal social organization and culture may be redundant.

The Future

> *People have a right, within their own environment, to be economically independent (Cournoyea, 1985).*

Economic Options

Greenlandic Inuit have successfully developed halibut, cod and prawn fisheries in the southern Davis Strait, but few individuals can participate because the capital requirements of mobile marine gear are so high (Kapel and Peterson, 1982). In most of arctic Canada, the only fishery with significant commercial potential is for char. With a flavour and texture comparable to Atlantic salmon, char can command a premium wholesale price, and there have been a number of experiments with netting and freezing char in the western Arctic (Brakel, 1977). A commercial char fishery established at Cambridge Bay in the 1960s has an annual quota of 100,000 fish and chiefly serves southern Canadian markets for fresh/frozen fish.

The sustainable yield of arctic char stocks is not known, but char is an extremely slow-growing fish that usually spawns repeatedly in fresh water. Physical yield is therefore low, and shore netting, while inexpensive and efficient, must be conducted with extreme care to avoid overharvesting spawners. Costs of air transportation to southern markets also pose a barrier. More shore-netting and freezing operations probably could be developed, but the total direct payroll in the Arctic likely would not exceed $1 million annually.

Many groups opposed to wildlife harvesting have suggested the development of "non-consumptive" wildlife activities, that is, tourism based

on opportunities to view animals. Auyuittuq National Park on Baffin Island currently attracts about 300 visitors yearly, generating a local payroll of about $200,000 for guides and support staff, but this cost is borne chiefly by government. Visits are restricted to the brief arctic summer, and most tourist dollars go to transportation because arctic travellers are rarely interested in premium indoor accommodations. In Alaska, most casual visitors rely on tour ships for both transport and lodging, and their shore visits contribute money chiefly to producers of local handicrafts.

Sport fishing for char is presently the main attraction for Canada's arctic visitors, who may pay up to $1,000 per day for air transport and modest accommodations. Recreational hunting would increase the attractiveness of the Arctic to tourists, but only a few very scarce species, such as musk-ox and polar bear, would be more valuable to a sport hunter than as food and fur to an Inuk. Limited development of the sport fishery offers the greatest potential, but will create only a few seasonal local jobs, and Inuit will benefit significantly only if they can control and expand air services, such as Air Inuit of Quebec.

By comparison, industrialization based on minerals and petroleum extraction would generate substantial short-term wages, but it would threaten the habitat on which Inuit must rely for survival in the long term. Although the mineral potential of the Canadian Arctic is enormous, arctic mining is extremely capital intensive, on the order of $700,000 per job created, and most benefits are realized by capital rather than by labour. It is likely that Inuit would be unable to control this technology and would tend to become more dependent on outside institutions. Moreover, mining creates new, temporary communities, rather than strengthening existing ones. The potential environmental costs of mining must also be considered, particularly the effect on seals and other local sources of food.

Custom industries based on by-products of hunting involve the lowest capital requirements and offer the greatest promise for local employment. Everything depends on the development and marketing of premium products. At present, most Inuit sealskin products are toys and small articles of clothing for sale to tourists from craftshops and hotels in the Northwest Territories. A few are exported to Japan, and the Vancouver Expo 86 has made a commitment to feature Inuit sealskin handicrafts. High-quality boots and coats are made, but not adequately marketed in Canada or abroad. Experiments conducted by the Territorial and Greenlandic Home Rule governments demonstrate that a fine-textured, durable leather can also be made from ringed sealskin, offering an opportunity to produce goods that do not "look like seal". Both potential markets should be explored actively:

premium clothing which is identifiably Inuit in styling and craftsmanship and handcrafted leather products derived from locally tanned sealskins.

No discussion of the Inuit economy would be complete without consideration of the pervasive role of the Hudson's Bay Company as a monopoly retailer of imported food, equipment and fuel in most arctic communities (Canada, DIAND, 1984a). The Bay did not co-operate fully with the Royal Commission, and Commissioners were unable to assess the volume of its sales or the nature of its pricing practices. Those commercial records that Commissioners did obtain were internally inconsistent. In most communities, Bay stores also act as bankers, receiving government cheques and extending limited credit so that many Inuit see no cash and must rely on local store managers to determine what they have or owe. Although some Bay stores continued to purchase a limited number of sealskins at reduced prices after overseas markets collapsed, this practice appears to have been restricted to communities where there was no retail competition: that is, where the money paid for seals had to be spent at the Bay.

Compensation and Adjustment Assistance

To be meaningful and acceptable to Inuit, a relief package must be designed to permit, if not to encourage, continued hunting of seals and other wildlife. The available evidence (Canada, DFO, 1985, p. 99–107) indicates that, just prior to 1983, approximately 60,000 seals were harvested annually in the Northwest Territories and northern Quebec and that about 40,000 sealskins were marketed, on average, by the Hudson's Bay Company and other channels. At the average price of roughly $20 per skin which prevailed during the late 1970s, this would represent total gross returns of $800,000. Since the sales data are known to be somewhat deficient, however, it is likely that gross returns in fact approached or exceeded $1,000,000 annually. Gross returns per hunter therefore may be estimated at $500, more or less, each year.

Revenue from commercial sealing thus contributed significantly to the financing of Inuit hunting enterprises, in which annual operating costs appear to be roughly $2,000 per hunter (Table 13.4) – that is, assuming approximately 2,000 hunters, a total of $4,000,000 annually. These hunting enterprises, in varying proportions according to area, depend on the harvest of caribou, polar bear and fox as well as seals. Without the support of sealing revenue, the entire Inuit hunting economy may be unsustainable. Indeed, reduced hunting activity since the 1983 collapse of sealskin markets has resulted in deterioration of equipment, which will now require replacement

Inuit hunter and catch

if hunting is to be renewed. It follows that a relief package must provide *at least* $1,000,000 (1983 dollars) yearly to replace lost sealing revenue, and up to $4,000,000 to re-finance the Inuit hunting economy as a whole, over a reasonable period of adjustment.

The Royal Commission prefers to take a flexible approach to this issue: one that respects the diversity and self-determination of Inuit communities. The Commissioners consider, therefore, that an annual adjustment payment of up to $4,000,000 should be distributed through contracts with Inuit community organizations, such as hunters and trappers associations, for a period of adjustment of five years, and should be allocated on the basis of the number of community residents hunting in 1981/82 just before the collapse of the sealskin market. This would leave to each community the determination of eligibility for assistance, and the forms of assistance.

Human communities cannot realistically survive in the Arctic without hunting or importing far more costly southern substitutes. If Canada is committed to maintaining an arctic presence, it must accept the possibility of underwriting the costs of continued hunting as an alternative to subsidizing permanently costlier food imports. Depending on the future of seal-product markets, arctic communities may require some level of aid indefinitely. At the same time, the government should be aware that encouraging further population growth in the Arctic in connection with mineral and oil and gas development, while attractive in the short term, will lead

to the evolution of a greater number of larger permanent arctic settlements incapable of feeding themselves in the long term. Such development may reduce the need for public aid for one or two generations, but would lead eventually to an increase in dependence on southern imports and subsidies.

Management in the North

> *The methods of conservation used by the Inuit of Labrador were not scientific methods, but they worked for thousands of years (Andersen, 1985).*

The Arctic Ecosystem

The Arctic is at the limits of environmental conditions that can support life. The arctic ecosystem is fragile and can easily be damaged by disturbances that could take years to reverse. Human activities of all kinds, including hunting and mineral development, must be controlled carefully if the Arctic is to remain habitable. The situation on land, where a motor vehicle can leave tracks in the permafrost visible years later, may be more sensitive than that of the sea, but this does not justify regarding arctic marine resources as secure or inexhaustible. Serious attention must be given to strengthening the management regime in the Arctic and, for efficacy as well as policy reasons, devolving major responsibility to the Inuit themselves.

Harvest Effort

Little is reliably known about long-term changes in intensity of Inuit sealing. There is evidence that the Inuit population declined significantly during the last century owing to mortality from epidemic diseases introduced by European whalers (Anders et al., 1967). While Inuit have probably increased again since the introduction of public health programs in the 1950s (Hamelin, 1979; Anders et al., 1967), it is not known whether they have yet exceeded their original numbers (Schaefer and Steckle, 1980). In any case, since the late 1950s, they have been increasingly concentrated in towns (Draper et al., 1979; Freeman, 1976). Although this centralization has been offset by the range and speed of snowmobiles (Freeman, 1982), employment has reduced the proportion of Inuit who depend entirely on wildlife (Kemp et al., 1977; Anders et al., 1967; Kapel and Petersen, 1982), and de-

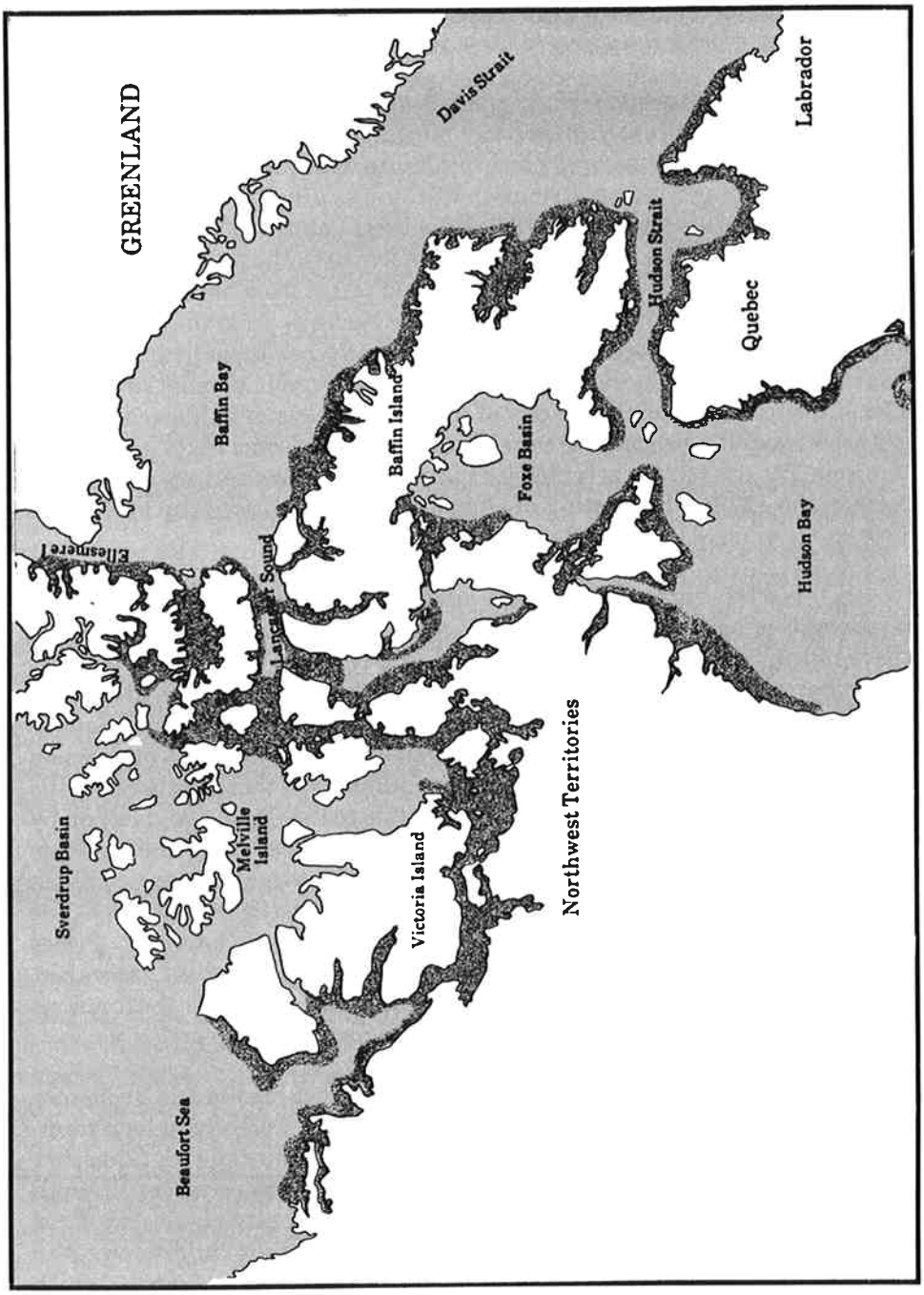
creased use of dog traction means less pressure on wildlife for dog food (Schaefer and Steckle, 1980). The total biomass of sea mammals required by Inuit may therefore have changed little since the last century.

Inuit camps were formerly small and widely scattered, and they were moved often, greatly dispersing hunting effort. Since ringed seals abandon intensely hunted areas and recolonize depleted ones, often at great distances, the geographic distribution of Inuit sealing prevented any long-term depletion of stocks (Figure 13.3; Kapel and Peterson, 1982). Conservation problems will arise only if there is an increase in the proportion of seal's habitat that is hunted intensively. This could result from an increase in the number and distribution of settlements in the North or from the degradation of unexploited areas of seal habitat by mining or other industrial activities. Wages and transfer payments will also tend to permit population growth beyond the food-producing capacity of the arctic ecosystem. If an expanding northern population continues to rely on hunting for some of its nutritional requirements – a pattern reported for industrialized towns in the Mackenzie Delta in the 1970s – harvesting of ringed seals could eventually exceed the sustainable yield of some local stocks.

It is often suggested that seal hunting has increased or will increase in response to opportunities to convert sealskins into cash. In Greenland, where much more precise hunting statistics have been kept, Inuit harvests of commercially valuable harp and hooded seals did increase in the 1970s (Kapel and Petersen, 1982), but Lars Emil Johannsen, Minister of Renewable Resources for the Home Rule government, told the Royal Commission that this development reflects the growing numbers of these seals along the country's west coast. Estimates made available to the Royal Commission by the Baffin Regional Inuit Association (1985) suggest that harp seal harvests have been more sensitive to prices than have ringed seal harvests. When harp seal prices rose by 20% in the 1970s, harvests rose by 96%, while a 30% increase in ringed seal prices led to only a 38% increase in harvests. Prices and harvests for both species fell at the same rate after 1981, however, suggesting that Inuit have not only lost cash opportunities, but can no longer finance the minimum requirements of hunting either species.

Inuit and Indians teach their children respect for life and avoidance of waste (Kapel and Peterson, 1982; McCarthy, 1985), and have a long tradition of self-regulation under the guidance of community elders (Labrador Inuit Association, 1985). Over-harvesting may nevertheless result from underestimating the efficiency of new technologies, as already has occurred as a result of the use of fishing nets (Wenzel, 1981). Inuit children are also increasingly exposed today to Euro-Canadian education and media, which

Figure 13.3
Inuit Sealing



promote a new kind of individualism, consumption and belief in human superiority over the animal world. Hunter education and renewed emphasis on Inuit values may have an important role to play in the future of ringed seal management. A significant step in this direction has been taken in northern Quebec, where Inuit communities contribute to the expenses of equipping and training young hunters through school programs.

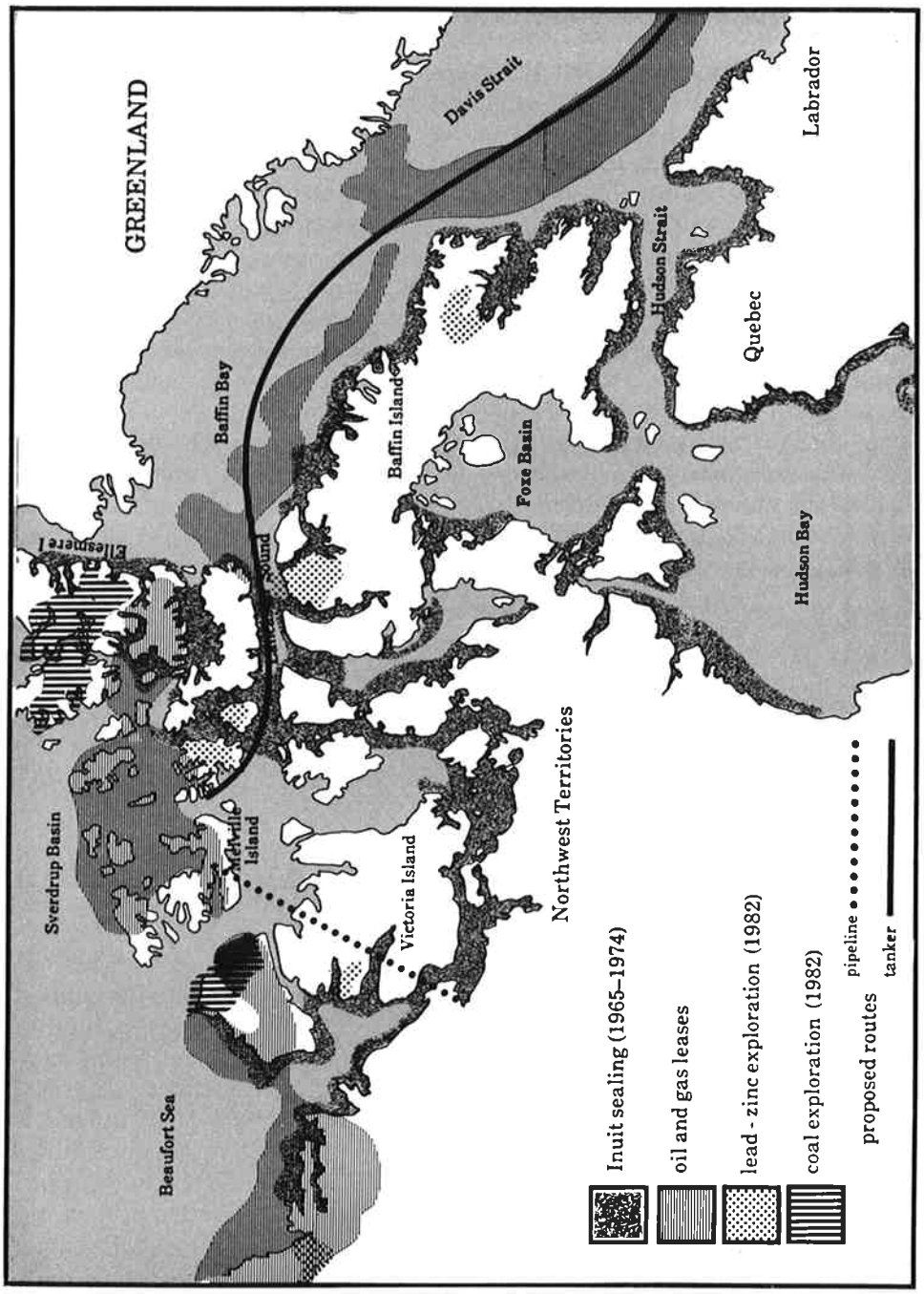
Regional quotas, already established for polar bears, beluga and narwhal, area restrictions (sanctuaries), limitations on hunting equipment and licensing may also have roles to play in the future management of ringed seals. Any attempt at imposing restrictions from the outside will be resisted strenuously, however, because of ringed seals' central contribution to northern food supplies. All of the communities contacted by the Royal Commission emphasized their right and responsibility to manage hunting locally, through their own institutions. Many of them stressed the importance of their familiarity with their own local environments. Others criticized what appeared to be arbitrary and unduly restrictive federal actions, such as the enforcement of sealing regulations, designed primarily for the Newfoundland commercial harp seal hunt, against Inuit hunters in northern Labrador (Labrador Inuit Association, 1985).

Effects of Northern Development

A number of ongoing and potentially harmful effects on seals and the overall arctic environment result from industrial development. These effects, in turn, reduce the ability of the Inuit to hunt seals and, therefore, further erode their unique way of life.

Development of arctic mining and oil exploitation can have a significant impact on the abundance of seals and their availability to hunters (Davis, 1981). Much of the Beaufort Sea, Sverdrup Basin (Parry Islands), and Baffin Bay have already been leased for petroleum exploration (Figure 13.4). Inuit hunt seals on the Beaufort Sea ice and along the shores of Davis Strait, and ship transport through the ice to the Sverdrup oilfield would necessarily pass through Inuit sealing areas in Lancaster Sound and Barrow Strait. A proposed pipeline route from Melville Island would cross sealing areas in the Coronation Gulf. Potential conflicts with respect to seals and seal hunting include toxic effects of heavy-metal wastes from mining operations, oiling of seals from a tanker or drill-rig spill, destruction of seal habitat by ice-breakers, and disruption of hunters' travel on ice broken by shipping. Mercury, which accumulates naturally in ringed seals in some areas, when combined with other heavy-metal accumulation, can result in

Figure 13.4
Inuit Sealing and Northern Development



seal meat with potentially high risks for human health. The effects of arctic development on seals are considered further in Chapter 23.

Reduction in the availability of seals to hunters as a result of ship traffic through the ice may be particularly important. For Inuit and other northern hunters, stable sea-ice is a travelling surface, not an obstacle (Boles et al., 1983). Ice-breaker tracks are impassable when fresh, and rough and relatively unstable when refrozen, resulting in reduced mobility and greater risk of injury for hunters. Persistent ice traffic would also interrupt the seasonal movements of caribou, reducing their access to the region's sparse and widely dispersed vegetation. Accordingly, Inuit have generally opposed ice-breaker traffic, forming a human barricade at Rigolet in 1982 to block ice-breaker tests (Labrador Inuit Association, 1985) and a dog-sled barricade of oreships in Greenland a decade earlier.

Management Responsibility

Centralized Inuit communities strengthen Canada's presence in the Arctic (Boyd, 1984; Denhez, 1984; Pharand, 1984). It would appear that Grise Fiord and Resolute, the most recent and northerly arctic settlements, have been established exclusively for this purpose. The most economical, environmentally appropriate way to maintain that presence is the continuation of subsistence hunting by the Inuit. Inuit land claims acknowledge that fact and aim to give the Inuit sufficient control over arctic territory and resources to manage the subsistence hunt effectively.

Canada's recognition of Inuit claims to the Arctic is reflected in the policy, in place since 1973, of negotiating "comprehensive claims settlements" in the North and compensating the aboriginal owners for the parts relinquished to the Crown. Moreover, the *Constitution Act, 1982*, section 35, now expressly reserves "aboriginal and treaty rights" from legislative encroachment, and it would be difficult to regard Inuit land use for wildlife harvesting as anything but a matter of aboriginal right (Tarnopolsky, 1983, p. 256; Sanders, 1983, p. 329). Federal action restricting Inuit harvesting, except under the terms of a claims settlement, could therefore become the subject of a constitutional challenge and should be avoided.

Wildlife-harvesting rights and management have been a major issue in all land-claims negotiations and settlements in the north, beginning with the 1975 James Bay and Northern Quebec Agreement (Whyte, 1982; Rostaing, 1985). Currently there are several comprehensive land claims (i.e., claims based on traditional use and occupancy of land) under negotia-

tion with the federal government. Four of those claims are by organizations whose members are actively engaged in seal hunting: Tungavik Federation of Nunavut (TFN), Labrador Inuit Association (LIA), Naskapi-Montagnais Innu Association (NMIA), and Conseil Attikamek-Montagnais (CAM). In June 1985, the Inuvialuit Final Agreement was initialled; it covers much of the western Arctic. All such agreements, whether proposed, pending or final, have substantial portions dedicated to wildlife management. For two reasons it is of the utmost importance that these agreements be taken into account when governments engage in management planning: first, the agreements contain detailed and comprehensive plans based on extensive, high quality research; and secondly, failure to account for those plans might result in conflicting management strategies.

Under the James Bay and Northern Quebec Agreement, a tripartite co-ordinating committee with Inuit and Cree representation advises the federal and provincial governments on matters of harvest management. Under the Inuvialuit Final Agreement, the Northwest Territories Wildlife Management Advisory Council fixes the total allowable harvest of each species and a subsistence quota which, in turn, is allocated among communities by the Inuvialuit Game Council (Canada, DIAND, 1984b). Local hunters and trappers associations are to be represented on both agencies. Inuit (TFN) territorial claims to the central and eastern Arctic are still under negotiation, but an agreement-in-principle has been initialled which anticipates Inuit autonomy in wildlife management (Nunavut Constitutional Forum, 1983). Inuit recognize the importance of sound conservation and believe that they have the experience and commitment to assume full responsibility (Payne and Graham, 1984). CAM has tabled a wildlife proposal modeled on the TFN plan, and LIA has tied their proposal into the wildlife section of the James Bay and Northern Quebec Agreement.

A trend in favour of aboriginal self-government may also be discerned in proposals such as the 1983 House of Commons Special Commitee report, *Indian Self-Government in Canada*, the last Liberal government's proposed Bill C-52, tabled in 1984, and the present government's *Proposed Accord Relating to the Aboriginal Peoples of Canada*, tabled at the April 1985 First Ministers Conference on the Constitution, which would have amended the constitution to clarify aboriginal peoples' "authority over and responsibility for lands that have been or may be reserved for their use." The Special Committee observed in its report that Canada is a party to the International Covenant on Civil and Political Rights, which *inter alia* emphasizes the right to self-determination and provides that "in no case may a people be deprived of its own means of subsistence". In its presentation to this Royal Commission, the Department of Fisheries and Oceans emphasized

its policy of negotiating standards with local Inuit organizations, rather than regulating the Inuit seal harvest directly (Canada, DFO, 1985, p. 91–92).

Entirely apart from questions of self-regulation, aboriginal wildlife harvesting already enjoys a limited degree of legal priority in relation to species otherwise restricted or controlled (Bennett, 1982). Most federal provisions address personal or family use for food and clothing as distinct from trade, barter or sale, although the recently adopted beluga and narwhal regulations (S.O.R./80-376 and 80-739) and walrus regulations (S.O.R./80-338) permit trade or barter. Priority for aboriginal users is also entrenched by a number of claims settlements. Under the James Bay and Northern Quebec Agreement, aboriginal hunters enjoy what is referred to as a "guaranteed harvest", that is, the right to harvest wildlife for personal and community use up to 1975 levels, with priority to subsistence uses, subject only to conservation requirements (Moses, 1985). Under the Inuvialuit agreement, Inuvialuit communities enjoy an exclusive right to hunt polar bear, musk-ox and furbearers on reserved lands, and a preferential right to the use of other wildlife and fishery resources, including the right to "sell, trade or barter" inedible by-products.

International Aspects

Inuit have been affected not only by the collapse of European sealskin markets, but also by the effective closure of U.S. markets to marine mammal products under the United States *Marine Mammal Protection Act of 1972*, which restricts the importation of these products to countries certified as managing their marine stocks consistently with the Act. The Act nonetheless exempts Alaska's Indians and Inuit from most restrictions (Schoolcraft, 1983, p. 289). Canada could usefully raise this discrimination with the American authorities and propose corrective legislation, particularly in light of the 1794 Treaty of Amity, Commerce and Navigation between the United States and Great Britain, which secured aboriginal North Americans' "full liberty to pass and repass by land or inland navigation . . . and freely to carry on trade" across the U.S. border.

Canada is a party to several international conventions under which arctic marine mammal management is shared variously with the United States, the U.S.S.R., Norway and Japan. It is in the interests of northern peoples that this circumpolar approach to wildlife management be continued and strengthened. At the same time, the legitimacy and enforceability of regulations will be greatest if Inuit themselves are directly represented in administering existing conventions and negotiating new ones. The influence

of the Alaska Eskimo Whaling Commission serves as a model. There is also an important new factor in circumpolar wildlife management: the autonomy of Greenland. Although still nominally represented by Denmark in external affairs, Greenland is entirely independent in fisheries and wildlife management. Since Canada shares with Greenland the Davis Strait and its harp, hooded, bearded and ringed seal stocks, it would be highly desirable to begin negotiations with the Home Rule government with a view to making Greenland a full partner in circumpolar management. This is a task in which Canadian Inuit could and should play a significant role.

Since the 1880s, Inuit wildlife harvesting in Greenland has been regulated to some extent by local Hunters' Councils. Under the terms of the *Home Rule Act* and Greenlandic legislation, quotas, gear requirements and licensing regulations are established in the capital, Nuuk, but licences are issued, and regulations enforced, at the local level. There are separate classes of hunting licences for persons whose sole income is from hunting, for those who obtain only supplemental income from hunting, and for those who are fully employed (Kapel and Peterson, 1982; Johannsen, 1985). Danes provide only technical advice. Denmark completed the transfer of all authority over fisheries and wildlife to the Home Rule government on 1 January 1985. Greenland and Canadian Inuit are currently active in efforts of the Inuit Circumpolar Conference (ICC) to establish a comprehensive environmental policy for the circumpolar region as a whole. The Canadian government made a substantial financial contribution to the ICC in September 1985.

Aboriginal management autonomy also exists to some extent in other countries. In Alaska, where a division of territory was legislated in 1971, the United States has accepted Inupiat self-regulation of the bowhead-whale harvest (Langdon, 1984). Native whaling captains elect the members of the Alaska Eskimo Whaling Commission (AEWC). The AEWC suggests quotas and harvest regulations, which the United States ordinarily joins in proposing annually to the IWC. However, the final decision rests with the IWC and has frequently varied from the proposals submitted by the Inupiat and the U.S. government. Enforcement of this final decision by the IWC is left to the Inupiat community. Efforts are now being made to organize an Alaska Native Marine Mammal Commission to secure community control of seal and walrus harvesting, as well. In the contiguous United States, all wildlife harvesting on Indian reservations is managed by tribal councils, under the terms of their federally approved constitutions. According to a 1983 decision of the United States Supreme Court, *New Mexico* v. *Mescalero Apache Tribe*, this management is independent of government direction.

Russian fur hunters began exploring the Aleutian Islands in the mid-1740s, and by 1786 they had discovered the large fur-seal rookeries on St. Paul and St. George Islands (the Pribilof Islands), where 80% of the population breeds (Hansen, 1982; Veltre and Veltre, 1981). Lacking fresh water streams, protected bays or forests, the Islands have no anadromous fisheries, few shellfish and little driftwood for fuel (Veltre and Veltre, 1981). Hence they remained uninhabited until 1799, when the Russian America Company obtained a monopoly of seal and sea otter harvesting, and began importing Aleuts to the Pribilofs as seasonal hunters through a system of forced labour. Permanent Aleut settlements were established in the 1820s, to reduce the costs associated with the annual transportation of hunters. The company failed financially in the 1830s, however, and in 1867, its interests passed, with the Islands, to the United States by treaty (Veltre and Veltre, 1981).

The Americans governed the Aleuts on the Pribilofs strictly, isolating them from other aboriginal communities, paying poor wages, regulating marriages, closing Russian schools, and prohibiting Islanders' use of the Aleut language until the emergency evacuation of the Islands during the Second World War (Veltre and Veltre, 1981). They also doubled the annual harvest of fur seals under a policy of leasing monopoly harvesting rights to private companies. While Russian sealers had sought out silver pup fur, the Americans preferred the dark fur of three- to four-year-old "bachelor" seals. Harvest quotas and restrictions, begun by the Russians in the 1820s, were strengthened but the number of seals declined rapidly. Beginning in 1909, the U.S. Administration assumed direct control of the harvest, hiring Aleuts to herd and kill the seals (Hansen, 1982).

Fur-seal meat was necessarily always a staple for the Aleuts. Although halibut, reindeer (on St. Paul Island), birds and eggs are seasonally available, seals, including phocid seals and sea lions, are by far the most abundant and reliable food source in the Pribilofs. Subsistence use has remained at about 400 pounds (roughly 8–10 seals) per capita yearly since the stock was first studied in 1914. From 1870 to 1889, the Islanders took 10,000 seals yearly for food, about half of them pups, and took another 85,000 for fur alone. Killing of pups was forbidden in 1891, although they were preferred as food. By the 1970s, St. Paul Islanders were taking about 2,000 seals yearly for food and 25,000 for fur. Villagers on St. George Island, where there has been no commercial sealing since 1972, and a subsistence quota of only 350 seals, depend on surplus meat from St. Paul (Veltre and Veltre, 1981). In July 1985, there was no commercial hunt at all, but 3,400 seals were taken for subsistence.

Restrictions on pelagic sealing were instituted by international treaty in 1911. The treaty lapsed in 1941, but was revived in 1957 in the form of the *Interim Convention on Conservation of North Pacific Fur Seals*. The Convention, which expired in 1984, stated that restrictions on pelagic sealing did not apply to "Indians, Ainos, Aleuts, or Eskimos dwelling on the coast . . . who carry on pelagic sealing in canoes not transported by or used in connection with other vessels, and propelled entirely by oars, paddles or sails . . . without the use of firearms [and] not in the employment of other persons." This retained little practical significance, since the traditional hunting methods contemplated are no longer in use. The Convention also provided, however, that in recommending any harvest reductions on conservation grounds, the Commission was to give "due consideration to the subsistence needs of Indians, Ainos, Aleuts or Eskimos who live on the islands where fur seals breed." This provision was in essence a commitment to subsistence harvesting as long as conservation goals could be met, whether or not there was any commercial harvest.

From 1909 to 1984, the federal Administration provided security for the Islanders by paying them wages for the annual hunt. Deblubbered pelts were sold to the Fouke Fur Company in Greenville, South Carolina, for finishing and resale. A number of other seal products were produced on the Islands, including glycerin (during the First World War), tanning oils (used by the government until 1962), and feed for fox and mink farming (until 1978) (Veltre and Veltre, 1981; Riley, 1961). The harvest employed 85 Aleuts in 1979, and made US $500,000 profit (Hansen, 1982), but costs and public pressures were rising. Congress resolved to transfer responsibility to the Islanders with the aim of gradually replacing sealing with some other source of local income. Public Law 98-129 (1983) conveyed all federal seal-processing facilities on the Islands to Tanadgusix Corporation, an Aleut-controlled corporation organized under the 1971 *Alaska Native Claims Settlement Act*, extended federal employee retirement benefits to Aleuts who had formerly worked as government harvesters, and established a trust fund for local economic development.

Tanadgusix Corporation obtained a monopoly of the distribution of the meat, export of penis bones, and processing of the remaining fur seal carcasses as dog food and crab bait (Veltre and Veltre, 1981). Under the terms of the transfer legislation, the corporation also obtained a monopoly of pelt sales. It organized the 1985 hunt at an anticipated cost of about US $300,000, but anti-harvesting protests resulted in a compromise under which seals were taken only for subsistence, and this arrangement is likely to hold for the foreseeable future. Trust funds are now being used to capi-

talize a fleet of groundfishing vessels to compete for the promising Bering Shelf fishery, on the assumption that this enterprise will prove a more stable (and more acceptable) source of employment for the Islanders than sealing. The Pribilof case is distinguishable from the Canadian case in two respects: the availability of a growing, rather than a declining, regional fishery as an employment alternative and the very small number of people involved.

Subsistence harvesting and, especially, Native subsistence enjoy special legal status under laws particularly applicable to Alaska. The United States *Marine Mammal Protection Act of 1972* permits harvesting of protected marine mammals by Natives for "nonwasteful" uses such as food and clothing, including the sale of processed articles made from inedible by-products (authentic handicraft articles). In 1981, the Act was amended to permit the State of Alaska to assume responsibility for marine-mammal management, provided that it demonstrated a commitment to priorizing "rural" subsistence. Aboriginal Alaskans have organized an Alaska Native Marine Mammal Commission to challenge the State's recent efforts to take advantage of this option, on grounds that the State has so far adopted no satisfactory guidelines or regulations for the protection of aboriginal harvesting rights.

The 1978 *Alaska National Interest Lands Conservation Act* (ANILCA), sections 804 and 805, establishes a priority for "nonwasteful subsistence uses" in the management of wildlife on federal lands in that State, and requires the State to apply the same priority in managing the lands that it acquired from the federal Administration. In accordance with its responsibilities under ANILCA, the State of Alaska established a statewide subsistence priority in public lands management in 1978 (A.S. 16.05.940). Covered are all "customary and traditional uses", which include "direct personal or family [blood kin or household members] consumption as food, shelter, fuel, clothing, tools, or transportation, for the making or selling of handicrafts" from inedible by-products, and for participation in "customary trade, barter, or sharing". If restrictions on harvesting must be imposed to ensure conservation, the State must favour subsistence users who have "customary and direct dependence" on the resource, who are local residents, and who have no reasonable economic alternatives available to them. Refinement of these terms has been troublesome (Langdon, 1984) because aboriginals see them as too restrictive on selling furs and other unprocessed by-products, and too favourable to non-aboriginals recently arrived in the North.

Findings and Conclusions

There are three factors that underlie the Royal Commission's recommendations regarding sealing by aboriginal peoples. First, northern aboriginal communities are characterized by a complex interplay of social, economic, cultural and political factors that must be considered in the design and implementation of new policies and programs. Secondly, sealing is vitally important to the physical, social and cultural health of the Inuit and, to a lesser extent, the Indians living in the North and in the Atlantic and Pacific regions. Thirdly, the EC's ban on the importation of certain seal products, in combination with other factors such as resettlement, has had a devastating impact on Inuit people. In view of these three factors, the Royal Commission believes that innovative steps must be taken. Furthermore, solutions will not be sucessful in the long term if they deal only with the sealing component of aboriginal economies; in fact, the entire interplay must be addressed.

Equilibrium and Change in the North

Northern aboriginal peoples have lived for thousands of years in a fragile and demanding environment. They have been able to do so by balancing their needs with environmental conservation, through effective strategies of resource use, social organization and cultural design. Human relationships are close and supportive, thereby contributing to community survival. Co-operation among families is geared to effective hunting, and children learn at an early age about the hunt and the importance of working together. Moreover, when people depended entirely on the hunt for their livelihood, their strategies were adaptive; changes in weather and animal populations that could have resulted in starvation were usually handled by travelling and/or by using alternative resources, at least temporarily.

Sealing has long been a critical part of the strategy for northern survival, particularly among Inuit. The ringed seal is the most reliable and abundant food source in most of the Arctic, and it meets the nutritional needs of the Inuit much better than foods imported from southern Canada. Contemporary events have not changed this situation significantly, and permanent northern communities will depend, for the forseeable future, on the ringed seal.

Since the 1950s, however, a number of factors have changed the nature of sealing in the North, although these factors have not lessened the

importance of seals to the physical health and culture of the Inuit. In the 1950s, the resettlement of many Inuit from their remote camps and small villages to larger, more centralized communities effectively removed these people from their sealing areas. The move had the effect of providing easier access to outside services, as the federal government had intended, but it also necessitated increased energy and speed to travel to sealing areas. Motorization, especially the use of snowmobiles, compensated for this necessity, but required cash to buy the machines, spare parts, lubricants and fuel. The only way in which Inuit could acquire enough cash was to export seal pelts and, to a lesser extent, seal products such as handicrafts.

While many families were able to cope reasonably well from the 1950s to the early 1970s, the rapidly rising inflation rate of the 1970s made transportation increasingly difficult to finance. Wage-labour, though scarce, did provide some income for a number of Inuit families; however, the bulk of

Cleaning sealskins

such labour was at "remote" resource-extraction sites, thus precluding the chance for wage-earning hunters to engage in sealing. In addition, transfer payments provided by the federal government were inadequate to cover the costs of travel to sealing areas. Thus sealing began to decline, not because it had lost any importance for the Inuit, but because it was becoming increasingly difficult to finance the hunt.

To the extent that lack of cash from wages and export sales has reduced the intensity of hunting, the nutrition and health of Inuit have suffered. A host of problems ranging from dental caries to cardiovascular disease and cancer can be attributed directly or indirectly to the lack of seal meat in some communities. The replacement of seal meat by imported foods of considerably lower nutrient value has obviously had severe effects.

While sealing was being affected by resettlement and rising costs over the years, an acute blow came with the EC's 1983 ban on the importation of certain seal products. The market for ringed sealskin products was never the target of anti-sealing protests and was exempted explicitly from the EC's 1983 directive. Indeed, ringed seal products moved through separate channels (the Bay and Inuit Co-ops) and remained largely distinct (handicrafts) from products of harp-seal (whitecoat) pelts. The protests and subsequent directive nonetheless appear to have triggered a general reaction against all seal products, regardless of species or origin. Within two years of the EC directive, Canadian Inuit had lost more than three-fourths of their income from sealing, and up to one-third of their cash income from all sources.

While the decline in hunting is more difficult to quantify than health problems, there is little doubt that it has started to affect the cultural integrity of northern aboriginal peoples, especially the Inuit. The northern cultures are oriented to hunting in every way, from co-operation among families to mythology and education. A sudden decline in hunting is bound to leave a vacuum. When combined with the increase in health problems and the removal of the working life (i.e., hunting) of many people, the vacuum could open the way for the demise of Inuit culture.

Addressing the Problem

Since public sentiment favours the survival of Inuit culture as unique, distinctions between Inuit products and products of large-scale commercial sealing can be re-established though product identification and public information. Secondary processing by Inuit themselves, rather than by southern manufacturers , is likely to improve the public acceptability of

products. Above all, Inuit themselves are in the best position to judge how to proceed and how to represent their own interests to governments and potential consumers.

The structural challenge in the Arctic is to develop a "mixed" (cash and subsistence) economy that is consistent with the limited biological surplus and fragility of arctic ecosystems. Wildlife harvests cannot be much increased, and liquidating non-renewable resources may have a negative effect on the long-term productivity of the environment. The most promising foundation for the long-term habitability of the North, without a permanent subsidy, is processing and exporting the by-products of existing harvesting activities and exploring alternative transport, housing and energy technologies to minimize northern communities' dependence on southern imports.

For the short term, the Royal Commission recommends the establishment of an assistance package to permit, if not to encourage, continued subsistence hunting of seals and other wildlife. An annual adjustment of up to $4 million should be distributed through contracts with Inuit community organizations, such as hunters and trappers associations. This money should be allocated on the basis of the number of community residents hunting in 1981/82, before the collapse of sealskin markets.

If Canada is serious about maintaining its arctic presence, viable and conservationally sound arctic communities must exist. Inuit sealing must therefore be supported.

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PART IV

Economic, Social and Cultural Issues

PART IV b

The Atlantic Region

The Atlantic Region

This section is based on a number of reports prepared by consultants who were asked to investigate various aspects of sealing in the Atlantic region. (See Administrative Appendix VI, Technical Reports 9, 12, 13, 14, 17, 19, 20.) As with the North, an initial requirement was to examine the extent of the hunt and related processing activities. On the basis of the analysis of the human resources and equipment employed in sealing, and of the yield in terms of pelts and other seal products, it was possible to assess the overall costs and benefits of the hunt. The more strictly defined *net economic* benefits were then calculated so as to estimate the economic yield to the region that accrues from sealing. In addition, a number of other socio-cultural benefits were identified and commented on.

The initial analysis was based on the scale of the sealing industry that prevailed prior to the collapse of markets for seal products in 1983. Now that the large-scale commercial seal hunt has all but ceased, very different realities face those involved. After describing the present circumstances, the prospects for a revival of the industry are reviewed. Finding these economic prospects to be rather bleak, a discussion follows of options for the kinds of development assistance, including compensation, that might possibly be extended to sealers and affected communities. A concluding section draws together the findings and conclusions with respect to the Atlantic region.

The term "Atlantic region" is used here to include not only the four Atlantic provinces, but also the north shore of the Gulf of St. Lawrence and the Magdalen Islands in Quebec. (See Figure 14.1.) The focus in this section, then, is sealing in this broadly defined Atlantic region and Canada's territorial waters which surround it.

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Chapter 14

The Atlantic Sealing Economy

In 1981, my net income from sealing was far over ten thousand dollars, but in 1984, my income was one hundred and fifty dollars from sealing (Small, 1985).

In this chapter the human resources and equipment committed to the seal hunt in recent years are described in some detail. Also quantified, to the extent possible, are the primary and secondary outputs of the sealing industry in the Atlantic region. Sub-regional data are presented to help pin-point those areas where the sealing industry has particular meaning.

The Primary Sealing Industry

Human Resources and Equipment

In general terms, the active sealing labour force comprises inshore fishermen and fish-processing plant workers. The location and number of sealers, the nature and strength of their attachment to the seal "fishery", their education, skills and work experience, and the income earned from sealing are particularly relevant to this overview. Tables 14.1–14.3 indicate the resource commitment to the seal hunt in the Atlantic region in 1982, which was representative of the hunt prior to its collapse in 1983.

The Labrador seal hunt has been a landsmen's hunt, except for a small amount of longliner activity in the southern area. Vessel incomes have been in the $5,000 range over the period 1980–1982. Landsmen activity ranged from Nain in the north down to the Strait of Belle Isle area in the south. Excluding Inuit hunters who do not require a licence for the subsistence hunt, as many as 1,000 licences have been issued annually in Labrador, but probably only about 40% of the licensees were active. In the north, some landsmen using nets had incomes in the $5,000–$6,000 range in good years; most, however, were in the $100–$500 range. Subsistence hunting for personal use was and is an important element of the Labrador hunt. Table 14.4 records the conduct of the seal hunt in Labrador and Newfoundland from 1971 to 1984.

Table 14.1
The Sealing Labour Force, Atlantic Region, by Category and Province, 1982

Category	Newfoundland	Quebec	Nova Scotia	Total
Sealers Licensed	9,322[a]	1,680	73	11,075
Active Participants:				
Landsmen	4,989	726[b]	15	5,730
Longliner crews	550	78	–	628
Hunters on large vessels	164[c]	35[d]	5	204
Total Active	5,703	839	20	6,562

Source: Canada, DFO (1983) and special tabulations by DFO, Quebec.

a. This number excludes Inuit sealers in Labrador who do not require licences for subsistence sealing.

b. This is an estimate based on King (1981). It is assumed that numbers of licensed sealers in 1982 were the same as in 1980, and that the proportion of licensed sealers on the north shore taking part in the hunt was the same as the corresponding proportion for the Madgalen Islands.

c. This includes one man sealing on a Nova Scotian vessel.

d. Including 15 men on a Nova Scotian vessel.

On the Island of Newfoundland, the active sealing labour force ranged from 3,000 to 6,500 persons annually, or up to 75% of licensed sealers. Of this number, some 2,200–2,750 reported cash earnings from the hunt. The half-dozen or so large sealing ships recruited 125–150 seal hunters each season, and these men earned the highest incomes from sealing, ranging from $3,000 to $5,000 annually. No particular place stood out as a home base for these sealers, although most appeared to come from small communities along the northeast coast from Trinity Bay to Notre Dame Bay and New World Island. (See Figure 14.2). Sealers on longliners earned the next-highest incomes. The number of participating vessels of this type fluctuated from a high of 184 in 1976 to a low of 41 in 1984 and, in total, carried as many as 500–700 crew members in good years. Longliner-sealer income typically ranged from $1,500 to $1,800 per year, but could run as high as $2,600 to $3,200 on the "highliner" vessels. Longliners were concentrated in

Figure 14.1
Traditional Commercial Sealing Areas–Atlantic Canada

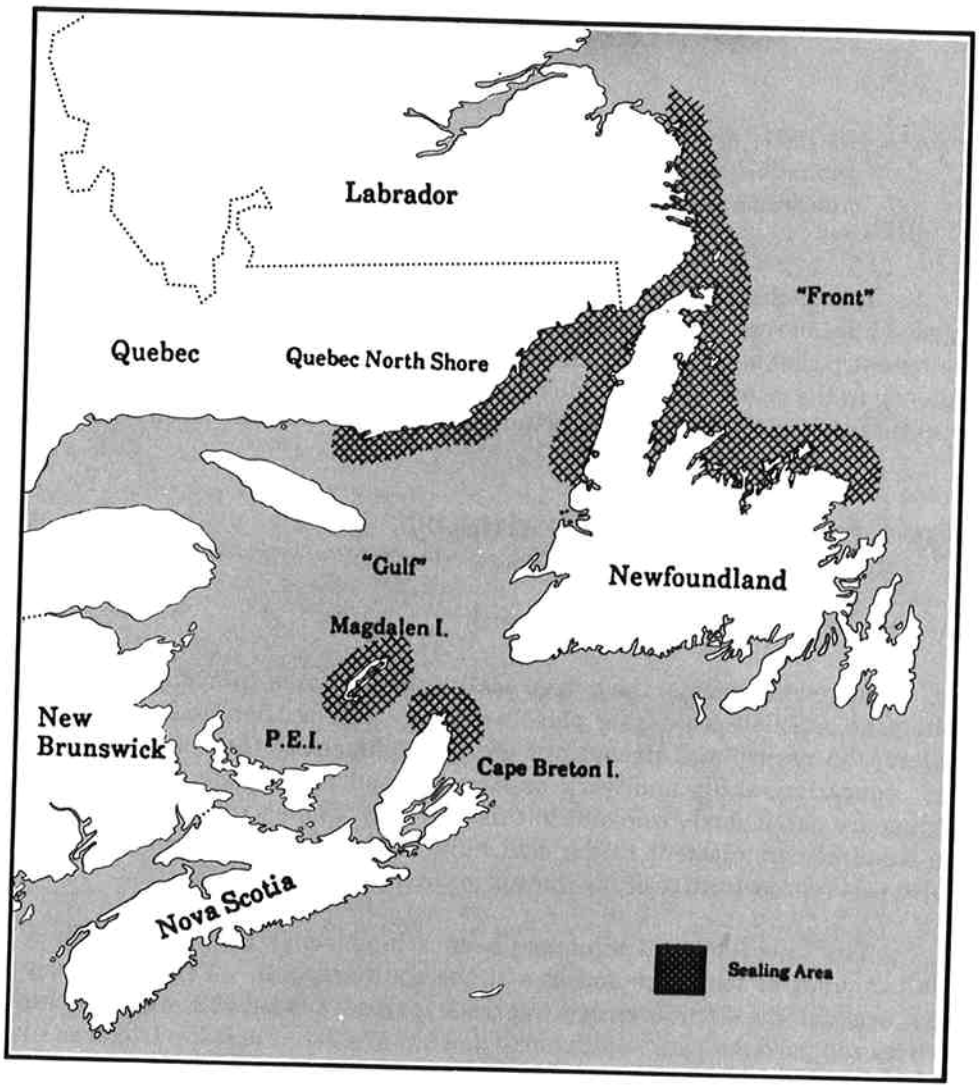


Table 14.2
The Sealing Fleet, Atlantic Region, by Class of Vessel and Province,[a] 1982

Vessel Class[b]	Newfoundland	Quebec	Nova Scotia	Total
Longliners:				
licensed	235	18	–	253
active	124[c]	10	–	134
Large Vessels:				
licensed/active	6	1[d]	1	8

Source: Canada, DFO (1983), and special tabulations by DFO, Quebec.

a. The vessels are listed according to the province in which they are based.
b. Longliners are fishing craft from 10–20 metres in overall length. Smaller craft, e.g., "speedboats" or dories, over 2,500 of which were used by landsmen in Newfoundland alone, are excluded here.
c. An additional three non-licensed vessels reported by-catches of seals (seals taken incidentally in fishing operations) in 1982. (See Table 15.4, Chapter 15).
d. This vessel landed its catch in Newfoundland.

the Twillingate area, around Fleur de Lys and La Scie on the Baie Verte Peninsula, in the St. Anthony area and, to a lesser extent, at Port aux Choix in the St. Barbe district (Figure 14.2). These fishing communities depend on a successful longliner fleet for their livelihood, and sealing made an important contribution to the financial viability of the longliner enterprises. Landsmen, ranging in number from some 2,500 in the early 1970s to double that number in 1982, composed the third group of sealers in Newfoundland. Incomes per season for an estimated 2,000–2,500 of this group averaged some $500 over 1981–1982, but higher incomes, averaging almost $1,000, were gained by landsmen in the St. Anthony area.

The seal hunt on the north shore of Quebec was carried out by landsmen, most of whom used nets. The main hunting concentration was around the Harrington–La Tabatière area, although some hunting took place farther east along the shore, and one family was active in sealing at

Table 14.3
Summary of the Sealing Labour-Force Activity by Area, 1982

Area	Gear Type and Number	Estimated Active Participants	Estimated Income Levels	Community Dependence
Labrador	Landsmen (mainly Inuit or settlers, using nets, rifles and harpoons)	• up to 1,000 licences held; 400–500 active hunters, but licensees do not include Inuit	• mainly subsistence hunt now • incomes of up to $5,000–$6,000 for good hunters prior to 1982, but most earned $100–$500	• Nain, Hopedale, Postville, Makkovik, Rigolet in the north • places like L'Anse au Loup, Battle Harbour, Black Tickle in the south
Newfoundland	Landsmen (powered boats or on foot)	• a range of 1,500–5,000 active hunters • up to 2,000–2,500 reporting income from sealing	• average income of $500–$600 range; higher in the St. Anthony-Northern Peninsula area	• along northeast coast and northern peninsula
	Longliners (125–150)	• varies from year to year with number of vessels • average crew of 4.5 per vessel • total crew members approximately 600	• average crew earning about $1,500–$1,800; in the $2,000–$3,200 range per year on highliner vessels	• concentrated along north-east coast and northern peninsula in Twillingate, Baie Verte and St. Anthony areas and, to a much smaller extent, around Port aux Choix on the west coast
	Large vessels (5–6)	• 120–150 sealers • approximately 25% turnover per year	• $3,000–$5,000 • 1/3 to 1/2 of annual income	• spread along east coast from Trinity Bay to New World Island

Table 14.3
Summary of the Sealing Labour-Force Activity by Area, 1982 (cont'd)

Area	Gear Type and Number	Estimated Active Participants	Estimated Income Levels	Community Dependence
North Shore Quebec	Landsmen (using nets or rifles)	• as many as 1,000 licences but probably 100–200 active in recent years	• $500–$1,000 • historically important for subsistence; no longer economically important	• mainly Harrington, La Tabatière and Mutton Bay; one family at Tadoussac
Magdalen Islands	Landsmen (powered boats, snowmobiles, or on foot)	• 200–250 committed • 600–700 occasional, depending on ice conditions	• up to $1,500; $500–$1,000 common, less than $500 likely	• distributed across the whole area
	Longliners (approximately 18 vessels)	• up to 150 sealers/fishermen • catch usually concentrated in 10 vessels or fewer	• same as in Newfoundland	• distributed across the whole area
	Large Vessels (1–2)	• approximately 35–40 sealers	• $3,000 + • 1/3 or more of annual income	• sealers drawn from across the Islands
Cape Breton Island	Landsmen (using rifles)	• prior to 1983, number of licences varied with seal availability (from 15–240) • perhaps as few as 10 active hunters in recent years	• no dollar figure, but estimated up to 10% of total income in good year	• northern tip of the island in the Aspy Bay area

Source: Gardner Pinfold Consulting Economists Limited (1986).

Table 14.4
Engagement in Sealing, Newfoundland/Labrador, 1971–1984

	Landsmen		Longliners		Large Vessels	
Year	Craft (no.)	Men (no.)	Craft (no.)	Men (no.)	Craft (no.)	Men (no.)
1971	–	2,302	52	231	10	446
1972	–	3,640	42	169	4	132
1973	2,094	4,204	49	206	2	58
1974	1,955	3,911	73	273	2	54
1975	1,817	3,762	130	554	5	124
1976	2,058	4,047	184	771	4	100
1977	1,777	3,726	104	402	3	83
1978	1,307	4,244	132	515	5	126
1979	2,955	5,987	126	487	5	136
1980	2,553	4,998	146	589	4	111
1981	1,890	3,728	137	550	6	148
1982	2,529	4,989	124	550	6	163
1983	2,782	5,470	85	371	1	22
1984[a]	3,181	6,240	41	152	–	–

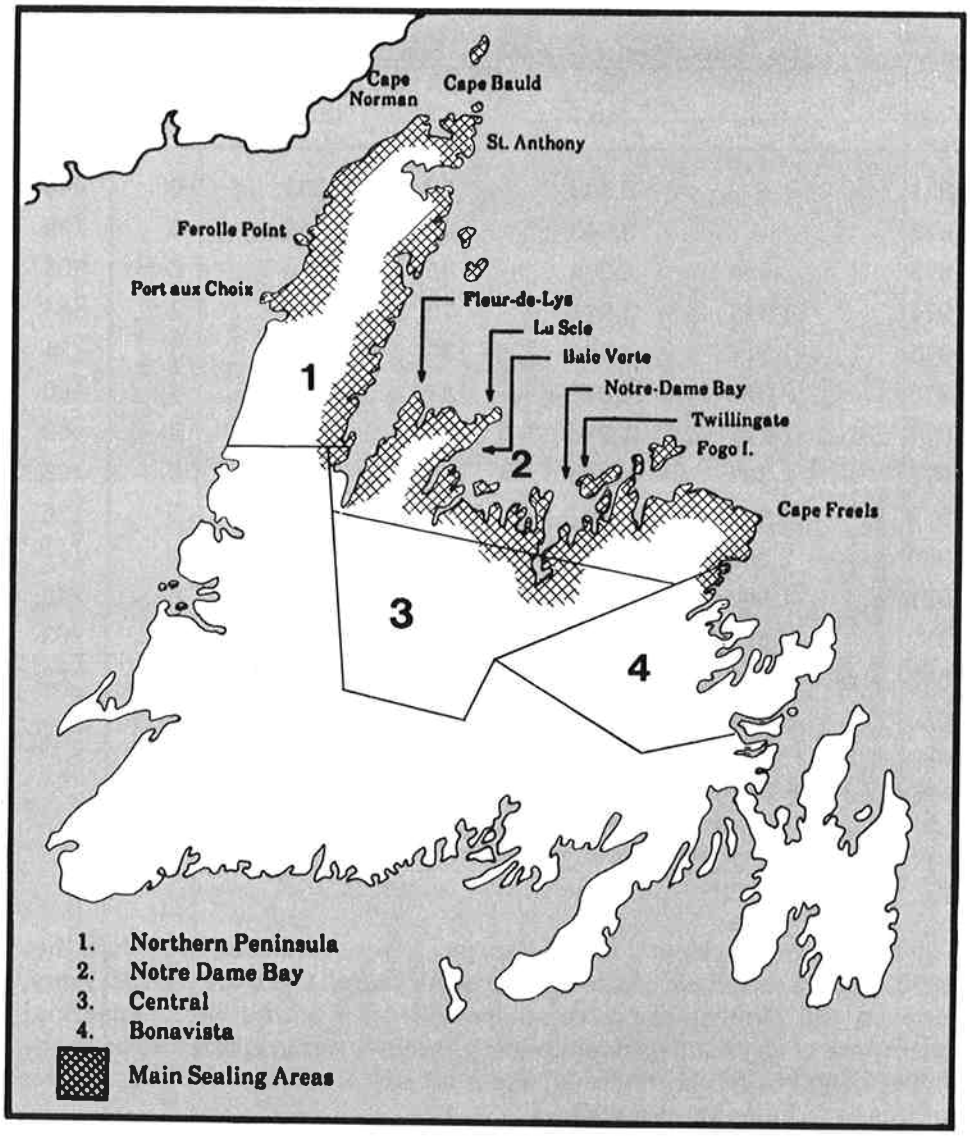
Source: ICNAF (1971–1982) and special tabulations by DFO.

a. There was no commercial hunt by large vessels in 1984.

Tadoussac, near the mouth of the Saguenay River. Licensing data show that 1,000 licences were held in the area in some years. Over the past 10 years, however, the number of active sealers declined as did the commercial importance of the hunt. Annual sealing incomes were reported to be in the $500–$1,000 range. Historically, the hunt was important for subsistence, but this aspect also has diminished.

The seal hunt in the Magdalen Islands was similar in character to the Newfoundland hunt, but was conducted on a much smaller scale. The large-vessel component normally consisted of two ships carrying about 40 Madelinot sealers. Up to 1982, these vessels generally took their quota of

Figure 14.2
Main Sealing Areas in Newfoundland



10,000 seals, which brought the sealers incomes of $3,000 or more annually. Most of the sealers came from Entry Island and the Bassin area in the southern part of the main island. A small fleet of longliners (approximately 18 vessels) also hunted. Between 100 and 150 sealers operated from the latter vessels. The available data suggest that the longliner catch was usually concentrated in fewer than 10 vessels, and sometimes only four or five vessels. Incomes could reach the $3,000 level for sealers on the high-catch vessels. As many as 1,000 licences were held by landsmen in the Magdalens, but only one-quarter of these men were committed hunters. More were active if ice conditions were favourable. Landsmen's incomes varied from year to year. Most earned less than $500, but a few managed to reach the $1,000–$1,500 range. Many landsmen appeared to limit their hunting to meeting their personal consumption needs.

In Nova Scotia, the hunt was concentrated near the northern tip of Cape Breton Island, around Aspy Bay. Hunting was a matter of chance from year to year, depending on ice conditions. The number of licences ranged from a low of 15 to a high of 240. In recent years, the number of active hunters may have fallen to 10. Sealing income varied but is not likely to have been much more than 10% of total income except in 1981, which was a particularly good year.

Northern Labrador[1]

The past 30 years have seen many changes in northern Labrador which have, in turn, affected seal harvesting activity. The important changes and their effects are as follows:

- The abandonment of the northern Inuit communities of Hebron and Nutak have left unoccupied much of the richest seal-hunting areas.
- Resettlement has put heavy pressure on resident seal populations near the southern villages where people are now concentrated.
- Many outports, homesteads or camps have been abandoned in favour of year-long residence in the communities.

1. The material in this section is based on Williamson (1986).

- Increased availability of cash and of store produce has reduced total reliance on country foods. Nevertheless, the quality of much of the food and fresh produce in the stores is poor, and country foods still provide a major source of protein.

- Dogs were replaced by snowmobiles in the 1960s and 1970s, thus eliminating the need for seal meat as dog food.

- The cash value of sealskins dramatically increased in the 1960s and 1970s, but at the same time the need for cash also increased greatly.

- The sealskin market collapsed following the 1982 harvest. A subsistence need for seals remains, however, and the cost of procuring the seals rises as fuel and capital costs of equipment continue to increase.

While all of the above circumstances have hindered sealing, they have not stopped it. Sealing continues to be a central social, cultural and economic activity in northern Labrador.[2] Table 14.5 shows the number of people involved in sealing in northern and southern Labrador, and in key communities therein, in relation to the provincial sealing labour force as a whole. (See Figure 14.3.)

At least 80% of the adult male sealers and many of their adolescent sons hunt seals sporadically for food and for local use of skins. In 1979, based on the consumption rate shown in Table 15.8, Chapter 15, the value of seal meat consumed for the whole region came to nearly half a million dollars. There is no evidence to indicate that this figure has decreased in subsequent years. Most of the seals taken for subsistence are shot, either in the water during the open-water season or on the spring ice during April and May.

The sealers who are most successful as commercial seal harvesters are landsmen who use nets. The economics of the net fishery and its worth to individuals can best be understood by an examination of individual netting operations in several communities. The following, therefore, were surveyed.

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2. This fact has been recognized by the Department of Fisheries and Oceans (DFO), which has exempted residents of Labrador from seal-hunting licences for subsistence purposes. It has done so because it recognizes that the seal hunt in northern Labrador is apart and separate from that associated with the "Front" or the Gulf. The Labrador Inuit Association (LIA) also argued successfully for its constituents that seal hunting was not only a tradition of many centuries in northern Labrador, but also a right. The LIA has been negotiating with DFO for the past several years to establish its own seal-management regime for northern Labrador and for redefinition of the zone.

Figure 14.3
Seal Hunting Areas of Labrador

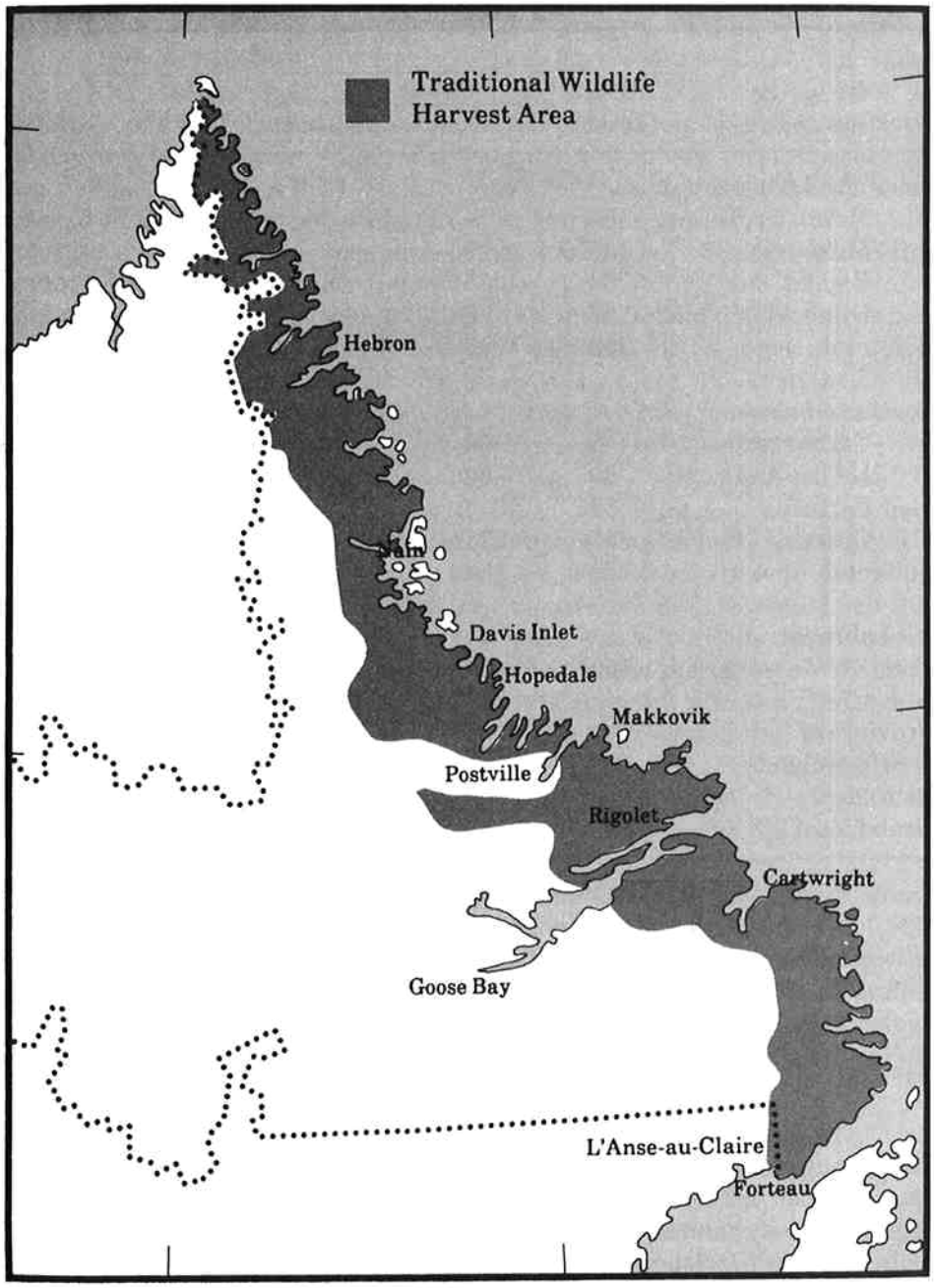


Table 14.5
Sealers Licensed in Newfoundland/Labrador, 1981 and 1983

Location	1981 Total	1983 Fishermen Full-time	1983 Fishermen Part-time	1983 Others	1983 Total
Northern Labrador:[a]					
Nain	22	–	–	–	–
Makkovik	48	5	1	6	12
Rigolet	80	33	18	49	100
Other	52	8	–	–	8
Sub-total	202	46	19	55	120
Southern Labrador:					
Cartwright	145	66	27	30	123
L'Anse au Loup	89	20	11	3	34
Forteau	59	5	4	–	9
Other	655	273	139	354	766
Sub-total	948	364	181	387	932
All Labrador: Total	1,150	410	200	442	1,052
Province of Newfoundland/ Labrador: Grand total	5,848	3,363	1,823	2,105	7,295

Source: Special tabulations by DFO, St. John's.

a. Inuit seal hunters are not required to hold licences.

Nain

At one time there were up to a dozen netting crews located throughout the outer archipelago in the Nain area. They tended the netting stations from October until just before Christmas. The nets are elaborate mazes set across narrow channels or "tickles". Some crews permitted shooting in the vicinity of the net fishery. In good years the crews collectively harvested as

many as 5,000 seals. Two-thirds were harp seals, which migrated south along the coast just before freeze-up. The remaining third were mainly ringed seals.

Between 1979 and 1982, only two netting crews operated out of Nain, one at Black Island, about 40 kilometres northeast of Nain and the other at Ivilik, about 40 kilometres due east of Nain. The sealing operation at Black Island is a family affair which has been carried out by three successive generations. In each of the 1980, 1981 and 1982 seasons, 400–500 seals were taken.[3] The family members involved in the hunt grossed $5,000–$6,000 each per season. In the same period, they grossed only $3,000 each in the salmon fishery. Expenses for the seal fishery are not high, and income from sealing has been an important addition to their household. Moreover, it has enabled the family to purchase new boat engines, snowmobiles and other hunting and fishing equipment. In these same years, the crew at Ivilik averaged about 200 seals per year. There were five men in the crew but not all from the same household. Each crew member grossed about $2,000.

In 1983, neither crew went sealing. The price for sealskins had dropped to $7 a piece. This was the first time in living memory that no Black Island crew went sealing. In 1984, however, some 80 seals were netted or shot. To the surprise of the sealers, they discovered that they could sell the frozen carcasses for $25 each to Nain residents, who wanted the meat for food and the skins for boots. The demand greatly exceeded the supply. With such a market in the immediate area, the Black Island crew planned a full-scale hunt in 1985.

Makkovik

Seven or eight people usually net seals in the Makkovik area. Individual seal netters can handle four to six nets. Between 1,000 and 1,500 seals were taken in the Makkovik area, but because prices were so low in 1984, only 600 seals were taken. One sealer interviewed in Makkovik stated that he caught 67 seals for subsistence purposes in the autumn of 1984, using four nets. He claimed that he might have taken at least 200 seals if the price had provided an incentive.

3. While statistics reported by informants do not always match official statistics, informant data are retained because of their value in establishing local situations.

Rigolet

The relationship between harvest levels and prices of sealskins for Rigolet and North West River is shown in Figures 14.4 and 14.5. Subsistence use of seals is more important at Rigolet than at North West River because the latter community has access to food markets in Happy Valley and Goose Bay. Morever, much of the labour force at North West River is permanently employed or has access to employment opportunities.

The labour force characteristics and economy of Rigolet are similar to the other northern Labrador coastal communities, rather than to the Happy Valley and Goose Bay area.

Hopedale and Postville

No hunters were interviewed in Hopedale and Postville, but Makkovik sealers said that harvest levels in these communities were comparable to conditions in Makkovik. In recent seasons, following the collapse of the sealskin market, subsistence harvests at Hopedale have amounted to approximately 1,000 animals and those at Postville to about 600 animals.

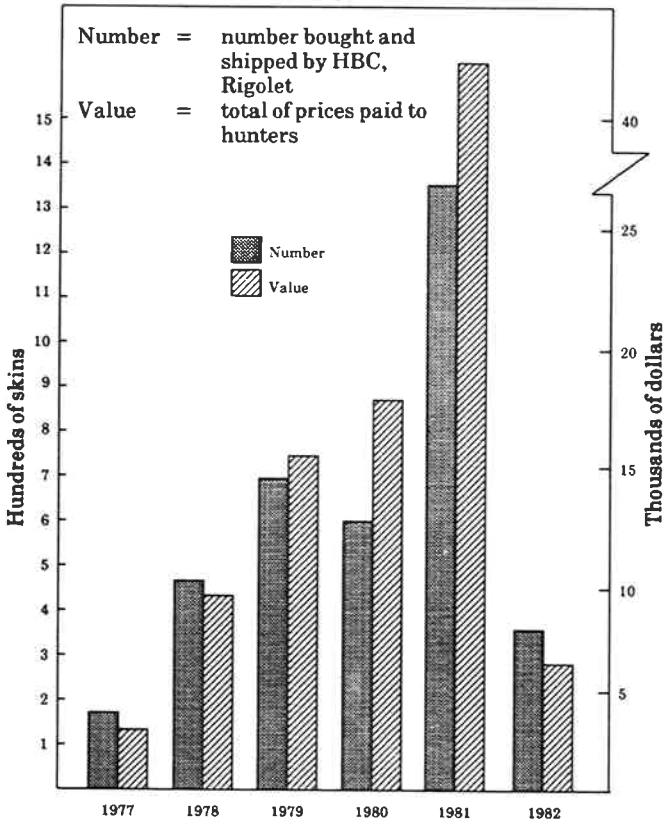
Southern Labrador

For most people in southern Labrador, seal meat has not been as preferred a food as it is for Inuit, although for many it has been a desirable food addition. During the winter and early spring, for example, seal meat has accounted for anywhere from 50% to 85% of food locally obtained in coastal communities like Black Tickle and St. Lewis (Mackey, 1981). The main thrust of seal harvesting in southern Labrador had been for cash returns. Since 1982, however, the seals harvested in southern Labrador have been taken for food, clothing or other personal use.

Table 14.5 compares the number of seal licences held in northern and southern Labrador in 1981 and 1983. More licences were held in southern Labrador than in the north, but it should be remembered that the Inuit do not require a licence, and thus the number of licences in the north underrepresents the number of sealers in that area. Table 14.6 shows that the number of licences held in 1984 was considerably less than the number held in 1983, indicating a sharp decline in interest in sealing. The licence data also suggest that in southern Labrador about 60% of licence holders are

Figure 14.4 Sealskin Sales and Prices in Two Communities, Labrador

Rigolet 1977*–1982**

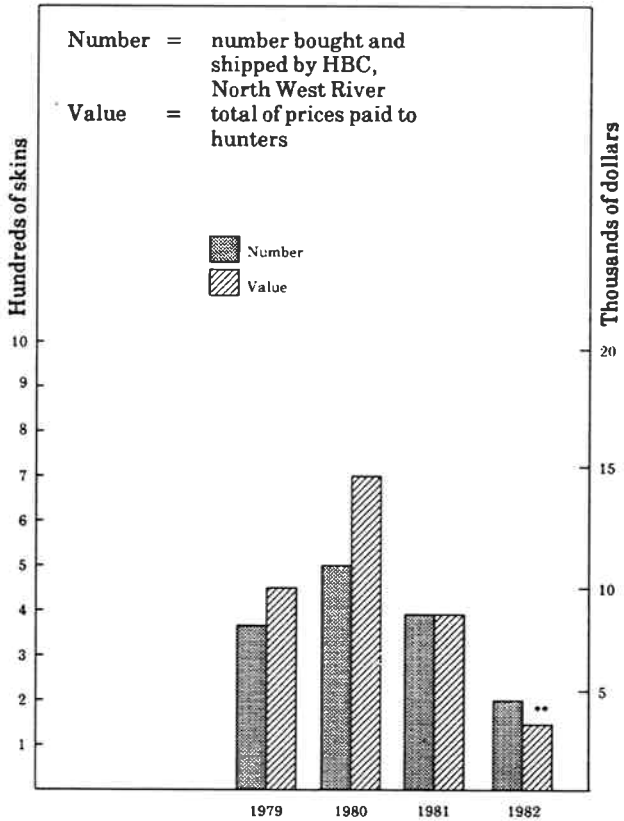


Source: Boles et al. (1983)

* Incomplete: Includes data from June–December only.

** Incomplete: Includes data from January–September only.

North West River, 1979 – 1982*



Source: Boles et al. (1983)

* 1982 data is from January–August only.

** Includes 12 harp seal skins spoiled by poor handling.

fishermen (roughly 40% full-time and 20% part-time), while for the province as a whole, the proportion is over 70%.

Table 14.6
Sealing "Effort" and Seal Harvests, by Fishery Statistical Area, Labrador

	Licensed[a] Sealers 1984	Licensed Vessels (35′–65′) 1984	Seals Harvested				
			1980	1981	1982	1983	1984
L'Anse au Clair–Cape St. Charles	235	1	975	9,263	636	831	44
Cape St. Charles–Island of Ponds	249	0	1,454	2,326	878	378	908
Island of Ponds–Cape Harrison	149	0	2,775	8,805	641	608	702
North of Cape Harrison	0	0	5,527	1,900	1,664	99	1,891
Total	633	1	10,731	22,294	3,819	1,916	3,545

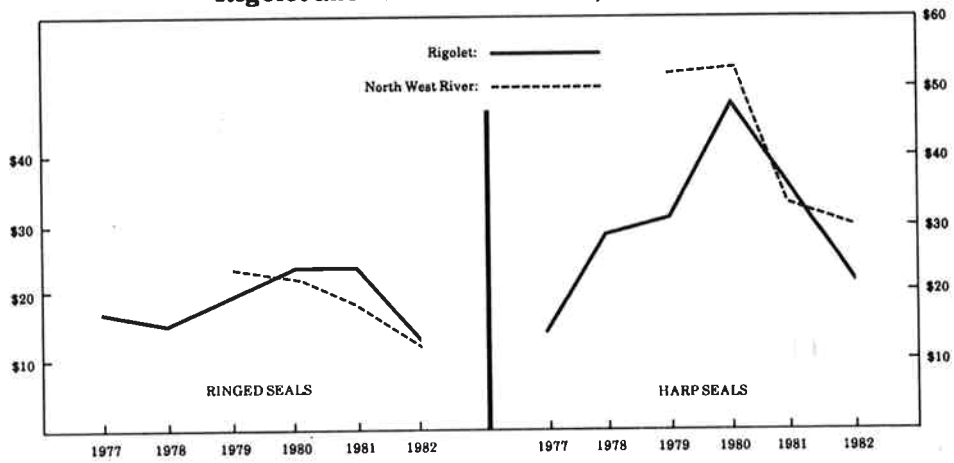
Source: Special tabulations by DFO, St. John's.

a. Most, if not all, licensed sealers in Labrador engage actively in the hunt.

Seal landings are shown by area in Table 14.6 and, for selected southern and northern communities, in Table 14.16. Seal landings by area and by specific community have varied sharply from year to year. This variation is typical for a landsman net-based fishery, which depends on ice conditions and the particular migration pattern followed by the seals. The landings data indicate that since 1982, sealing has not been an important commercial activity either in the south or in the north. In the past, seal netting has been a major autumn activity all along the southern coast. Some places, such as Battle Harbour, yielded as many as 5,000 seals in a season. More recently, when the price of skins was high enough to justify the expense, owners of longliners in the straits region have also pursued seals in the spring, following break-up. Licence information indicates, however, that only one longliner from Labrador was engaged in sealing in 1984.

As in northern Labrador, seal harvesting in the south was an important component of a mixed economy, although a longer fishing season and seasonal work in the woods, producing pulpwood or lumber, gave less emphasis to sealing in some of the bays. Nevertheless, almost 1,000 persons have held sealing licences in southern Labrador in the recent past, although perhaps only 40% of these were regularly active sealers. The available data suggest that sealing has provided varying amounts of cash income, ranging on average from the low hundreds to more than $1,000 per hunter. Moreover, seal meat was important as a source of food, and seal pelts were used to make clothing and boots. The commercial part of the hunt appears to have ceased in southern Labrador, but a return of the sealskin market would see a resurgence of seal harvesting in many of the communities of this area.

Figure 14.5
Average Price Paid for Seal Skins
Rigolet and North West River, 1977 – 1982



Source: Hudson's Bay Company, Rigolet and North West River

Source: Boles et al. (1983).

Island of Newfoundland

Landsmen

Newfoundland landsmen hunt seals either from small boats or by walking out onto the ice from land. Incomes earned by landsmen are lower

than those earned by sealers operating from longliners or larger vessels, since landsmen are more dependent on good ice and weather conditions for success.

Landsmen sealers are of two kinds. In the first place, there are commercial landsmen, who usually hunt on a partnership basis, sharing the income earned from pelts and other seal products. Very little product is wasted by this group of sealers. Secondly, there are the non-commercial landsmen who hold a licence so that they can meet their personal requirements for a few seals and other products.

The small boats used by landsmen for sealing double, for the most part, as fishing craft. The small boat fishermen are an important element in the Newfoundland fisheries despite government programs of modernization. The small boat fishery is characterized by low capital investment and low operating costs. Although the earning potential is not as great as with a longliner, small boat fishermen are not as dependent on large catches, since the difference between gross and net income is reduced. When small boats are used for sealing, however, operators cannot participate in the hunt on days when weather and ice conditions are adverse.

Sealing income earned by fishermen using small boats, as for those using longliners, was available at a time of year when there was no other means of earning a livelihood. The income often provided capital needed for investment in fishing gear for the upcoming season. Estimation of landsmen's incomes is inhibited by the fact that many participate in the hunt on a very casual basis. King (1981) indicated that participation by licensed landsmen ranged from 27% to 40% in 1978–1980. He found that 60% of those participating in 1980 reported some income from sealing.

Longliners

Longliners have been used extensively in the seal hunt between January and May on the west and northeast coasts of Newfoundland. A longliner crew might consist of from three to 10 men; the captain is usually the vessel owner. The vessels operate from a home port, but they can travel long distances and work under adverse weather conditions. Longliners are relatively expensive to run and are at considerable risk when out in the ice. The larger boats may stay out for a number of days at a time. Smaller, older boats operate from home port on a daily basis.

Table 14.7 shows the number of vessels that participated in the Newfoundland hunt from 1979 to 1983, the last year of significant sealing activity by longliners.

Table 14.7
The Longliner Seal Hunt, Newfoundland[a], 1979–1984

Year	Licensed Vessels Engaged	Vessels Landing Seals[b]
1979	126	84
1980	146	138
1981	137	145
1982	124	127
1983	85	85
1984	41	n.a.

Source: Canada, DFO (1985).

a. Excluding Labrador.
b. The apparently anomalous figures for 1981 and 1982 may result from the landing of seals taken as by-catches by longliners engaged in fishing operations.

Data provided by Dunn (1977) and King (1981) indicate that an average longliner crew consists of four or five men. This would suggest that in the peak production year of 1981, over 600 sealers participated in the hunt aboard longliners. The number actually licensed, however, was 550 in Newfoundland/Labrador (see Table 14.4). The income earned by these vessels is divided on a share basis among the crew. The vessel also has a share allotted to it. Calculating on the basis of the Royal Commission's survey data, vessel shares ranged from a single share (equal to a sealer's share) to a set percentage (15%–25%) off the top. The vessel's share covered the cost of capital investment in the boat, as well as fixed costs such as insurance. Many vessel owners use this share to contribute to the repayment of boat loans. The operating expenses of participating in the hunt, which include fuel, food and ammunition, were shared equally by all sealers. Most Newfoundland longliners sold their pelts to the Carino Company in Dildo. The

pelts were landed in the home port and trucked to Dildo, where they were graded and payment was made.

Seal carcasses and flippers were sold in local markets. If no market existed locally, carcasses were sold to Notre Dame Bay Fisheries Limited, where the seal meat was canned. The longliner operators interviewed by consultants to the Royal Commission said that they attempted to sell the carcasses of every seal taken. Only when a vessel's limited storage capacity forced a trade-off between taking more pelts or saving the carcasses were carcasses thrown overboard. The importance of the income derived from meat sales has usually been underestimated. Most meat sales were made at the wharf on a cash basis and were not usually recorded. A rule of thumb among sealers is that meat sales brought in enough cash to offset their share of operating expenses.

The longliners used for sealing have been near-shore fishing vessels, crewed by the same individuals during the sealing season as during the fishing season. Virtually every person involved in the longliner seal hunt has been a full-time fisherman. A longliner enterprise was often a family operation in which the father was the owner and the crew was made up of sons or other family-related members. A single longliner might provide the main source of household income for all members of the crew, and thus one vessel could be supporting five or six families.

Most longliner owners interviewed by the Royal Commission's consultants were between 45 and 60 years of age; crew members were usually younger, in the 25–40-year range. The education levels tended to be inversely related to age: older sealers had formal education of grade six to grade nine levels, while many younger sealers were high-school graduates.

Many longliner sealers had worked in other occupations before becoming full-time fishermen-sealers. Many had worked away from the community in which they now live. By choice or because of economic circumstances, however, they had returned to fish in the communities where they were born. They expressed no interest in pursuing other types of work if they could make a reasonable living from the fishery.

Large Vessels

When not involved in sealing, the large vessels (over 65 feet in length overall) that participated in the Newfoundland seal hunt have often served as fishery patrol vessels or coastal freighters and might be chartered

for other purposes. These vessels were quite powerful and sturdily constructed to operate under very heavy ice conditions. For sealing purposes, a typical vessel was manned by 15–25 sealers and 8–10 crew members. The vessels traditionally travelled to the Front or Gulf for the whitecoat hunt. From 1978 to 1982, five or six large Newfoundland vessels participated in the seal hunt. A vessel would normally spend up to one month taking its seal quota. Participation in the hunt usually represented the only opportunity for the crews to earn an income in the February–March period. Table 14.8 shows the number of vessels crewed by Newfoundlanders, their crew and the total pelt value of the seal catch from 1979 to 1983. For the most part these vessels operated from St. John's and harvested seals at the Front. The Karlsen Company of Halifax, too, sometimes sent one or more of its ships to the Front.

Table 14.8
The Large-Vessel Seal Hunt, Newfoundland, 1979–1983

Year	Ships Operating (no.)	Men Engaged (no.)	Value of Harvest ($)
1979	5	136	1,070,137
1980	4	111	1,100,073
1981	6	148	1,250,521
1982	6	163	1,411,252
1983	1	22	47,571

Source: Canada, DFO (1984).

The Karlsen vessel took its pelts to Blandford, Nova Scotia, and the Newfoundland vessels sold their pelts to the Carino plant in Dildo. In addition, the sealers derived income by selling other seal products such as flippers, carcasses and male genitals. Shares on the large vessels were split evenly among the sealers and the crew after the vessel's share was deducted.

Two owners of large vessels reported that sealing income accounted for between 20% and 50% of the vessel's annual gross income.

Sealing vessel near the "Front"

Sealers working on large vessels had to be available during February and March. Only persons who were unemployed or who had flexible or seasonal work schedules could participate in the offshore seal hunt. The majority of sealers on these vessels were either inshore fishermen or fish-plant workers.

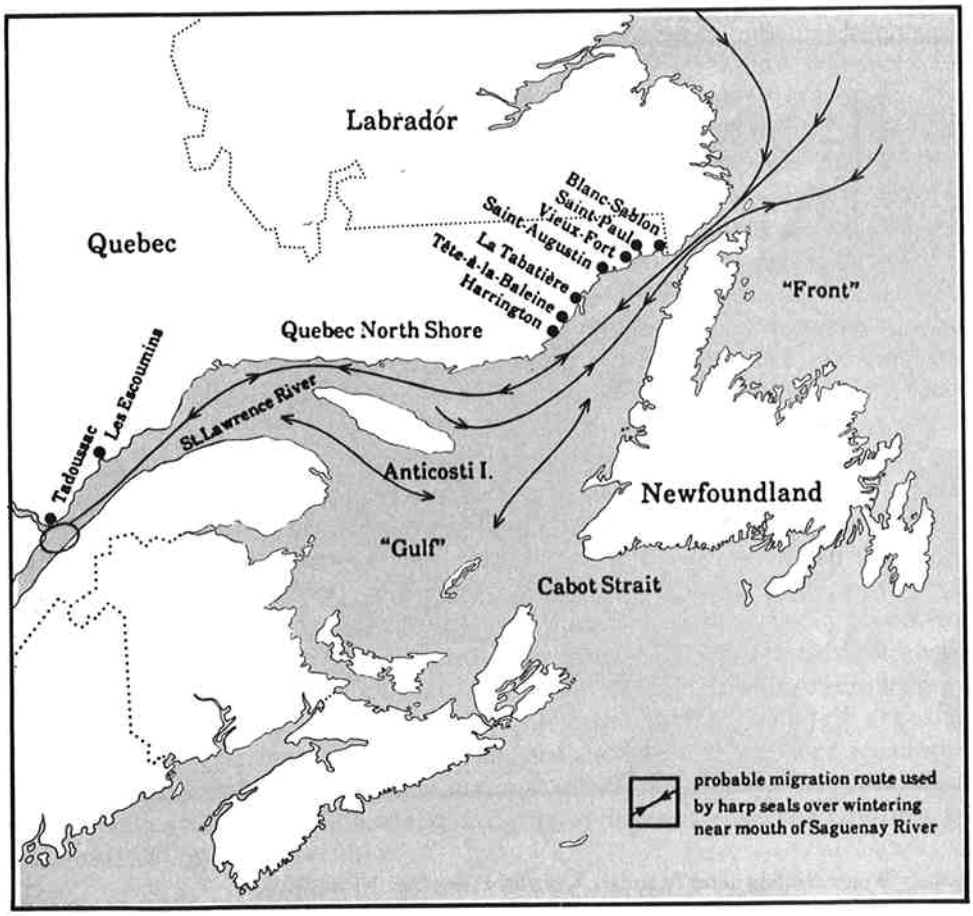
Each year approximately 25% of the crew would be first-time sealers. Old hands usually formed a small group of sealers who had many (at least 10) years' experience in the large-vessel hunt. Regular sealers (with less than 10 years' experience) formed the bulk of the crew. The sealers' average age was 25–35 years. The physical hardship associated with the hunt required young men.

If the vessel did not participate in the seal hunt, it was likely to remain idle. There is little possibility of alternative work for these vessels during the months of February and March, except as scientific/observer vessels related to the seal hunt. All large vessels were reported to be inactive during the traditional sealing period in 1985.

North Shore, Quebec

The annual migration patterns of the seal herds have determined which lower north shore communities participate in the seal fishery. Possible seal migration routes along the north shore of the Gulf of St. Lawrence are shown in Figure 14.6. The seals follow the Quebec coast on their way from the north Atlantic to the Gulf. A small population over-winters at the mouth of the Saguenay River (Sergeant, 1986). Migration dates and herd sizes vary from year to year. For the most part, the seals are harvested by means of nets. Heavy ice keeps them away from the shoreline where the nets are set; light ice usually foretells a good catch.

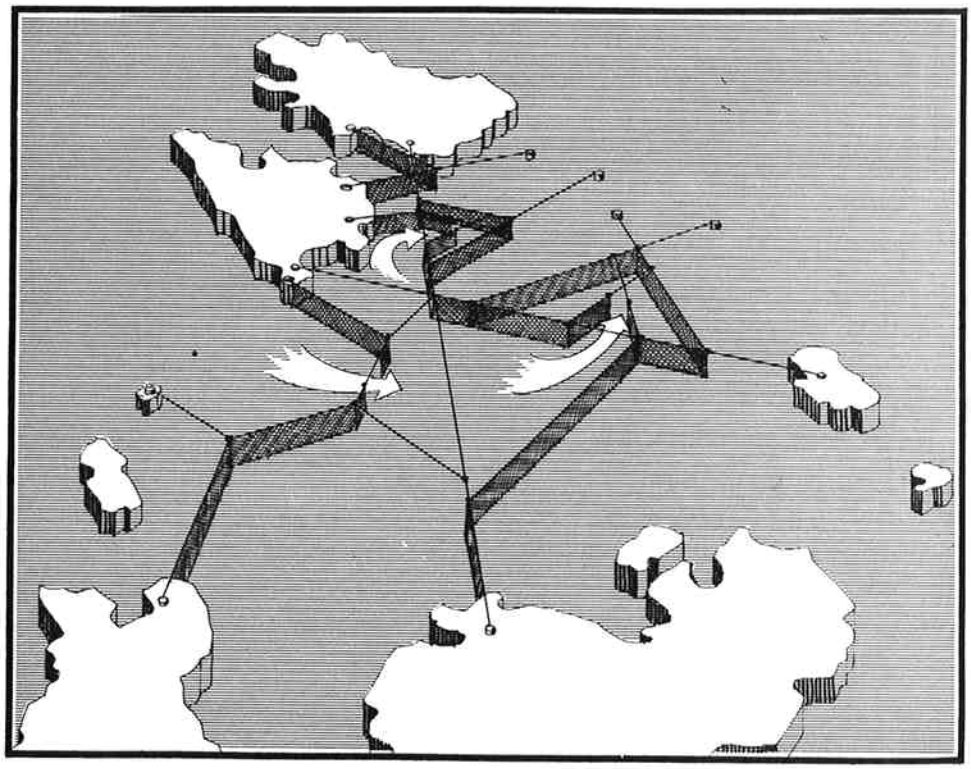
Figure 14.6
Principal Sealing Stations, North Shore, Quebec



In general, it would be fair to say that the seal hunt was a basic contributor to "the permanent settlement of the lower north shore littoral in the last century. It still colours many aspects of the cultural life of the inhabitants of this region as well" (Baril and Breton, undated).

In the early 1980s, there were over 100 seal-fishery berths along the lower north shore. Berths are specific zones for the salmon and seal-net fisheries, the rights to which are owned by individual families. Close to three-quarters of them were between Harrington and Saint-Augustin where there are many islands and reefs amenable to the setting of nets. A smaller concentration was located near Vieux-Fort and Blanc Sablon, but the net fishery has declined in this area in recent years.

Figure 14.7
Seal Net Fishery, North Shore, Quebec



Source: Winter Sealing at La Tabatière, Crawley Films Ltd., NFB (1963).

Seals are caught in intricate nets set about three to four metres below the surface of the water to avoid contact with ice floes. (See Figure 14.7.) The pelts were shipped to secondary processors such as the Carino Company in Newfoundland. The meat was kept for personal use and also fed to sled dogs. Traditionally, there has been little waste.

The only other concentrated hunting along the north shore is carried out by a family at Tadoussac, near the mouth of the Saguenay River, using rifles. In some years, this family gained 90% of their total income from sealing, selling the pelts directly to the Hudson's Bay Company. Recently, they have diversified their income sources to snow crab, cod and halibut fisheries and to moose hunting (Greendale, 1985).

Magdalen Islands

As in Newfoundland, sealing in the Magdalen Islands has been carried on by three distinct types of enterprise: large vessels, longliners and landsmen (Table 14.9).

The last typical year for the seal hunt on the Magdalen Islands was 1982, when two large vessels operated near the Magdalens with a total crew of 41 persons, all but six of whom were Magdalen residents. These vessels took virtually their full allowable catch of 10,000 seals per vessel, which would have yielded earnings of as much as $3,000 for each of the sealers. Eighteen longliner vessels, with a total crew of 141, were licensed for the hunt, but the harvest of 10,617 seals was taken by only 10 vessels, with a total crew of 78. Landsmen operating from small boats or snowmobiles killed 6,751 seals. Although there is some variability from year to year, this quantity seems to be fairly typical. During recent years, the estimates of the Department of Fisheries and Oceans (DFO) show that there are about 1,200 seal-licence holders in the Magdalens. Only about 400 sealers, however, are regarded as serious hunters.

Landsmen composed the largest number of sealers on the Magdalen Islands. According to DFO, in a typical year about 1,000 seal-hunting licences were issued to Magdalen landsmen. Up to 25% of these licences were held by fishermen operating from small boats (of less than 35 feet in length overall). Sealers who participated only if the ice was close enough to shore accounted for another 600–700 licences. On average, about 40% of the licence holders were dedicated or active sealers, a figure consistent with the findings of Dunn (1977) and King (1981).

Table 14.9
Distribution of Sealers by Category, Magdalen Islands, Recent Period

Category	Active Participants (approx. no.)
Landsmen:	
on foot (occasional)	600–700
with dories	200–250
Sub-total	800–950
Longliner Crews	100–150
Hunters on Large Vessels	35–40
Total	950–1,140

Source: Gardner Pinfold Consulting Economists Limited (1986).

The use of longliners was well established in the Magdalen's seal fishery, although the official hunt statistics are sketchy. According to Dunn (1977), 5.2% of seal licences were granted to Islanders operating from longliners. Longliner catch and crew data for the Magdalens are usually included with landsmen data in the official statistics, but evidently some 18 vessels were licensed annually for the seal hunt with a total crew complement ranging from 100 to 150 persons.

From 1978 to 1983, at least one and usually two large vessels participated in the seal hunt off the Magdalen Islands. These vessels were also available on charter for scientific work, sealing observation or as coastal freighters. Normally they would spend about two weeks during March taking their seal quota of 10,000 seals per vessel. The exact timing of the hunt depended on ice conditions and ice movement. Consequently, sealers on large vessels had to be available for work during the whole month of March. Because the ice can move rapidly away from the Magdalens and carry the seals with it, all segments of the hunt were concentrated within a short period. Variable ice conditions also meant that the seal catch and corresponding income varied sharply from year to year for landsmen and longliners.

The high rate of seasonal unemployment in the Magdalens ensured that there was no shortage of sealers. The year-to-year turnover of sealers on large vessels was about 25%. As elsewhere in the Atlantic region, most Magdalen Island sealers were fishermen. Sealers in the Magdalens have relied on a mix of earned income and unemployment insurance. As a 60% winter-unemployment rate suggests, drawing unemployment insurance was the main source of income during the winter months. Table 14.10 summarizes the sealing activity in the Magdalen Islands.

Table 14.10

Summary of Sealing Activity, Magdalen Islands

Year	Type[a]	Participation				Harvest	
		Craft		Sealers			
		Licensed (no.)	Active (no.)	Licensed (no.)	Active (no.)	(no.)	($)
1982	Landsmen	–	–	1,000[b]	400	6,751	129,400
	Longliners	18	10	141	78	10,617	218,600
	Large Vessels	2	2	35	35	19,984	399,000
1983	Landsmen	–	–	831	300–400	5,847	107,500
	Longliners	21	6	91	n.a	2,825	52,700
	Large Vessels	2	2	35	35	5,800	69,000
1984	Landsmen	–	–	1,000[b]	150	1,000[b]	10,800
	Longliners	–	–	–	–	–	–
	Large Vessels	–	–	–	–	–	–

Source: Canada, DFO (1984); Gardner Pinfold Consulting Economists Limited (1986).

a. Prior to 1982, the landsmen and longliner operations are undifferentiated in sealing statistics for the Magdalen Islands, and some uncertainty about the distinction persists, as indicated by the apparent variation in longliner crew numbers between an average of 7.8 (1982) and 4.3 (1983).

b. Estimated.

Cape Breton

Seal hunting in Cape Breton took place near the northern tip of the island in the Aspy Bay area. The sealers were from Neil's Harbour, Dingwall and Bay St. Lawrence. Sealing in this area has always been "hit and miss"; success depended on ice conditions.

The sealing labour force was made up predominantly of landsmen who were inshore fishermen during the summer. Most fishermen relied on unemployment-insurance benefits during the winter. The best fishermen involved in the seal hunt off Cape Breton, which took place in the winter, generally earned less than 10% of their annual income from this endeavour. Table 14.11 summarizes the numbers involved in the northern Cape Breton seal hunt.

Table 14.11
Sealing in Northern Cape Breton

Year	Licences Held	Active Hunters	Seals Caught[a]
1983	?	?	900
1984	160	10–12	300
1985	32	1	1

Source: Conway (1985).

a. Total allowable catch of seals: 900.

Primary Production (Harvest)

Tables 14.12–14.19 summarize the scale of the seal harvest, both for the Atlantic region as a whole (see Table 14.12) and for the major sealing areas.

Some inconsistencies and apparent contradictions among these tables or with other tables in the Report indicating catch levels will be observed. These problems are largely the result of the different methods of recording catches; in some instances the catch is attributed to the hunters' place of residence, in others to the actual location of the hunt, and in still

others to the site of the landings. To illustrate, Table 14.11 recorded the catch levels of the hunt off Cape Breton. Table 14.20, on the other hand, records landings in Nova Scotia from the hunt both off the province and elsewhere in the Atlantic region.

Table 14.12
Seal Harvest, Canadian Atlantic Coast, 1979–1984[a]

	1979	1980	1981	1982	1983	1984
Species						
Harp Seals:						
Whitecoats	120,134	102,856	153,068	114,450	–	–
Other	40,407	66,670	44,764	52,289	57,889	30,900
Sub-total	160,541	169,526	197,832	166,739	57,889	30,900
Hooded Seals:						
Bluebacks	11,948	11,153	10,661	7,757	–	–
Other	3,177	1,963	3,015	2,636	129	444
Sub-total	15,125	13,116	13,676	10,393	129	444
Other species	3,362	9,773	8,993	5,204	882	1,993
Total	179,028	192,415	220,501	182,336	58,900	33,337
Type of Enterprise						
Landsmen	48,187	48,897	65,106	33,226	34,591	28,439
Longliners	18,173	39,118	55,866	40,001	19,368	3,883
Large Vessels	112,668	104,400	99,529	109,109	4,941	1,015
Total	179,028	192,415	220,501	182,336	58,900	33,337

Sources: NAFO (1979–1984); DFO, special tabulations.

a. Including catch by Norwegian sealers prior to 1983.

Taking 1982 as representative of a "normal" hunting year, it is apparent that, as Table 14.13 shows, the seal-pup hunt (i.e., the hunt for whitecoats and bluebacks) was a major part of the harvest. Indeed, two-thirds of the harvest consisted of pelts from very young seals. Newfoundland was the major source of seal-pup pelts, but sealers from the Magdalen Islands and Nova Scotia also concentrated on this form of hunt.

Table 14.14 indicates that large vessels accounted for a little more than half of the total seal harvest. Inclusion of the catch by Norwegian vessels would augment this proportion. Of the "domestic" catch, landsmen and longliners divided about equally that proportion unaccounted for by the large vessels. This division, however, varied from year to year, as ice conditions greatly influenced the catch of landsmen.

Table 14.13
Provincial[a] Harvest by Species and Age of Seal, 1982

Species and Age		Newfoundland	Quebec	Nova Scotia	Atlantic Region
Harp:	Whitecoat	58,506	22,513	9,987	91,006
	Beater	25,509	4,883	173	30,565
	Bedlamer	16,238	–	4	16,242
	Adult	4,688	–	–	4,688
Hooded:	Blueback	4,428	–	–	4,428
	Adult	1,403	–	–	1,403
Unspecified		1,256	3,948	–	5,204
Total		112,028	31,344	10,164	153,536

Source: Canada, DFO (1983).

a. Province of participating landsmen and vessels.

Evident in all the tables (Tables 14.15–14.19, inclusive) recording numbers of seals killed and the value of the catch is the dramatic collapse of the hunt after 1982. Pelt prices dropped from an average of $24 in 1982 to just over $13 in 1983. In most sealing areas, the 1983 catch was half the 1982 catch; in some areas the drop was even more severe. On the Magdalen Islands, for example, the value of the sealskin landings dropped by 54% between 1982 and 1983. If account is taken of the cessation of the large-vessel catch off the Magdalen Islands, the collapse is even more dramatic. (See Table 14.10.)

Table 14.14
Provincial[a] Seal Harvest by Type of Enterprise, 1982

Type of Enterprise	Newfoundland	Quebec	Nova Scotia	Atlantic Region
Landsmen	22,319	10,731	176	33,226
Longliners	29,384	10,617	–	40,001
Large vessels	60,325[b]	9,996	9,988	80,309
Total	112,028	31,344	10,164	153,536

Source: Canada, DFO (1983).

a. Province of participating landsmen and vessels.

b. The difference between this and the corresponding quantity in Table 14.15 derives from the fact that the catch (9,996 seals) of the Quebec-based vessel was landed in Newfoundland.

Overall catch levels have varied considerably in Newfoundland and other sealing regions, with very low catch levels in the early 1970s rapidly being replaced by large catches in the late 1970s and early 1980s. The increased catches coincided with an increase in the prices for pelts. The seal fishery is very sensitive to international pelt prices, and the bleak outlook for overseas markets is predictive of low catches in the future in the Atlantic region.

Table 14.15
Commercial Seal Harvest (Quantity Landed) by Source, Newfoundland and Labrador, 1971–1984

Year	Landsmen (no.)	Longliners (no.)	Large Vessels[a] (no.)	Total (no.)	Gross Value ($)
1971	10,100	4,934	58,372	73,406	598,259
1972	17,198	3,459	21,086	41,743	434,962
1973	29,822	6,485	8,650	44,957	460,809
1974	17,292	5,985	22,507	45,784	684,927
1975	23,298	22,050	32,779	78,127	1,630,341
1976	29,950	32,546	32,121	94,617	1,496,834
1977	24,872	35,010	28,819	88,701	1,756,408
1978	47,446	28,050	36,067	111,563	2,128,622
1979	28,313	18,773	52,743	99,829	2,217,702
1980	32,459	29,118	50,646	112,223	3,322,381
1981	40,504	55,866	56,597	152,967	3,889,244
1982	22,319	29,384	70,321	122,024	3,100,756
1983	23,244	19,368	6,453	49,065	608,353
1984	24,468	3,883	1,015[b]	29,366	336,656

Source: Canada, DFO (1984); ICNAF and NAFO (various years).

a. Includes landings by vessels based outside the province.

b. There was no commercial hunt at all by large vessels in 1984. These landings represent seals taken by vessels conducting research for DFO.

Table 14.16
Commercial Seal Harvest, Labrador, 1980–1984 with Areal Breakdown by Selected Communities

	Number Taken				
Location	1980	1981	1982	1983	1984
Northern Labrador:					
Nain	2,122	603	587	3	622
Hopedale	1,273	738	132	41	297
Makkovik	1,987	378	842	55	353
Rigolet	683	2,318	216	255	237
Other	145	181	103	0	619
Sub-total[a]	6,210	4,218	1,880	354	2,128
Southern Labrador:					
Cartwright	93	5,871	16	0	35
L'Anse au Loup	885	3,178	376	0	0
Forteau	0	3,325	110	817	0
Other	3,543	5,702	1,437	745	1,382
Sub-total	4,521	18,076	1,939	1,562	1,417
All Labrador Total	10,731	22,294	3,819	1,916	3,545
Province of Newfoundland/Labrador Grand Total	122,223	152,967	122,024	49,065	29,366

Source: Special tabulations by DFO, St. John's.

a. An additional subsistence harvest of seals in northern Labrador is estimated to approximate 5,000 animals annually.

Table 14.17
Seal Harvest, North Shore, Quebec

Year	Lower North Shore		Saguenay		Total	
	no.	$	no.	$	no.	$
1975	7,203	149,115	285	4,275	7,488	156,603
1976	4,687	131,532	171	2,500	4,858	136,390
1977	1,384	23,058	223	3,545	1,607	26,603
1978	5,965	119,328	510	10,200	6,475	129,528
1979	2,604	45,559	1,247	23,610	3,851	69,169
1980	5,427	100,830	3,220	59,825	8,647	160,655
1981	5,720	114,238	1,239	25,662	6,959	139,900
1982	2,235	33,650	1,713	25,695	3,948	59,345
1983	1,292	24,100	320	6,000	1,612	30,100
1984	815	14,670	2,020	38,875	2,835	53,545

Source: Québec (1985).

Table 14.18
Seal Harvest, Magdalen Islands, Quebec[a]

Year	Quantity (no.)	Value ($)
1975	3,995	40,000
1976	3,081	39,700
1977	14,259	241,800
1978	15,628	253,900
1979	16,002	288,000
1980	7,743	157,200
1981	14,932	278,800
1982	17,368	348,000
1983	8,662	160,200
1984 (est.)	1,000	10,800

Source: Québec (1985).

a. Excludes the catch of large vessels operating in the Gulf of St. Lawrence and crewed largely by sealers from the Magdalen Islands, but landing in Newfoundland and Nova Scotia.

Table 14.19
Seal Harvest, Nova Scotia[a]

Year	Quantity (no.)	Value ($)
1975	33,309	635,000
1976	24,591	357,320
1977	23,487	310,046
1978	18,871	254,728
1979	30,752	567,362
1980	27,882	660,767
1981	17,894	397,406
1982	10,164	180,788
1983	5,170	60,655
1984	140	1,303

Source: Statistics Canada (various years); DFO, special tabulations.

a. These data represent the main landings from the Front and Gulf sealing grounds. The province formerly sent as many as four large vessels, manned largely by Newfoundland sealers, to the Front and latterly had one large vessel operating in the Gulf as well.

The Secondary Sealing Industry: Processing Plants and Labour Force

Seal processing involves the following basic activities:

- primary processing of the skin so that it can be preserved while awaiting final processing;
- final processing of the skin, which entails chrome tanning if the skin is to be used for leather, or alum tanning if the skin is to be used as fur;
- removing the blubber and refining it into oil;
- removing the meat, which may be sold fresh, frozen or processed.

Sealskin Processing

Processing capabilities and procedures vary from country to country. The Inuit of Greenland and Canada carry out the processing of the skins in traditional fashion, whereas initial processing in other areas is conducted industrially. In the Inuit method, the seal is flayed immediately after being caught. After flaying and flenching, only a very thin layer of blubber remains. The remaining blubber is scraped off with a knife. This is done on a slanting wood board. To remove superfluous oil, the skin is washed after being scraped, and a roller removes excess water. The skin is stretched on a square frame and dried, and is then ready to be sold.

In other areas, such as the Canadian Atlantic coast and the Pribilof Islands, the sealers sell their pelts in a raw state. Processing plants such as those in Canada and the one in the Pribilofs accept raw skins with blubber attached and carry out the primary processing mechanically. If there is a delay in delivering the raw skin to the processing plant, it is necessary to treat it immediately with an anti-oxidant to prevent yellowing.

Seal pelts harvested in Atlantic Canada received primary processing (cleaning, deblubbering and the application of anti-oxidant) by the Carino Company Ltd. (a subsidiary of G.C. Reiber and Company of Norway) at Dildo in Newfoundland, and by the Karlsen Company at Blandford, Nova Scotia. The procedure is described in Appendix 14.1.

The final dressing of skins (secondary processing), especially for furs, is a highly specialized operation, undertaken by relatively few firms in the world. The Fouke Company in Greenville, South Carolina, because it possesses "an exclusive processing method that has yet to be duplicated" (United States, 1985), has a monopoly for the dressing of U.S. fur sealskins. The largest dresser of sealskins is G.C. Rieber and Company of Bergen, Norway. In peak years this company has handled up to 250,000 skins, or close to two-thirds of the total world supply. Tanning for leather is a less difficult task and a larger number of firms undertake this operation. Table 14.20 records the domestic market for sealskins in 1982, and Table 14.21 the value of sealskins purchased in that year. Table 14.22 shows the quantity and value of skins retained by sealers for their own use.

As indicated in Figure 14.8, nominal prices for sealskins of all types, raw and dressed, generally reached a peak about 1980, although, in real terms, prices in 1980 were not higher than those in previous years. By 1984, prices in current dollars were usually less than half what they had been in 1980. Prices of raw skins paid to Canadian and Norwegian sealers in 1984

were about $11. These are prices for skins with the blubber. The most dramatic fall was in the prices at the Royal Greenland Trade Department's Copenhagen auctions. In 1984, harp sealskins were sold in Copenhagen at only 17% of the price obtained in 1980. Such prices do not cover the cost of harvesting. Moreover, the large stocks in inventory would first have to be sold or disposed of before any significant improvement in prices could be expected, even if demand did pick up again.

The decline of the seal hunt since 1982 precipitated the demise of the seal-processing industry in Atlantic Canada. The Karlsen Company's plant in Blandford had a seal-processing work force of 15–20 persons during late March and early April, and hired additional employees (generally another 15–20 persons) as needed. The plant, as of 1985, processes fish from late April to early October. Of the 15 to 20 core workers, five have retired and two who were close to retiring are now fishermen. The remainder are still considered part of the core work force. Instead of starting work in mid-March, however, as it did when sealing played a role, the plant now opens in late April. Five to six weeks of employment are lost. All plant workers are eligible for unemployment-insurance benefits during the off-season.

The workers at the Carino Company's plant in Dildo, Newfoundland, have not fared as well. The plant was closed in 1984. It had employed 14 people on a full-time basis, with peak seasonal employment increasing to 65. This labour force has few skills that might be useful in other forms of employment.

Twenty-two people who had worked in this plant were interviewed. Work experience within the group varied, although with few exceptions the level of technical skill did not go beyond that of general labour. Five persons had experience in whale processing (an activity now dormant in Dildo), while seven others had worked as unskilled labourers. Four plant workers had worked in fish-processing plants, and one had worked as a carpenter and painter. Only three had specialized training: one man to drive a truck, another to grade sealskins and the third as a power engineer.

Sixteen of the sample group grew up in Dildo, and although most had worked away from home, the opportunity to work at the Carino plant drew them back. They were employed there from four to 20 years (until 1970, in whale processing); most had been there for about nine years. Two are still employed at the plant as maintenance workers. The others are unemployed and dependent on unemployment-insurance benefits and secondary-income sources (such as spouses' income) for their livelihood.

Table 14.20
Number of Skins Purchased from Sealing Enterprises by Province[a] and Location of Processor, 1982

Type of Enterprise	Newfoundland	Quebec	Nova Scotia	Atlantic Region
Landsmen:				
Dildo, Nfld.	21,047	3,723[b]	–	24,770
Blandford, N.S.	–	6,396	176	6,572
Total	21,047	10,119	176	31,342
Longliners:				
Dildo, Nfld.	29,090	–	–	29,090
Blandford, N.S.	–	10,511	–	10,511
Total	29,090	10,511	–	39,601
Large vessels:				
Dildo, Nfld.	59,722	9,996	–	69,718
Blandford, N.S.	–	–	9,988	9,988
Total	59,722	9,996	9,988	79,706
Total:				
Dildo, Nfld.	109,859	13,719	–	123,578
Blandford, N.S.	–	16,907	10,164	27,071
Total	109,859	30,626	10,164	150,649

Source: Canada, DFO (1983). Purchases by processors assumed to be 94.3% of landsmen's catch and 99.0% of vessels' catch. (See King, 1981, Table 18.)

a. The province in which the producers (landsmen and vessels) are based.

b. Includes a small number of skins purchased by the Hudson's Bay Company.

Table 14.21
Value of Skins (including Blubber) Purchased, by Province[a] and Location of Processor, 1982

Location of Processor	Newfoundland	Quebec	Nova Scotia	Atlantic Region
Dildo, Nfld.	2,878,508	281,593	–	3,160,101
Blandford, N.S.	–	347,946	180,788	528,734
Total	2,878,508	629,539	180,788	3,688,835

Source: Canada, DFO (1983).

a. The province in which the producers are located.

Table 14.22
Skins Kept by Sealers for Own Use, by Province,[a] 1982

	Newfoundland	Quebec	Nova Scotia	Atlantic Region
Number	2,169	818	–	2,987
Value	$60,078	$15,978	–	$76,056

Source: Canada, DFO (1983). It is assumed that Nova Scotia sealers kept no skins for their own use.

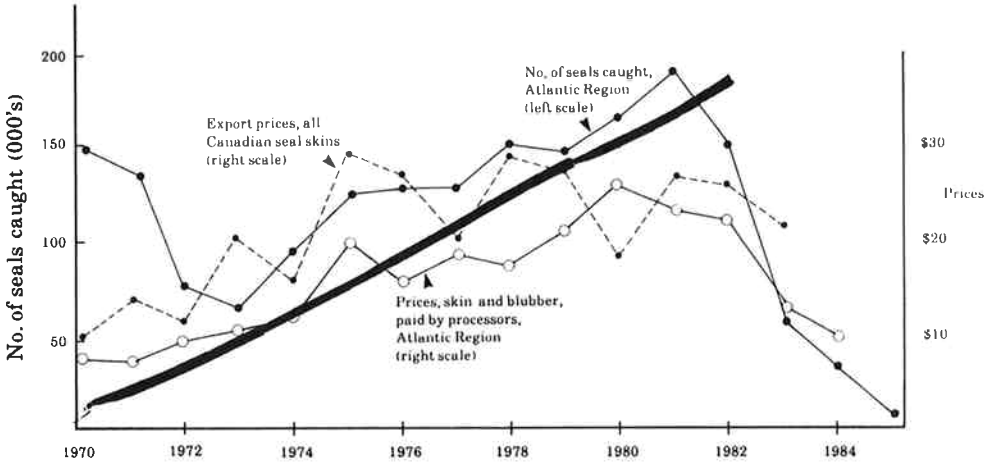
a. The province of sealers' residence.

Seal Meat Processing

Notre Dame Bay Fisheries, located at Comfort Cove, is the only seal-meat processing facility still operating in Newfoundland or, for that matter, in Canada. The plant is the main source of employment in the small community of 700 persons. The plant employs 50–60 people full-time and many

others for long enough to qualify them for unemployment-insurance benefits. The plant is a diversified operation. Besides canning seal meat and various species of fish, the workers pickle and freeze herring and mackerel, prepare salt cod, and handle lobster and squid. This combination of products enables the plant to operate almost year-round.

Figure 14.8
Number of Seals Caught and Prices Paid for Sealskins, 1970–1984



Source: Canada, DFO (1984).

The plant's market for seal meat is on the island of Newfoundland, and the main source of supply is the seal hunt conducted by landsmen and longliners. Most sealers, however, attempt to sell seal meat in local markets, where they can get a better price than the company will pay. Tables 14.23 and 14.24 record data concerning seal meat retained and sold by sealers in 1982. Once local demand is met, sealers sell surplus meat to the plant at roughly $0.25/lb (1983–1984 prices). In the past few years, the seal-meat canning operation has employed 20–25 individuals for a six-to-eight-week period from mid-March to early May. Until 1984, total annual production was in the range of 144,000–192,000 fifteen-ounce cans of seal meat. The plant is no longer able to secure the carcasses needed to supply its market. Notre Dame Bay Fisheries has been financially affected by the decline of the herring and squid fisheries. The key to the company's success has been its diversified operation. The loss of a single element could affect its financial stability.

Table 14.23
Number of Carcasses Sold and Kept by Sealers, by Province,[a] 1982

	Newfoundland	Quebec	Nova Scotia	Atlantic Region
Sold:				
by landsmen	10,356	4,979	–	15,335
by vessels	24,042	5,524	–	29,566
Total	34,398[b]	10,503	–	44,901
Kept	18,485	5,172	29	23,686

Sources: Table 14.14 and King (1981, Table 9). From the latter, the proportions of the catch which are sold and kept in Newfoundland and Quebec are:

Sold:	landsmen	.464
	vessels	.268
Kept		.165

In Nova Scotia, it is assumed that no carcasses were sold and that only landsmen kept any for their own use.

a. Province of sealers' residence.

b. Of this quantity, 30,698 carcasses were sold as fresh meat and the remainder to canners.

Table 14.24
Number of Flippers (Pairs) Sold and Kept by Sealers, by Province,[a] 1982

	Newfoundland	Quebec	Nova Scotia	Atlantic Region
Sold:				
by landsmen	3,817	1,835	–	5,652
by vessels	59,567	13,687	9,988	83,242
Total	63,384	15,522	9,988	88,894
Kept	17,588	4,921	5	22,514

Sources: Table 14.14 and King (1981, Table 9). From the latter, the proportions of the catch which are sold and kept in Newfoundland and Quebec are:

Sold:	landsmen	.771
	vessels	.664
Kept		.157

a. Province of sealers' residences, except for Nova Scotia where landsmen are assumed to have sold no flippers and sealers on the large vessel to have sold all flippers in Newfoundland.

Appendix

Appendix 14.1 The Primary Processing of Sealskins

Sealskin Preparation

The raw pelts are first placed in a tub of slightly warm water, to thaw out frozen portions and remove foreign matter. They are then transferred to the pre-fleshing equipment, where the thickest layer of fat (blubber) is separated from the skin by a sharp blade (band knife). This operation

can be done by hand, but that method tends to produce inconsistent quality. Machine fleshing is preferable for the maintenance of consistently high quality.

Most of the fat is thus removed from the skin, but another fleshing operation is usually needed to eliminate remaining blubber. This second fleshing by mechanical scrapers can be carried out to a finer degree of adjustment than is attained in pre-fleshing, avoiding damage to the skin and increasing the yield of blubber. Additional fat is removed by tumbling the skins in a rotating drum, or dry mill, containing hardwood sawdust and a perchloroethylene solvent. The interior of the drum must be very smooth and the sawdust extremely fine to avoid marking the skins. The oil-soaked sawdust is suitable for use as a fertilizer.

When the skins emerge from the dry mill, they are generally coated with sawdust. This can be removed by brushing by hand, but it is preferable, for quality and economy, to put the skins through another revolving drum or cage equipped with a vacuum system for removal and collection of the sawdust. The skins are then soaked in a brine solution to preserve them for further processing. The preserved skins are usually stored for a period of one to two months, in covered vats, in a cool place away from light, to await shipping. Finally, they are packaged in aluminum or fibreglass containers, each containing 180–450 skins, and shipped to the final processor.

After the second tumbling, the skins can be graded more accurately than at the time of arrival at the plant. Those of young harp seals are classified as whitecoat, overgang, tanner or ragged-jacket and are graded from 1 to 4, depending on condition: number 1 skins are those without damage, and number 4 are heavily damaged. The beater, bedlamer and hooded sealskins are classified A, B and C, according to colour quality: A indicates a perfect specimen. Then, like the others, these three types are also graded 1 to 4, according to condition. This ranking by type, colour and condition results in a total of 80 categories for harp and hooded sealskins. Ringed and harbour sealskins have 12 categories, and bearded sealskins have eight categories. After grading, each category is separated for storage.

Seal-Oil Production

The blubber obtained from the fleshing operations described above is transferred to a hogger for mincing. It is then placed in cookers (each holding some 10 tonnes) into which steam is injected, and the fat is cooked

Deblubbering sealskins, St. John's (circa 1920)

for three to three-and-a-half hours. It is then allowed to settle for about one-half hour, and the clear oil is siphoned off. This oil, in turn, is allowed to settle in another tank for an hour, and then the top portion is siphoned off and again allowed to settle for two days. Finally, the top portion of the settled oil is pumped into storage.

The cloudy, heavier quantities of oil remaining after each settling are put through separators, vibrator screens and some, again, through the cooker (waste material usually being disposed of as fertilizer). Up to four qualities of seal oil are thus produced. These products are exported directly to market by tanker ship.

(Material in the section above is based on NewLantic Group (1984) and Ryan (1986).

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Chapter 15

The Benefits and Costs of the Seal Hunt

As an underdeveloped region we cannot afford to lightly dismiss even a few million dollars. Neither can we afford to overlook the fact that sealing provides employment for 5,000 to 6,000 of our people and that this employment helps to sustain the base of our vital rural economy and lifestyle (Rideout, 1985).

The benefits and costs of the seal hunt in Atlantic Canada have been both material and less tangible. In this chapter, the material benefits and costs, comprising money income, food supply, and cost outlays are estimated in order to undertake a benefit-cost assessment of the hunt. (See also Appendices 15.1–15.4.) It is concluded that the net economic benefits to Canada in 1982 were on the order of $2.5 million.

The less tangible, but nonetheless real, benefits and costs are considered next. These include the contribution of sealing to sustaining fishing enterprises and, thereby, the viability of fishery-dependent communities in several parts of the Atlantic region, and the enrichment of the cultural life of those parts of the region. The latter type of benefit, especially, is illustrated with quotations from both observers and members of the indigenous culture. Among the costs have been the lost lives of numerous seal hunters over the years. This has become part of the folk history of the region. No attempt to measure these less quantifiable benefits and costs is made in this study. Although they cannot reasonably be counted in dollars and cents, that does not make them unimportant.

Benefit-Cost Assessment of the Seal Hunt

Analysis of the impact of the seal hunt on Atlantic Canada is carried out here within the framework of an economic benefit-cost study. Though such a study is a procedure more often used to assess the effect of a new project, it is also suitable for estimating the effect of the removal of an

economic activity. The appraisal seeks to answer the question, "If the 1982 hunt had not taken place, how much income would have been lost?" The same query might have been phrased as, "How much net income did the hunt yield in 1982?" The year 1982 is selected as it was the most recent one in line with the long-term trend in catches and prices. It was the last year before the dramatic decline of the hunt occurred. (For the moment, concern is limited to economic effects. Non-economic effects will be discussed later.) The procedure is to estimate benefits, costs and net benefits for the three provinces directly involved – Newfoundland, Quebec and Nova Scotia – and for the Atlantic region as a whole. Finally, account is taken of costs incurred by the federal government to arrive at net benefits for Canada. (See also Appendices 15.1 and 15.2.)

As incomes from sealing and seal processing declined, the government transferred money to the areas affected to soften the impact. Some of these "transfer payments" were automatic, since unemployment benefits and welfare payments automatically rise as employment falls, income taxes are automatically reduced as incomes drop, liability to pay unemployment-insurance contributions is lifted when employment ceases, and welfare payments are increased as need becomes greater. In addition, a direct subsidy was initiated, partially to compensate sealers and vessel owners for the decline in sealskin prices. Although these transfer payments are important to those concerned, they are not brought into the following computations. To include them would obscure the true effect of the decline of the hunt; indeed, if they were included and the federal government chose to compensate fully all those adversely affected, the analysis would determine that the hunt was irrelevant to the material incomes of people in the Atlantic region.

Benefits

The benefits of the seal hunt are here defined as the value of the goods and services it produced – the skins, oil and meat – whether they were sold or retained for the use of the hunter. Almost 85% of returns from sealing came from the pelts: somewhat over 70% from (semi-processed) sealskins and a further 12% from seal oil (rendered from the blubber). The remaining 15% of the economic benefits of the hunt came from seal meat, either consumed locally, distributed commercially in fresh or frozen form, or canned.

The analysis avoids double-counting of "intermediate products". The value of sales of processed skins, for instance, is added to benefits, but the sale of raw skins by the hunter to the processor in his own province is

Discharging sealskins, St. John's

omitted. However, if a landsman sold his raw skins to a processor in a different province, the returns the hunter received are included in the computations of benefits to his province. This "intermediate" sale, of course, is excluded from the total for the Atlantic region.

Skins Sold or Put to Inventory

Pricing the processed skins produced in 1982 presents difficulties. As indicated in Chapter 14, the Carino Company Ltd. is a subsidiary company of G.C. Rieber and Company of Norway. The price at which the transfer of skins was made to the parent company was a matter of corporate policy, rather than a price which might be obtained in a competitive market. But the benefits accruing to Newfoundland from the sale of skins, however the prices are determined, are what Rieber actually pays. It is therefore the value declared to customs by Carino when it exported its skins in 1982 that is taken as the basis for calculating benefits.

The Karlsen Company, the other skin processor, also presents difficulties. When it exported skins in 1982, it retained possession of them, merely sending them to Finland for dressing. However, since the mix and quality of skins appear to have been similar to those exported by Carino, it is assumed that they were worth a similar price.

The number of skins exported in 1982 was rather lower than the number of skins processed in that year; the difference resulted in an increase in the level of inventory. Those skins put to inventory are assumed to be of similar value to those exported. The value of processed skins in 1982, calculated as described above, was as follows:

Province[a]	Value ($)
Newfoundland	3,398,000 [b,d]
Quebec	630,000 [c,d]
Nova Scotia	745,000
Atlantic Region	4,143,000

a. The province identified here is that of the production units, i.e., landsmen and vessel enterprises, involved.

b. Some of the skins were finished in a small tannery operated by Carino in 1982. Since their finished value was little different from the export price of processed skins in that year, they are not distinguished from the exports.

c. The $630,000 worth of skins produced in Quebec were raw skins sold to the processors in Newfoundland and Nova Scotia. Since they are "intermediate products" and their value is incorporated in the values shown for Newfoundland and Nova Scotia, they are excluded from the Atlantic region figures to avoid double counting.

d. The figure includes a few skins from seals caught in Labrador and along the north shore that were deblubbered and dried by the sealers and sold to the Hudson's Bay Company or to a small Quebec tanner.

Oil Sold

The blubber attached to the skins when they were bought by the processors was rendered down and the oil exported to Europe. The value of the exported oil is computed from the estimated average export price in 1982. Benefits from the sale of oil amounted to:

Province	Value ($)
Newfoundland	583,000
Quebec	–
Nova Scotia	128,000
Atlantic Region	711,000

Meat Sold

Carcasses and flippers brought ashore by Newfoundland landsmen and vessels (other than those landed in Labrador) found a ready market in that province; they were sold at dockside or through wholesalers and retailers. The large Quebec and Nova Scotia vessels also landed their meat in Newfoundland. Elsewhere in the region, little meat was sold commercially.

The value of the meat sold is computed from the estimated number of carcasses and flippers sold as fresh meat and the estimated landed price in 1982. (See Tables 14.23 and 14.24, Chapter 14.)[1] To the Newfoundland total is also added the estimated value of the small amount of canned meat produced by two processors in Notre Dame Bay. With this addition the totals become:

Province	Value ($)
Newfoundland	575,000
Quebec	98,000
Nova Scotia	27,000
Atlantic Region	700,000

Products Kept for Own Use

Sealers kept a small number of skins for their own use. For the purpose of these computations, these skins have been assumed to have had the same market value as those sold to processors.

1. Seal meat is valued here at about $1.00/kg, or $10 per carcass, based on actual port-market prices. The much higher value indicated in Table 15.8 (Appendix 15.4) is based on the cost of substitutable meat products available in Labrador.

Landsmen and sealers on longliners kept for their own use part of the meat they brought ashore; indeed, in Labrador, Quebec and Nova Scotia, all meat landed was consumed locally or thrown away, since there was no commercial market for it. In the following computation, products kept for own use have also been valued at the estimated market price of meat sold in Newfoundland.

The total value of products kept for own use is estimated to have been:

Province	Value ($)
Newfoundland	205,000
Quebec	57,000
Nova Scotia	–[a]
Atlantic Region	262,000

a. Less than $500.

Shares Earned by Sealers Serving on Large Vessels of Other Provinces

The two large vessels, one based in Quebec and the other based in Nova Scotia, which operated in the Gulf, both took aboard their sealers in the Magdalen Islands, as a government regulation required. In effect, sealers on the Nova Scotia-based vessel sold their services to a firm in another province, and the income (shares) they received was a benefit to Quebec. The benefit to Quebec, however, was exactly matched by costs to Nova Scotia and therefore did not produce a benefit to the Atlantic region. One Newfoundlander served on the Nova Scotia vessel and the income he received for the services he sold is treated in a similar fashion. Benefits on this account were:

Province	Value ($)
Newfoundland	3,000
Quebec	40,000
Nova Scotia	–
Atlantic Region	–

Commissions Earned by Agents Acting for Processors in Other Provinces

Karlsen's agent in the Magdalen Islands received commissions on skins landed by landsmen and longliners. He was therefore, in effect, selling his services to a firm outside the province, and his commissions were a benefit to Quebec. Agents also operated in Newfoundland and along the north shore, but in 1982 they acted on behalf of the sealers, not the processors. The commissions earned by Karlsen's agent, though a benefit to Quebec, generated an equivalent cost to Nova Scotia, so that no benefit accrues to the Atlantic region from this source. The effect was therefore:

Province	Value ($)
Newfoundland	–
Quebec	35,000
Nova Scotia	–
Atlantic Region	–

Other Benefits

A few other parts (hearts and livers) of seals were eaten by sealers, sold to government research establishments (stomachs and other entrails) or to foreign buyers (penis bones exported to the Orient as aphrodisiacs). The total value of these parts, however, was small and is therefore ignored.

There are other benefits which many fishermen and fish packers believe accrue from the seal hunt: as the hunt thins the seal herds, it increases the fish available for fishermen, reduces the incidence of parasites in commercial fish and curtails the damage that seals cause to fishing gear. These questions are discussed at length in Chapters 24, 25 and 26; the impact of harp seals on fish stocks and the value of the fishery is extremely difficult to quantify reliably and, therefore, has not been included in the benefit-cost analysis.

Costs

The costs of the seal hunt are the value of goods and services which have to be given up so that the labour and other factors of production may be devoted to the hunt and to the transportation and processing of seal products.

Since our concern is confined to the costs which had to be incurred in order to initiate the hunting and processing, all the computations are done on a marginal basis. "Costs" which would not have decreased if there had been no hunt, such as interest payments on money borrowed by a fisherman/sealer to finance a longliner, are ignored.

The normal way to compute costs is to take the payments actually made to the factors involved (including sealers), on the assumption that these factors would have been paid a similar reward in alternative occupations, had there been no hunt. Sealers, who were self-employed, would be allocated costs in line with their earnings in other occupations if they had not been hunting seals.

An important problem arises, however, where factors of production engaged in the hunt and associated activities would otherwise have been unemployed. Using these factors in the sealing industry would then have imposed no cost upon the region, since no other goods and services would have had to be given up so that sealing and processing could go on. In this situation a "shadow price of labour" of zero is appropriate.

In benefit-cost analysis the use of a zero shadow price of labour is rare. It appears, however, to be a reasonable procedure in the unusual circumstances surrounding the seal hunt, since it and the associated processing activities generally took place over a short period in winter, in small isolated communities where seasonal unemployment sometimes reaches 50%. Inquiries on this point invariably produced answers that if there had been no hunt in 1982, no other paid employment would have been available for sealers . About half the sealers were fishermen prevented from fishing by ice, who generally relied during the winter on savings and unemployment-insurance benefits; the other half might well have been unemployed or might have sealed in their spare time. Informants insisted that nobody with a firm job would leave it to go sealing. Similarly, informants confirmed that no significant alternative employment existed for process workers and others associated with the hunt. A zero shadow price of labour, therefore, is adopted in the following computations. The results of a "sensitivity analysis", which assesses the effect of adopting this procedure, is presented at the end of our discussion of benefit-cost analysis.

Costs appear in the form of the expenses of sealers when they are engaged in the hunt, of vessels while sealing, of agents and of processors.

Landsmen's Expenses

Landsmen incurred costs for food, ammunition and certain other items they needed on the hunt. These costs are estimated to have been:

Province	Expenses ($)
Newfoundland	850,000
Quebec	124,000
Nova Scotia	3,000
Atlantic Region	976,000 [a]

a. Due to rounding, column does not add to total.

Vessels' Expenses

The operation of longliners and large vessels also involves expenditure, which was normally shared between the owners and the crew. The extra costs that arose because the vessels took part in the hunt included fuel, food, damage to equipment and the like. These costs are estimated to have been:

Province	Expenses ($)
Newfoundland	836,000
Quebec	115,000
Nova Scotia	136,000
Atlantic Region	1,043,000 [a]

a. Total excludes payments to crew from Quebec and Newfoundland serving on the large Nova Scotia vessel, since these were not costs to the region as a whole.

Earnings Lost by Sealers Because of Participation in the Hunt

On the assumption that sealers taking part in the hunt would otherwise have been unemployed during its duration, the alternative earnings they lost are zero.

Handling and Transportation Costs

Ten agents operated in Newfoundland, collecting skins and arranging for their transportation to the Carino plant at Dildo. Some also handled meat. Three agents operated in Quebec, one overseeing the transportation of skins from the Magdalen Islands to Karlsen's plant at Blandford, the other two arranging the delivery of north shore skins to Dildo. In Nova Scotia, a sealers' co-operative looked after the transportation of skins to Blandford but the costs involved were insignificant.

Since the Royal Commission is assuming that persons working as agents would otherwise be unemployed, there is no cost for their labour. Transportation costs were involved, however, and are estimated at:

Province	Costs ($)
Newfoundland	135,000
Quebec	17,000
Nova Scotia	–
Atlantic Region	152,000

Skin and Oil Processors' Costs

Labour costs are again assumed to be zero, so that the costs to Newfoundland and Nova Scotia for skin and oil processing were limited to miscellaneous manufacturing costs (power, water, chemicals, depreciation of buildings and equipment because of their use in seal processing, and the like), the cost of raw skins purchased from other provinces, and the commissions paid to agents in other provinces. These are estimated to have been:

Province	Costs ($)
Newfoundland	606,000
Quebec	–
Nova Scotia	437,000
Atlantic Region	379,000[a]

a. Costs of skins purchased from other provinces have been excluded from the total, since they are not a cost to the Atlantic region as a whole.

Meat Processors' Costs

Assuming that employees of the meat-processing plant in Notre Dame Bay would otherwise have been unemployed during the period when they were processing seal meat, the only costs of the plant are miscellaneous production costs, estimated to amount to $24,000 for Newfoundland.

Net Benefits

Summarizing the benefits and costs listed above leads to net benefits as shown in Table 15.1. The total net benefit of sealing and seal processing to the Atlantic region is therefore estimated to have been $3.2 million in 1982 ($3.8 million in March 1985 dollars). A little over 70% of this amount accrued to Newfoundland, rather less than 20% to Quebec, and the remaining 10% to Nova Scotia.

Indirect Effects

When one section of the economy of a region receives extra income, the effects spread out and benefit other sectors of the region. There is a "multiplier effect". Some benefit-cost studies take such effects into account. The use of multipliers is fraught with conceptual difficulties, however, and in any event, no multipliers relating specifically to the sealing industry have been computed by Statistics Canada. For these conceptual and practical reasons, multipliers are not applied in this benefit-cost analysis. Some understatement of net benefits may possibly result, but it appears better to tolerate a little understatement than to risk presenting an exaggerated picture based on inappropriate data.[2]

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2. If, in spite of the above, the application of a multiplier is deemed appropriate, the net benefits, of course, will be inflated, the degree depending on the multiplier chosen. If the multiplier (1.685) that seems to enjoy favour in DFO is used, net benefits become:

Province	Net Benefit ($)
Newfoundland	3,901,000
Quebec	1,016,000
Nova Scotia	548,000
Atlantic Region	5,464,000

Table 15.1
Net Benefits of the Seal Hunt ($'000)

	Newfoundland	Quebec	Nova Scotia	Atlantic Region
Benefits				
Skins sold or put in inventory	3,398	630	745	4,143
Oil sold	583	–	128	711
Meat sold	575	97	27	700
Seal products kept for own use	205	57	–	262
Shares earned by sealers serving on large vessels of other provinces	3	40	–	–
Commissions earned by agents acting for processors in other provinces	–	35	–	–
Other benefits	–	–	–	–
Total	4,765	859	900	5,816
Costs				
Landsmen	850	124	3	976
Vessels	835	115	136	1,043
Earnings lost by sealers from participation in hunt	–	–	–	–
Handling and transportation	135	17	–	152
Skin and oil processing	606	–	437	379
Meat processing	24	–	–	24
Total	2,459	256	575	2,574
Net Benefits[a]	2,315	603	325	3,243

a. All lines and columns do not add to totals because of elimination of interprovincial transfers or rounding.

Sensitivity Analysis

The reasons for adopting a zero cost of labour in the previous computations were given above. In the special circumstances of the hunt, and based upon the assessments of the situation obtained from those close to the industry, it seems a reasonable procedure. It is useful, however, to know the effect of adopting such a procedure. This effect can be estimated by performing a "sensitivity analysis", which involves redoing the computations on the basis of a different assumption. A possible alternative assumption is that if the seal hunt had not taken place in 1982, those usually involved in sealing and associated activities would have suffered the same rate of unemployment as that existing in their districts as a whole.

Substituting this alternative assumption greatly increases costs and reduces net benefits to:

Province	Net Benefits ($)
Newfoundland	13,000
Quebec	433,000
Nova Scotia	191,000
Atlantic Region	637,000

The assumption on which the foregoing analysis was based is thus very important to the result. Other assumptions would lower estimates of net benefits further, perhaps reducing them to small values. In the view of the Royal Commission, however, the most reasonable assumption for the alternative labour income or cost of labour during the sealing season is zero.

National Economic Impact

The net benefits arising in the Atlantic region are also net benefits for Canada as a whole. Account must also be taken, however, of certain costs of the 1982 hunt connected with the federal government's research on seals, its supervision and control of the hunt, its ice-breaking services, and its actions intended to counteract the campaigns of anti-sealing organizations. All these costs were unusually heavy in 1982. Many people, vehicles, vessels and aircraft and much equipment were employed by the federal government in connection with the hunt that year, and considerable expense was incurred in negotiations with member governments of the European Community.

Such costs can only be estimated from information in the possession of the Department of Fisheries and Oceans (DFO) and other departments and agencies, including the Department of External Affairs, the RCMP and the Department of National Defence. DFO, therefore, was asked to estimate the costs incurred in 1982 by the federal government which would not have been incurred had it been known at the beginning of the year that there would be no seal hunt. The figure requested was the marginal cost of the hunt to the federal government, and it was made clear that any costs which had to be met, seal hunt or no seal hunt, should be omitted. The latter costs would include, for instance, depreciation on vessels that would have been kept for other purposes and salaries of people who would have remained in government employment, but whose output of useful work unconnected to the hunt would not have increased significantly if no hunt had taken place in 1982. DFO was asked to analyse the relevant costs under four headings – "research", "surveillance", "ice-breaking", and "publicity" – or any others it considered appropriate.

It was recognized that when a large operation is discontinued, it takes time to eliminate all the expenditure connected with it. Equipment has to be sold and people must be discharged or reassigned. Consequently, annual savings from the ending of the hunt may be expected to rise as time passes. For that reason, DFO was asked to make a second analysis, along the same lines as the first, but including savings that would only be achieved after a year or more had passed.

Emphasizing that some of the required estimates depended heavily on the assumptions made to derive them (Chapter 30 raises a number of reservations about the estimates), DFO supplied the following data:

Activity	Savings in 1982	Annual Savings After Readjustments
Research	$137,000	$247,000
Surveillance	$295,000	$295,000
Ice-breaking	–	–
Publicity & Public Relations	$240,000	$50,000
External Affairs	$5,000	$5,000
COSS	$60,000	$60,000
Total	$737,000	$657,000

The total of the first column is close to that provided earlier by DFO for the year 1976/77 (Canada, DFO, 1979). One might have expected a larger figure. To adjust for inflation alone would bring the 1976/77 figure of $706,000 to about $1.2 million by 1982, and federal government efforts to control and counteract the activities of anti-sealing groups increased during the period.

Part of the apparent discrepancy would appear to arise because the 1976/77 estimate was not made on a consistent marginal basis. It seems that various fixed costs were included that would not have altered even if hunting seals had been banned in that season. Among these costs, for instance, were depreciation of vessels, research on seals, and salaries of fisheries officers who would have been retained to enforce the ban instead of monitoring the hunt.

The total of figures in the second column is lower than that of figures in the first, even though annual savings in research expenditures related to the hunt were expected to rise as time passed. The explanation of this unexpected result is that in 1982, expenditures on publicity and public relations to counteract the activities of anti-sealing groups were exceptionally high and would have declined considerably in 1983 and subsequently even if the hunt had continued at its 1982 level.

The difficulty of arriving at meaningful estimates of the extra expenditure that the federal government had to incur because of the seal hunt must be recognized. Some research on seals, for instance, would have continued even if the hunt had ended in 1982. Indeed, because concern would likely have increased about the adverse effects that enlarged seal herds might have had on fish stocks and the parasitic infection of commercial fish, certain types of research on seals might well have increased. Whether or not this actually occurred, however, would have been a matter of future policy, which could not be predicted with any degree of certainty.

One other cost of the hunt is the damage it has done to Canada's international image. The campaigns of the anti-sealing organizations undoubtedly have tarnished that image. (See Chapter 9.) This damage must be reckoned an additional cost to Canada of the Atlantic seal hunt. No specific value can be put on it, but it is important.

Subtracting the above estimate of costs of the seal hunt borne by the federal government from the net benefits previously calculated results in net benefits of the hunt to Canada in 1982 of $2.5 million.

The Interdependency Between Sealing and the Fisheries

The life of fishermen is really a hard life. They have to work many hours from 4 to 5 in the morning to 9 or 10 at night with very little to show for it. Time after time I've seen . . . go out in the morning, gone all day and return home with nothing and maybe a net or two gone or torn up too bad to put back in the water again. It's really heart breaking sometimes to see them. But they got no other choice but to keep at it. This is why in the spring we in the outports of Nfld hunt for seals. It means a great deal to us. The meat helps out with the groceries. We keep some fresh, bottle some and salt some for the coming winter. And the money we get for the pelts we use to pay off the bills which pile up over the winter and gives the fishermen a good start for the fishing season. If they're lucky enough to catch a few seals they have money to get their boats ready, repair their nets and buy a few new ones. I'll just use us as an example. This year . . . was unable to go seal hunting so we are living on $104 a week which he collects from U.I.C. You must realize how much you can do on $104 a week for 6 people. It's not enough to buy groceries at the cost they are here so we have no fresh milk, fruits, burgers, juices or french fries the thing most kids take for granted. I am just able to buy the bare necessities. Now this is only the groceries. Then there is the oil bills power bills, phone bills. The upkeep of the house. Clothing etc. If . . . had been able to seal this winter we would owe no bills. We would be able to eat better and I would be able to buy things for the kids they really need. Also he would be able to buy a few more new nets to fish with as the more nets you have the more fish you can get and if you have a few extra ones you can have them in the water while you're repairing the torn ones. Believe me when people say that the Nfld fishermen don't need the money they get from the seal hunt they don't know what they're talking about (Jefferson, 1984).

Sealing statistics from the middle of the 18th century to the present day reflect the highly variable nature of sealing activity. Effort and catches have fluctuated from year to year and among regions. In some years, sealers in the Gulf of St. Lawrence enjoyed access to seals for an extended period, while their counterparts in Newfoundland were unable to reach the seal herds because of local ice conditions. Tables 14.15 to 14.19, Chapter 14, illustrate the variability of sealing results and suggest that sealers could never depend exclusively on sealing to provide food or income. Earnings from sealing, however, often meant the difference between keeping a fishing enterprise viable or going bankrupt. Sealers perceived that the benefits involved outweighed the attendant risks. Tables 15.11 and 15.12 (Appendix 15.5) indicate the important financial contribution made by Newfoundland longliner fishing vessels, and Appendix 15.5 provides further details.

Socio-Cultural Benefits and Costs

In this section, no attempt is made to weigh benefits or costs of the life-styles that are associated with sealing. Instead, this section captures something of the folklore and culture associated with sealing. Benefits and costs there clearly are, but there is no reasonable way to translate such intangibles into dollar yardsticks.

Although fishermen/sealers/hunters participate in the seal fishery primarily for economic reasons, sealing activities also have important social and cultural dimensions that reinforce community spirit, and psychological dimensions that contribute to self-esteem. While a majority of sealers are also fishermen, many outsiders do not comprehend the relationship between hunting and fishing. Sealers have been depicted as representing the darkest side of humankind: destructive, ignorant, cruel and selfish. Fishermen, in contrast, are more often represented in romantic terms as kind, honest, hard-working individuals. Partly because of the spectacular imagery that the whitecoat hunt offered the media and partly because of the method (clubbing) of killing whitecoats, questions have been raised about the potentially brutalizing effects of seal killing. Madelinot and Newfoundland sealers admit that hunting excesses have occurred in the past, but most reject the notion that they are insensitive to killing, or that they are unconcerned about resource conservation and management. Evidence of the cultural importance attributed to responsible resource use is reflected in the testimony of the Local Development Committee of Fleur-de-Lys:

> *It was the year of 1888, commonly referred to as the "Year of the Great Seal Haul". In this year approximately 12,000 seals were killed just off a point of land known as Partridge Point. People came from all over the Green Bay and White Bay to haul seals. Men, women and children, and even the local priest, Father Shene, were involved in this sealing expedition. It is said that people got so sick of seals that they started being cruel to the animals, whereupon Father Shene became very angry, warning the people that it would be a long time before seals would be taken in such quantities again. Incidentally, they have never been taken in such a quantity since and they most likely never will (Walsh and Lewis, 1985).*

A number of sealers have expressed their distaste for participation in the whitecoat hunt, and some have gone out once and subsequently limited their efforts to the landsmen or longliner hunt (Wright, 1984). One landsman hunter described his feelings about his relationship to animals and the environment:

> *I have a great appreciation for nature. I respect nature and learn from it. I am amazed by it. If I were to kill a seal and didn't kill it clean, then I would feel for it. The majority of fishermen I know feel that way. When you kill something, blood has got to flow. To the people who don't understand, it looks terrible. It makes you look like a savage, but it is the right thing to do when it is done right (Walsh and Lewis, 1985).*

In the spring of 1981, the ice in the Gulf of St. Lawrence carried seals to the shores of Prince Edward Island. Inexperienced men, taking advantage of the unexpected resource opportunity, began clubbing seals. Fisheries officers quickly closed the hunt when they realized that the hunters were unskilled and that the killing was inhumane. (See also Chapter 20.) Madelinot sealers often refer to that incident as an example of thoughtless and cruel behaviour. They maintain that sealing is a professional activity that can only be learned through years of experience and apprenticeship.

Aboriginal peoples are generally perceived as possessing greater reverence for the environment and animals than their southern non-aboriginal counterparts. Even among the Inuit, however, episodes of cruelty have been witnessed, and such behaviour is not well-received by the elders. Unacceptable behaviour is often attributed to alcohol abuse and alienation:

> *I have lived with and participated in the lives of hunters and food gatherers from Alaska to Greenland over a 30 year period and have seen no brutality toward animals. I have seen wasteful and careless killing of animals by young people who have been away at residential schools, or by young people who have not apprenticed with their elders. They are judged by their own society as well as by the global society. I have also witnessed degenerate and harmful behaviour, almost always under the influence of alcohol, by individuals who by and large are caught in small communities and are not able to live the life of their forebears nor to take a meaningful role in the larger society. In general, it has been my observation that people who live by hunting, or by killing if you will, have a respect and reverence for life which I have not seen amongst the sports hunters from urban and industrialized society, who kill not to live but perhaps to recapture a sense of self which has been lost in modern society (Williamson, 1986).*

Researchers from the Quebec north shore explained in a brief to the Royal Commission that sealing is not a "blood sport", but a hard and brutal way to earn a living with few employment alternatives (Evans et al., 1985).

For more than a decade, Atlantic coast fishermen-sealers have been the subject of an intense protest campaign conducted by numerous animal-rights groups. (See Chapter 9.) Initially, sealers were surprised and shocked by the protest, but as the effect of the campaign began to erode coastal community economies, surprise was transformed into anger and then determination to defend the right of primary producers to earn their livelihood by honest work.

For many Atlantic coast residents, the annual seal harvest is an occasion to reaffirm community spirit, manifested as the topic of everyday conversation, in material culture, and in songs and stories told and re-told over generations.

Northern Labrador

Sealing on the Labrador coast has to be understood in the context of widespread change. Over the past three decades, for example, there has been a gradual trend to permanent residence in communities. A number of factors have contributed to this trend, including resettlement of the communities of Hebron and Nutak in the 1950s to the communities of Nain, Hopedale, and Makkovik; the takeover of schools by the Newfoundland government, which keeps the children – and therefore their parents – in the communities; and the centralization and expansion of community or social services, especially health and welfare services. In general, improved access to goods and services has enhanced material welfare, reduced infant mortality, and improved health care, but there have also been negative consequences of the move to permanent communities.

Because families are required to remain in centralized communities so that children can attend school and adults can retain eligibility to receive certain transfer payments, there is an enforced idleness during the winter months. This inactivity, coupled with overcrowding, because housing has not kept pace with population growth, contributes to social conflict, often in association with alcohol abuse. Many communities now include substantial numbers of outside bureaucrats and entrepreneurs, reducing the sense of ownership and of responsibility for community affairs. A remarkable increase in deaths by misadventure, including suicide, homicide, drowning, exposure and accidental shooting, also reflects a growing social malaise. Employees of medical and social agencies have noted that extreme forms of behaviour or symptoms of stress and social conflict are often minimized when families return to summer or outpost camps (Williamson, 1986).

Among the Inuit of northern Labrador sealing is perceived as an important affirmation of cultural identity. The successful hunter is recognized for his skills, which reflect how well he has been taught by his elders. When a hunter returns home, he is often greeted with the question "Anguvene?" Loosely translated, this means, "Have you killed anything?" but the exact translation is, "Have you become a man"? This question illustrates the central importance of hunting to Inuit society. Hunting and the skills which it requires in northern Labrador also define the well-being and success of the individual. A young Inuit leader, returning to Nain after a week of meetings in St. John's and Ottawa reflected: "Too much talk, too much sitting; I feel bad". Immediately he assembled his hunting outfit and headed north to Okak Bay. He returned several days later with four seals. "Now I feel like a man again", he said. "Now I can return to my office at the

LIA" (Labrador Inuit Association). The current President of the LIA takes his children hunting on his holidays to teach them the skills and values that he has learned as a hunter. The Co-chief Negotiator for Land Claims, a settler, sets seal nets in the autumn and hunts otok (seals basking on the ice) in spring. Most of the young men of northern Labrador, Inuit or settler, hunt as a method of finding meaning in their lives and of restoring themselves (Williamson, 1986).

The pursuit of seals is more than a cultural activity. It is a means of augmenting income, providing fresh meat (which is more nutritious than many store-purchased foodstuffs imported to northern Labrador), and providing skins for mittens and boots. Sealing requires the exercise of personal skills and knowledge of the environment. The extent of such indigenous knowledge is recorded in *Our Footprints Are Everywhere* (Labrador Inuit Association, 1977), the northern Labrador Inuit and settlers' own history of land use and occupancy.

The young learn from the old to identify good ice and bad ice, and the signs of oncoming storms. They learn about frostbite, handling small boats in rough water, which seals will sink and which will float when shot in the water, how to build a snow shelter, and how to use a rifle, a harpoon or a net. All of these skills are taught and absorbed while hunting seals and other animals. The environment can be unforgiving to individuals without such knowledge, and mistakes can be fatal.

The hunt also teaches values. Young hunters learn to respect animals, not to kill what cannot be retrieved, not to kill what cannot be used. The fact that some of these values have been lost is a reflection of how the educational system has deprived many young people of apprenticeship with their elders and has made some ashamed of their own culture.

> *In them days, we use to have everything. The Labrador people had control of themselves. They could do what they liked, and they wasn't going to destroy anything that wasn't supposed to be destroyed. There is not one trapper or hunter that ever killed a bird or destroyed an animal if he knowed that that bird or that animal was going to breed, and they was going to have their young the next year. They left that alone . . .*

> *I would like our land to belong to us, because we will always live by hunting anywhere on the land. I would like the land to belong to the Inuit and not to the Kabloonaat [non-aboriginal]. I think all of it is useful, the land and the sea. There are seals in the water and animals go where they should go. Some go south and some go north. It is for the use of the people (Labrador Inuit Association, 1977).*

In recent years, the people of northern Labrador and their school board have tried to remedy the effects of isolating young people from their elders. Courses based on aboriginal information and life skills are gradually being integrated into the school curriculum, and the people are seeking the right to appoint their own school board.

Sealing has a recreational element, even for men who hunt seriously for meat and pelts. Boles et al. (1983) explain that "The ice on a fine spring day is an exhilarating environment, and men look forward to the opening of the season with keen interest." Seal hunting in Labrador is primarily an individual enterprise and does not require a co-ordinated group effort as whaling activities once did; but it does involve community co-operation to the extent that elders and others unable to participate directly in the hunt often help to plan the hunting trips. Sealers usually share their success by distributing meat to others in the community.

Island of Newfoundland

For many Newfoundlanders, the seal hunt is an expression of collective identity. The history of the sealing industry is a long record of personal tragedy and triumph, poverty and profit. Although the excesses of seal profiteering are largely a part of history, Newfoundlanders have not forgotten how many lives were lost at the ice, nor how painful is the wait on shore for a sealer's return. The bravery and foolhardiness of sealing ventures are still celebrated in oral tradition, and many folksongs and recitations recount famous and infamous sealing expeditions (Ryan and Small, 1978). Contemporary literary and artistic works also find inspiration in sealing. Brown and Horwood's now-classic book, *Death on the Ice* (1972) and David Blackwood's etchings provide powerful images of sealing and rural outport life of bygone days. In recent years, the anti-hunt protest movement has triggered a variety of counter-reactions. (See also Chapter 9.) Some

Newfoundlanders have been outraged at what appears to be an attack on a long-established way of life. Others have responded with sarcasm, wit or humour (Lamson, 1979).

"Copying" at the Front

In the rural communities of northern Newfoundland, an individual's reputation and social status depend on how well that person conforms to the predominant cultural values of the community. These values centre around work, family and, in some communities, religion. Anyone who is seen to be working hard and who is making every effort to remain economically independent is generally respected, irrespective of his/her current employment status. However, the person who makes little effort to exploit available local resources and who depends on government transfer payments, particularly social assistance, loses the respect of the community.

Apart from forest resources, seals are one of the few resources available during the winter months. Sealing licences are available to all fishermen and to any other person who has held a licence within the previous five years. The seal hunt provides a major opportunity for men who have no other work to demonstrate their commitment to community values. Men who relinquish their unemployment-insurance benefits and pursue the hunt are highly respected.

Although sealing, like the fisheries, is basically a co-operative enterprise, there is a degree of rivalry among sealers to determine who is the best hunter. Fishermen/sealers take pride in demonstrating their seafaring and

navigational skills in the depth of winter, and in testing their endurance on the open water in small boats from dawn to dusk, with temperatures well below zero. The men exhibit their commitment to the work ethic and to economic independence even when there are no guarantees of making a profitable voyage. The most successful sealers are often the most successful fishermen (locally called "highliners"). They are among the most industrious workers in the community and are the ones most likely to exhibit leadership and entrepreneurial skills within the fishery. Hence, in northern Newfoundland, sealing activities enhance a person's social status in the community, as well as feelings of self-esteem and respect:

> *As fishermen/sealers living in small communities of fifty to several hundred people dotted along the northeast coast of Newfoundland, we live close to the land in harmony with nature. It's a lifestyle which we enjoy. We appreciate what we have and we know that many people living in urban areas of Canada would covet our lifestyle if they only knew that it existed. We are poor in many ways. Yet in others we are rich. We survive month-to-month, year-to-year, living in hope for better times. On average, our incomes are well below the poverty line, yet we live a lifestyle that brings great day-to-day satisfaction. We have often heard from our critics that men such as myself only earn a few hundred dollars a year from sealing. Therefore, it is of no great economic benefit. But Canadians and this Royal Commission must realize that for families living near the poverty line, a few hundred dollars means a lot. This is cold hard cash at a cold hard time of the year. Without that money we can't continue to make money, because we need it to reinvest in the rest of the year's fishery. In 1981, before expenses, I received more than $10,000 from the seal fishery, in 1984 I earned $184. Where do I look to replace this income? (Canadian Sealers Association, 1985).*

Participation in the large-vessel, offshore hunt also reinforced cultural values. Wright (1984) notes that hardiness and the ability to provide for one's family are two criteria of manhood in Newfoundland, though they are certainly not exclusive to Newfoundland:

> *It is physically demanding, exclusively male and has a mystique that demands respect from all individuals, whether they have been to the ice or not. Indeed, part of the hunt's mystique is that it takes place in an environment that most people can only imagine . . . The sealers can strip away the fetters of ordinary existence and, for one month, test their resilience in an almost primordial world fraught with dangers and discomfort (Wright, 1984).*

Wright also points out that a successful seal hunt requires solidarity, fraternity and trust among sealers. Young men who become part of such a group develop a positive self-image and are respected by their peers and elders. Of course, employment and income derived from participating in the offshore hunt also enhance the social status of the sealer in the community.

One of the hallmarks of the seal fishery was the level of activity and excitement that the arrival of seals brought to isolated communities and households:

> *The men around here say that seal fishing is one of the best jobs they've ever done. It was hard work, but fun.*
>
> *Some days it would be 20 degrees below zero F out there. We'd work together.*
>
> *When you'd see a long school of seals come in . . . I can't explain it . . . Well, you'd get so excited . . . I can't explain it. Now when we see them pass, we notice that there are many more seals than there were before, but we can't fish for them like before.*
>
> *I can't explain it, but the first seal we'd catch, well that's what we'd have for our next meal. No matter whether it was dinner or supper, that's what we all had to have (Blanchard, 1985b).*

In sum, the harvesting of seals and processing of meat and pelts were activities that many residents looked forward to during the long winter months of unemployment. The activities involved teamwork among family

members and friends, and the camaraderie shared among workers was expressed in the telling of tales and anticipation of another season of sealing. Women were involved in the home processing of meat and in the cottage industry that uses pelts for moccasins, mittens and dolls. They, too, would often engage in conversation about the harvest and readily admit that it is an activity which their husbands enjoy.

North Shore, Quebec

Economic activity of lower north shore fishermen was characteristically organized along family lines. Beaucage (1968) charted the relationships of fishermen and hunters in several settlements and discovered a complex web of co-operation, investment and the exchange of labour and information, determined partly by heritage, partly by choice and partly from the exigencies of labour and investment. At La Tabatière, for example, the seal fishery was a collective and co-operative effort of 10 local families. In contrast, the cod-fishing activity is usually limited to individual households. The rights to specific zones (called "berths") for the salmon and seal-net fisheries are owned by individual families, and are passed down from generation to generation. Descendents of the early pioneering families, including Robertsons at La Tabatière, Maugers at Tête-à-la-Baleine, and Joneses at Wolf Bay, maintained control of the prime fishing locations and had a competitive advantage over more recent migrants to the north shore. The decline of markets for sealskins, however, may alter traditional, family-based resource-harvesting activities. Leonard Robertson summarized his concern that younger persons would not be able to acquire necessary skills to continue the family fishing legacy in this way: "People talk about how in the future men won't know how to operate the big [seal-net] fisheries any more. My older sons will. My younger son is nine and he won't know how to operate it. I'm sad about this" (Blanchard, 1985a).

Sealing activities are an expression of community renewal for many lower north shore residents. The arrival of seals in the month of December and the first meal of fresh seal meat recall memories of years gone by when seals represented winter-survival insurance before unemployment insurance or other sources of assistance were available (Evans et al., 1985).

Magdalen Islands

Madelinots refer to the seal fishery as a "spring gift" because bumper years enabled sealers to earn substantial sums that could be used for major

investments such as buying or building a home or boat. Langford (1985), a local writer, explained that Madelinots anxiously await the arrival of seals as a sign of spring; their appearance always rejuvenates Islanders, who have wearied of winter. Mainlanders can observe the gradual arrival of spring as trees begin to bud, but Madelinots have no natural indicators other than the gradually lengthening days.

> *By the end of February, a sense of waiting reaches its peak . . . the seals have been sighted. From this moment on, for the next few weeks, the everyday life of the Madelinot becomes wrapped up in the seal hunt. Tales of the hunt are on everyone's lips. The local radio frequently boadcasts the old ballads recalling the hunt, the tragedy of lost lives and even the false-sounding discourses of the protesters; all this heightens a feeling of celebration brought about by the arrival of the seals. Ice conditions and the activities of the herd are the subjects on every adult's mind. This is the time when the hunters pool together their ancestral knowledge about the winds, the tides and the currents to establish quite precisely the position and movements of the herd (Association des chasseurs de phoque des Iles-de-la-Madeleine, 1985). (Translation).*

Although the arrival of seals in the Gulf is greeted with general enthusiasm, not all residents are equally enthusiastic about the prospects of going to the ice. Geistdoerfer (1974) reported that wives and girlfriends would often try to dissuade men from undertaking the hunt on grounds that it was too risky to be worth the generally meagre profits, that the men could easily find alternative and useful activity around the home, and that the smell of seal fat and blood was unpleasant and difficult to eliminate. Such arguments were seldom persuasive enough to convince sealers that the risks were too high, because sealing was perceived as a type of lottery that might, just once, pay off substantially.

Sealing is a demanding physical activity, and sealers must be of sound mind and body to endure the rigours of going to the ice:

> *Hunting seal is not a game. To come home with a profit, the Madelinot hunter must first be in excellent physical*

> *condition and possess a strength of character that rises to every challenge. The work is hard, demanding and dangerous. The hours spent on the ice are very long and the weather conditions, which are extremely variable at that time of year, are a constant source of peril (Labelle, 1985). (Translation).*

There are numerous signs that sealing activity is at the core of Madelinot identity. Historians (Hubert, Chiasson and Landry), ethnographers (Roy and Geistdoerfer), artists (Langford, Chantraine) and community workers have all represented the seal hunt as more than an economic activity. Because the Island is a small community, people know one another and share common joys and sorrows. In years when fishing is good, everyone benefits, but no one is untouched by the effects of a declining economy or the tragedy of a sea disaster. As the Magdalens are small and relatively isolated in the Gulf, folklore and oral tradition are part of everyday life. Sealing is a prominent subject or motif of traditional Madelinot cultural expression. The 1911 tragedy of Daniel LeBel and the loss of his sealing party, for example, inspired the composition of a folk ballad which continues to survive in local tradition, as well as in repertoires of Acadians living on other Gulf shores.

Fishermen and sealers are keen observers of environmental conditions and of fish and animal behaviour because their lives and livelihoods depend on such knowledge. Observations are shared with other fishermen and may eventually become the basis of traditional belief. One old sealer told Chiasson (1981) that seals are not afraid of men on the ice until they are close enough to see their faces. To avoid frightening the animals and to get close enough to kill them, hunters are admonished to wear veils covering their faces. Certain natural events are taken as signs of impending sealing fortunes. The appearance of crows flying inland towards a group of landsmen walking out to the ice is a sign of good luck; crows flying seawards from land in the same direction as the hunters are walking is a sign that seals and ice will move offshore (de l'Orme and LeBlanc, 1980).

Members of the Madelinot community are demonstrating their support for the seal fishery in a variety of ways. A recently published collection of Madelinot recipes includes several for seal-meat preparation. A local bakery uses seal oil for pastry production. Island restaurants serve seal meat in season, and an annual sealing festival is held each summer during the tourist season. The local media report regularly on sealing and related matters, songs and poems are circulated on the airwaves and in print, and Island merchants sell locally produced seal products.

Landsman sealer, Magdalen Islands

In our present society there is a temptation to take seriously only that which can be readily translated into numbers - especially into financial measures. The kinds of intangibles, however, discussed in the previous section, are not to be treated cavalierly in any assessment merely because they do not have dollar signs attached to them.

Consequences of Decline in the Seal Hunt

The 1982 hunt was the last of the traditional kind. In 1983, only 64,509 seals were taken, compared with 153,536 in 1982. Only three large vessels took part; Norwegians had been allocated a quota, but decided against sending ships to Canadian waters. In 1984, the number of seals caught, at approximately 33,500, was hardly more than half the 1983 catch. By 1985, the hunt was a pale shadow of what it had been, for only 23,200 seals were caught. Neither Carino nor Karlsen bought skins, and the hunt was mainly conducted to provide meat; indeed, instances were reported of skins being thrown away.

The decline of the seal hunt had both economic and non-economic consequences. To Canada, a rich country which in 1982 produced goods and services worth some $329 billion, the loss of the sealing industry must be deemed insignificant from an economic point of view. Even in Newfoundland, one of Canada's poorest provinces, in which three-quarters of sealing activity took place, the hunt generated only about 1% of the gross provincial

product. In Quebec and Nova Scotia, the other two eastern provinces where seals were hunted, the decline of the hunt caused scarcely an economic ripple.

If sealing is viewed very narrowly, and one is content merely to cite averages, the economic value of commercial sealing can be made to appear minute; for example, the average landsman who took part in the hunt in 1980, when harvest levels were relatively high, was only about $150 better off after expenses. Sealers on vessels earned more, but in that year still received only about $1,300 (longliners) and $2,600 (large vessels), after expenses (King, 1981, Table 12). Sealing was generally limited to a week or two and contributed only a small percentage to average incomes. Indeed, for some longliner owners who also engaged in the relatively lucrative crab and lobster fisheries, the returns from sealing must have been a very small part of their annual income.

The hunt was also an unreliable source of income. The weather and the path of ice floes could sometimes reduce catches to low levels. For instance, Labrador's 1982 catch was only one-sixth of that of the preceding year, although prices offered by the processors were much the same.

It is also true that some landsmen participated in the hunt mainly for sport. In the Magdalens, it is said that, weather permitting, almost every able-bodied man used to go out on the first day of the hunt, but by the second and third days, most had given up. In 1980, 74% of the Magdalen landsmen who took part in the hunt received no cash incomes from the activity (King, 1981, Table 13). Incomes seem to many landsmen to have been a very subsidiary consideration, and cessation of the hunt can scarcely be thought of as a crippling economic blow.

Average figures, however, can be misleading. The hunt was geographically concentrated. In 1982, 86% of the Newfoundland catch (by value) was taken along the northern coast between Cape Norman and Cape Freels, and 90% of the Quebec catch (by value) was concentrated in the Magdalen Islands. Surveys of sealers, carried out for the Royal Commission in St. Anthony, Newfoundland, and in the Magdalens, showed how important sealing could be in those small communities. It provided between 5% and 20% of annual incomes of those surveyed and occurred when many fishermen had exhausted their unemployment insurance (UI) entitlements or were close to so doing. Longliner owners particularly welcomed the sealing season, since it occurred before they could go fishing and traditionally

provided money to buy gear and supplies for the coming season without running them yet further into debt.

The hunt played a particularly important part in the lives of coastal Labradorians. Because of their isolation, many had no alternative source of cash income other than the inshore fishery (Hill, 1983, p. 56). The short fishing season led to low family incomes, and a large percentage of families (approximately 25% in southeast Labrador and over 30% in northern Labrador) live below the poverty line set by Statistics Canada. Sealing income, therefore, was an important support for families in this area.

Although the average earnings from sealing were low, this was in part because of the participation of people who regarded it as a sport or social activity. If one considers only those active landsmen who earned some income from the hunt, the average income for landsmen in 1980 was about $375. If one restricts the assessment to serious hunters, the average would be higher. The loss of income from sealing in 1983 was significant also because it was accompanied by depressed catches and prices for groundfish, the mainstay of most serious sealers.

While the sale of skins to processors provided most of the cash income gained from sealing, seal meat was also important. Some seal meat was kept by Newfoundland sealers for their own use, and the remainder was sold at wharves or through supermarkets and other outlets. While there was little or no commercial market outside Newfoundland, seal meat was consumed in the Magdalens and along Quebec's north shore. It was particularly important to the coastal Labrador communities. A 1980/81 survey of households in Rigolet indicated that over 90% of families consumed ringed seal meat during the 12-month period in amounts ranging from 1 kg to 180 kg. Of the 13 households (out of a total of 59) that consumed more than 45 kg, the average cost of buying red meat to replace the protein the seal meat contained would have been $830 in 1980 (Boles et al., 1983, p. 96–97). The cessation of the seal hunt could well have an increasingly deleterious effect on the nutritional value of food consumed by Labrador residents.

Sealers and their families were not the only people to be hurt by the decline of the hunt. Perhaps the worst hit were employees involved in sealskin processing. At Blandford in Nova Scotia, where processing took place during March to mid-May, many of the plant workers were fishermen whose position was similar to that of fishermen who went sealing. The plant still operates as a seasonal fish plant and provides employment for a core group of workers. The loss of seal processing has eliminated five to six weeks of employment for each worker, but their jobs still exist.

The individuals who probably suffered the greatest loss are the plant workers at Dildo in Newfoundland. Many of them were older employees with long service in what were thought to be secure jobs. Normally, the employees worked for about eight months of the year and claimed unemployment-insurance benefits for the rest. The closing of the processing operation deprived them of their main – in some cases their only – means of earning a livelihood. The chances of finding alternative employment in an isolated community are remote. Their level of education is low, and the skills they gained in seal processing are not very marketable even if they were to move away.

The impact on the seal-meat processing workers at Comfort Cove, Newfoundland, is less predictable, as their future depends on the availability of seal carcasses. This, in turn, depends on continuance of the hunt, the price paid to sealers for carcasses, and the market for canned seal meat. If the plant ceases to process seal meat, six to eight weeks of employment will be lost for 20 to 25 individuals. As long as the plant continues to process fish products, however, these people will be able to obtain seasonal employment in that operation.

The social and non-material damage inflicted by the decline of the seal hunt may well be of much greater importance than the economic effects. While to attempt to translate these effects into monetary terms is to overstretch the analytical tools of economic benefit-cost analysis, the social and non-material effects are nonetheless of importance. Some of the main social and non-material effects are described below.

People living in small communities who lose a significant part of their incomes because sealing and seal processing have ceased suffer not only economic deprivation, but also a loss of dignity and self-respect. The receipt of unemployment-insurance benefits nowadays carries with it little stigma, in part because such benefits are paid only to those who have had employment. Unemployment-insurance benefit payments, therefore, are often taken as a sign of industry. On the other hand, those who have to rely on welfare assistance do lose status (Hill, 1983, p. 150). Their self-esteem suffers, and the absence of gainful employment often takes away whatever purpose in life they previously felt. The work ethic is still strong in small communities.

Sealing also provided stimulation at the end of a hard winter when activities were restricted. Hunting seals on the ice on a good day was for some an exhilarating experience. It provided an activity which cemented

community relationships and restored morale. In Inuit communities, hunting provided an opportunity for men to display their skill and to learn patience and other qualities highly valued in their society. The end of the hunt may therefore be expected to cause social and cultural damage.

It may be argued that the post-1982 behaviour of sealers demonstrates that the social and cultural benefits of the seal hunt have been exaggerated. Once the market for sealskins collapsed, and the cash return from catching seals disappeared, most sealers seemed to lose interest in the hunt. Some observers conclude from this that sealers took part in the hunt mainly for the money, and that "psychic" benefits were minor, at most (e.g., Watson, 1985).

Although this argument may possess some validity, it is itself an exaggeration. When sealskins could be sold, there was a yardstick by which the success of sealing could be measured. For sealers merely to kill seals and leave them on the ice would seem a senseless slaughter and bring no satisfaction or benefit.

It is a situation not very different from that of senior executives of large corporations. There is no doubt that they gain satisfaction from their work. They are continually presented with challenges and receive "psychic income" from success in dealing with them. Monetary incomes, of course, are important partly because they are needed to maintain desired standards of living and security, but also because they provide a measure of success. Take away those money incomes, and the psychic income, undoubtedly present before, disappears.

The dramatic demise of a centuries-old industry was reinforced by the ban on the importation of pup sealskins imposed in October 1983 by the European Community (EC). Even if there had been no ban, however, it is unlikely that the hunt could have been saved. The market for sealskin clothes collapsed, partly because of poor economic conditions and partly, perhaps, because of the swing of fashion; the main cause, however, was the effectiveness of the anti-sealing organizations. (See Chapter 9.) Few people in Europe were buying sealskin garments. Even the skins from older seals, which were not included in the ban, could not be sold. G.C. Rieber and Company closed part of their seal-processing plant in Bergen, Norway, and some merchants and furriers went out of business.

Canadian processors appear to have been gambling, in 1982, that the market would hold up; they bought the 150,000 skins offered to them at close to peak prices. They were wrong; the bottom fell out of the market halfway

through the year. The Karlsen processing plant at Blandford ceased to buy after the 1983 hunt; the Carino Company at Dildo kept going one more year, but on a reduced scale. By the time the 1985 hunt would normally have been held, sealers had no buyers of any size to whom they could sell.

Against the background of the Canadian fur trade in general, valued at several hundred millions of dollars and similarly liable to attack from animal-rights activists, the trade in sealskins has been of small significance. Worldwide, sealskin garments accounted for something like 1% or 2% of the total value of fur garments manufactured. If campaigns such as those directed against imports of Canadian fish products in the United Kingdom and the United States had succeeded, the damage inflicted on the economy of the Atlantic region would have been incalculable. (See Chapter 9.) Exports of fishery products from Canada, some 65% of which originate in the Atlantic region, exceed one billion dollars in value annually: even a slight diminution in this trade would outweigh all the economic benefits of the seal hunt many times over.

A revival of the demand for sealskins would require a change in public attitudes, particularly in Western Europe, and there is little indication as yet that this is imminent. There is some evidence of disarray among anti-hunting organizations resulting from encounter with the contradiction between the rights of animals and those of aboriginal or native peoples and with the distinction between concern for the individual animal and that for the species or ecosystem.

Another consequence of the decline of the seal hunt may be an increase in the size of seal herds and a consequent intensification of competition with the fishing industry for commercial fish stocks. This possibility is not included in the preceding benefit-cost analysis, but it clearly could become of great economic significance. Another potential danger is that larger harp seal herds will exacerbate the parasitic infection of demersal fish stocks and thus add to the cost of parasite removal for fish packers. These matters are discussed in Chapters 24 and 26 of this Report.

Appendices

Appendix 15.1 Purpose and Methodology of Benefit-Cost Analysis

The primary purpose of benefit-cost analysis is to assess the net economic benefits generated by the seal hunt carried out by landsmen, long-

liners and large vessels, for Canada as a whole, for the Atlantic region, and for the provinces that make up that region. Sealing in Atlantic Canada is an ancient occupation, but it attracted little attention outside the areas involved in the hunt and in processing seal products until the early 1960s, when anti-sealing groups started to appear. These groups mounted campaigns aimed at the abolition of the hunt, which they claimed caused unneccessary suffering to the seals and might lead to their extinction. (See Chapter 9.) So effective were these campaigns that the market for garments made of sealskin has virtually disappeared, the European Community (EC) has banned the import of skins from young harp and hooded seals, and although the hunt still officially continues, the take of seals has shrunk from 192,752 in 1981 to about 23,200 in 1985.

In designing the methodology, decisions had to be made about which year's seal hunt was to be examined, which jurisdiction would be covered, how benefits, costs and net benefits would be measured, and which sources would be relied on.

Year

Even when the seal hunt was in full swing, the take of seals varied from year to year, mainly because of weather conditions and the path of ice-floes; no year was "normal" in every respect. The most meaningful approach appeared to be to compute the economic benefits and costs of the hunt in a year that was consistent with the long-term trend and as recent as possible, since otherwise the results of the computations would be of little interest.

Figure 14.8, Chapter 14, shows the number of seals landed, the prices paid by processors for raw skins, and the selling price of sealskins, exported between 1970 and 1984. The year 1982 satisfies the two conditions quite well. If trend lines are fitted to each of these data series, the values for 1982 would be close to those trends, though the catch was down from 1981, a record year in recent times, and a little lower than 1980. It was also the last year before the dramatic decline of the hunt. The year 1982, therefore, is taken as the basis for computing the economic costs and benefits of the seal hunt to the Atlantic region.

Coverage

Separate computations are undertaken for the Atlantic region and for the three provinces (Quebec, Newfoundland and Nova Scotia) which are

considered for present purposes to be within the region, and which were involved in the seal hunt in 1982. No licences to hunt were issued in Prince Edward Island or New Brunswick in that year. Moreover, because of the distinctive life-style and culture of some sealing communities in Labrador, separate computations are done for that part of Newfoundland. Finally, a computation is made for Canada as a whole.

Benefits

The benefits of the seal hunt are measured by the value of the goods and services it produced: the skins, oil and meat, whether sold or retained for the use of the hunter. In computing benefits for individual provinces, the earnings of sealers while serving as crew on vessels from other provinces and the commissions earned by agents for processors of other provinces are included in the provinces to which they belonged.

Double-counting of "intermediate products" is avoided. For instance, the value of sales of processed skins is included in benefits, but the value of sales of raw skins by the hunter to a processor in his own province is omitted. If a landsman sold raw skins to a processor in a different province, however, the returns the hunter received are included in the computations of benefits to his province; but in computing benefits for the province in which the processor is located, to arrive at totals for the Atlantic region, those raw skins are not counted.

Costs

The costs of the seal hunt are the value of goods and services which have to be given up so that labour and other factors of production may be devoted to the hunt and the transportation and processing of seal products.

Since our concern is confined to the costs which had to be incurred in order to have the hunting and processing undertaken, we shall do all the computations on a marginal basis. Costs which would not have decreased if there had been no hunt, for instance, interest payments on money borrowed by a fisherman/sealer to finance the building of his longliner, are ignored if he would have kept the boat for fishing.

The usual way to compute such costs is to take the payments actually made to these factors on the assumption that they would have been paid a similar reward in an alternative occupation if there had there been no hunt.

Sealers who were self-employed would be allocated the costs in line with their expected earnings in other occupations if there had been no hunt.

In areas of high unemployment, such as those in which sealing and seal processing took place, the price for labour is particularly difficult to assess. Some sealers might have been able to find other employment if they had not gone sealing, in which case their earnings in those alternative employments provide an approximation to the value of goods and services they would have produced in sealing. Inquiries on this point, however, invariably produced answers that no paid employment would otherwise have been available. This could be near the truth, since about half those involved generally existed during the winter on savings and unemployment-insurance benefits; and the other half could well have been unemployed or have sealed in their spare time. Informants insisted that nobody with a firm job would leave it to go sealing. Similarly, informants confirmed that no significant alternative employment existed for process workers and others associated with the hunt.[4]

The first approach taken in the computations is to assume that the informants were substantially correct, and that no alternative employment would have been available. A "shadow price" of zero is applied to the labour of sealers. The labour employed by processors and agents is treated similarly. This is an extreme assumption, rarely made in benefit-cost analysis, and one adopted here only with misgiving and after much hesitation. But the circumstances surrounding the seal hunt are unusual, since the hunt and the processing activities generally take place over a short period in winter, in small isolated communities where seasonal unemployment sometimes reaches 50%.

Because the assumption is extreme, however, "sensitivity analyses" were carried out to measure its effect. The computations were redone using the alternative assumption that in the absence of the hunt, the rate of employment among sealers and employees of processors and agents would have been the same as the general level of employment in the area. It seems to be the only other practicable assumption, but it is even more extreme in

4. None of this comment should be taken to imply that sealers and others concerned merely sit around idle when deprived of their normal work; rather the contrary, since the work ethic is alive and well in the districts concerned. The men chop wood, go hunting, repair their houses, and do other useful work. In principle the value of such activity should be considered the opportunity cost of going sealing or working on other jobs connected with sealing. But it does not necessarily result in much extra work being done during the year; it may merely redistribute work over time or among people.

the opposite direction, since sealers and persons employed as agents and in processing plants come from occupations normally subject to higher rates of unemployment in winter than is the general population. Other levels of unemployment could be postulated (20%, 30%, 40%, and so on) but each would be difficult to justify.

The first assumption, requiring the use of a zero shadow price for labour, would appear to be sufficiently close to the truth to justify its adoption, and the sensitivity analysis was carried out merely to indicate its effect.

Net Benefits

Net benefits are computed by deducting costs from benefits. It should be noted that this study seeks to establish the overall effect of the seal hunt on the Atlantic region and the provinces which it comprises, and does not concern itself with the manner in which net benefits of sealing and processing seal products were distributed. For instance, the returns to capital and the returns to labour are not separately computed, and no attempt is made to attribute the net benefits to primary, secondary or tertiary sectors of the region. Some comment, however, is made about the value of the hunt to those communities most dependent on it.

Indirect Benefits

When one sector of the economy of a region receives income, the effects spread out and benefit other sectors of the region; in other words, there is a "multiplier effect". If, for instance, part of the income a sealer receives for joining the hunt is spent on fishing gear for the next season and on building materials to finish his basement, the regional producers and distributors of that gear and those building materials would benefit indirectly from the hunt. Such multiplier effects would therefore seem relevant to benefit-cost analysis.

Nevertheless, the use of multipliers is fraught with conceptual and practical difficulties.[5] Among them is the argument that some, at least, of any indirect effects are caught by the use of shadow prices. Both multipliers and shadow prices rely on the existence of surplus capacity in the economy, since indirect effects can only occur if unused resources are available to

5. See, for instance, Canada, Treasury Board Secretariat (undated). Also refer to Kent and McAllister (1985, p. 61).

expand output in industries linked to the industry being analysed, and shadow prices are appropriate only when some of the resources to be used have been idle. When shadow prices are employed, as in this analysis, the effect of surplus capacity has already been accounted for, at least in part.

Moreover, in the approach used in this analysis, at the conceptual level the computation of benefits is based on the full output of processing plants; this method thus takes account of the value of raw skins produced in the sealing industry. The principal linkage, that between processing and sealing, is thereby recognized and incorporated in the calculations.

For such reasons, multipliers are not applied in this benefit-cost analysis. Some understatement of net benefits may possibly result, but it appears better to tolerate a little understatement than to risk presenting an exaggerated picture based on a dubious theoretical concept and inappropriate data.

Transfer Payments

Since this study sets out to assess the net benefits of the seal hunt to the Atlantic region, no account is taken in the computations of changes in transfer payments (taxes, unemployment-insurance contributions and benefits, and welfare payments) into and out of the region. The federal government could, if it wished, adjust transfer payments so that they matched the loss of net benefits from the hunt; in these circumstances, a benefit-cost analysis which took such payments into account would produce a figure of zero. It would not be answering the question it set out to answer.

Sources

The sources relied upon in this study include material published or otherwise provided by government departments and agencies, briefs to the Royal Commission, non-governmental publications, interviews with public servants and other people connected with sealing and seal processing, and information obtained by consultants engaged in associated studies for the Royal Commission.

Three sources have been used particularly extensively. They are the Department of Fisheries and Oceans (DFO), "Statistics of the Canadian Seal Catch" (various years), and two sample surveys of sealers, vessel owners and processors carried out by DFO and written up in Dunn (1977) and King (1981).

This study, like every other benefit-cost analysis, has had to grapple with shortage of data. Other information has been used as a proxy where precise data were not available, a good deal of estimation has had to be carried out, and assumptions have had to be made. Once the methodological framework had been established, the task was to select the best proxies and to work on the most reasonable assumptions.

Again, like all other benefit-cost analyses, this study has had to work under constraints of limited resources and time, and the desire for completeness and precision has had to be tempered by the bounds of practicality; in the absence of such constraints, one could have spent a lifetime following up all the economic ripples caused by the seal hunt.

Appendix 15.2 The Economic Value of the Seal Hunt off Canada's East Coast: A Comparison of Five Estimates

Over the past eight years, several estimates of the value of the Canadian east coast seal hunt have appeared. The values of five such estimates have been:

Dunn (1977)[6]	(referring to the 1976 hunt)	$ 5.4 million
King (1981)	(referring to the 1980 hunt)	$12.1 million
Canada, (DFO, 1985)	(referring to the 1982 hunt)	$ 9.8 million
George (1986)	(referring to the 1982 hunt)	$ 2.5 million
Watson (1985, p. 36)	(referring to the 1984 hunt as if it had been on same scale as that of 1978)	$20.5–37.5 million

What follows is a brief account of each of these estimates.

Dunn

This appears to have been the pioneering study. It sought to estimate the "value of the 1976 seal hunt to the Atlantic region". Its method was described as "the value-added approach of subtracting the cost of raw materials from total receipts for each sector of the industry." The study took the receipts of the primary and secondary sectors involved in sealing and

6. The value $5.4 million appears in the summary table but a figure of $5.9 million is mentioned at two points in the text.

deducted the cost of raw materials purchased by each sector; "raw materials" included only sealskins and seal meat. This is an unconventional procedure that yields results which are not very meaningful.

The value-added approach is properly used when computing the contributions of an industry to the value of output produced in a region. It avoids double-counting of goods and services sold by one firm to another. To arrive at a correct "value-added", however, one must deduct not only any raw materials purchased by firms, but also anything else purchased from other firms. For instance, any electric power, chemicals, water, and other goods and services (except labour) bought by a sealskin processor should be deducted from the value of the processed skins produced. Similarly, the cost of ammunition, clothing, equipment and gasoline used in the primary sector should be deducted from the value of raw skins and meat produced by sealers, to arrive at the value-added.

Because Dunn considered only the value of raw materials, he assessed landsmen's costs at only $1 per landsman, and costs for longliners and large vessels at only $14 and $489 per vessel respectively. From the figures provided elsewhere in his report, it appears that the cost of purchases other than raw materials, by sealers, vessel owners, agents and processors was about $1.5 million.

The value-added approach, even when conventionally applied, would only provide an estimate of the value of the seal hunt to the Atlantic region if one assumed that the labour and other inputs to sealing and seal processing (except those purchased from other firms) would otherwise have been idle. If this had not been so, their employment in sealing and seal processing would result in a reduction in the output of the activities in which they would otherwise have been employed, thereby incurring cost to the region in terms of forgone production.

Dunn does not mention his assumption that sealers would otherwise have been unemployed, but the assumption is reasonable given the special circumstances in which the hunt and seal processing took place. The majority of sealers were fishermen who were prevented by ice from fishing during the period when most sealing took place, and when alternative employment in the isolated communities in which they lived was scarce.

Dunn notes that "The economic benefit accumulated within the region through associated industries and occupations are not reflected in [his] study." He does not, therefore, apply conventional multipliers. However, he

does compute a kind of multiplier which was used subsequently in the DFO study; its significance will be discussed later.

Since Dunn was concerned only with the Atlantic region, he took no account of costs to the federal government for surveillance, research, law enforcement and publicity to counteract the activities of anti-sealing groups. DFO estimated that these costs amounted to $706,000 in 1976/77.

Adjusting Dunn's estimate to take account of costs not included in his computations produces the following:

Dunn's estimate	$5.4 million
Costs of sealers, vessels, agents and processors	–$1.5 million
Costs of federal government	–$0.7 million
Revised estimate	$3.2 million

King

King's method was similar to that used by Dunn. If he had deducted from the receipts of sealers, vessels, agents and processors the costs of all goods and services purchased from other firms, instead of just the cost of raw materials, his estimate of value-added by sealing and seal processing would have been reduced by about $1.9 million. Deducting federal government costs as computed by DFO for 1976/77 leads to a further reduction of $0.7 million.

Another reason that King's result was high is that he estimated the export value of processed skins in 1980 at $6.1 million. In fact, the export price from Canada in that year averaged $18.70 per skin, making the export value of the 162,000 skins processed in the Atlantic region in that year only $3.0 million.

Finally, unlike Dunn, King sought to capture indirect effects of the seal hunt on other sectors of the Atlantic economy, by applying a multiplier of 1.685 to both primary and secondary sectors. The source of this multiplier is given as the DFO Economic Development Directorate, but it seems more likely that it originated from Statistics Canada and was computed for an activity other than sealing and seal processing.

Making appropriate adjustment, and removing the effect of applying a multiplier, in order to produce comparability with the methodology of others, King's estimate becomes:

King's estimate	$12.1 million
Costs of sealers, vessels, agents and processors not taken into account	–$ 1.9 million
Costs of federal government	–$ 0.7 million
Overstatement of value of processed skins	–$ 3.1 million
Effect of multiplier	–$ 4.9 million
Revised estimate	$ 1.5 million

Department of Fisheries and Oceans (DFO)

The Department of Fisheries and Oceans took the same approach as Dunn and King, but did not deduct the expenditure on raw materials from the receipts of the primary sector.

The deduction of the cost of all goods and services purchased from other firms in both primary and secondary sectors would have reduced the economic impact of the Atlantic sealing industry by about $2.7 million.

The use of another procedure in its computations resulted in an inflation of value-added. Because the difference between the declared value of processed skins exported from Canada and the value of raw skins sold to processors averaged about $10 per skin from 1978 to 1981, it was assumed that this differential would apply in 1982, and the value-added by processing in 1982 was computed as $1.6 million (Canada, DFO, 1985). Added to the $3.7 million of raw skins produced by the primary sector that year, this produced a value of processed skins of $5.3 million. In fact, the average export price in 1982 was $26.90, making the export value of the 151,000 skins processed in 1982 only $4.1 million. DFO's value-added is therefore $1.2 million too high.

DFO computations do not take account of the cost of the hunt to the federal government. If the Department's estimate for 1976/77 is used, the value-added falls by another $0.7 million.

To reach the "total dollar contribution to the regional economy" (Canada, DFO, 1985), DFO used an "impact multiplier" of 2.668. This was the one Dunn computed for the 1976 hunt by dividing the value of processed seal skins by the value of raw skins. Such a multiplier is unrelated to the indirect effects of the seal hunt on other sectors of the Atlantic region. Applied to the value of raw skins produced in any year, it might provide a quick, though unreliable, way of estimating the value of the final products of the seal

industry in that year, but since DFO computed this value for 1982 in other ways, its use leads to double-counting.

Making appropriate adjustments, DFO's estimate becomes:

DFO's estimate	$9.8 million
Costs not taken into account	–$2.7 million
Overstatement of value of processed skins	–$1.2 million
Costs of federal government	–$0.7 million
Effect of multiplier	–$2.6 million
Revised estimate	$2.6 million

Watson

Watson evaluated the benefits of the hunt to sealers, processors and others, and then deducted their costs. He included in his computations several items that others ignored or did not attempt to quantify. These were:

- cost of the "seal war" (the cost to government incurred by the need to devise policies relating to the hunt, to police the hunt, and to counteract anti-sealing demonstrators);
- income losses to Canadians in other industries (resulting from damage to Canada's European trade);
- external costs to Canadians who do not approve of the hunt (the amount Canadians would be prepared to pay to see the hunt ended). This item is so large that it swamps the computation;
- psychic benefits to sealers (the satisfaction they derive from sealing);
- external benefits to supporters of the hunt (the pleasure some other Canadians experience because of the hunt).

Though he argues against the relevance of multipliers, he includes multiplier effects.

Watson stresses that the only value in his computations which can be regarded as "firm" is the income received by sealers. He makes no claim for the accuracy of his other data since they were "guesstimates" (Watson,

1985). Even his firm figure is suspect because he assumes that incomes in the sealing industry rose at the same rate as prices in general between 1978 and 1984. They did not. Export prices of processed skins were at their peak in 1978, and the catch and the number of skins processed were as high as in any recent year except 1980 and 1981. His estimate of $10 million to $18 million for sealers' and processors' income in 1984, assuming a hunt on the 1978 scale, seems unrealistic, given that exports of skins have never exceeded $5 million in any recent year except 1981.

Removing items not included in the other estimates, eliminating multiplier effects, and making other appropriate adjustments results in the following revised estimate:

	Low Estimate ($)	**High Estimate ($)**
Watson's estimate[a]	–(21 million)	–(38 million)
Costs of "seal war"	+ 1 million	+ 3 million
Income losses to Canadians in other industries	+ 0	+ 1 million
External costs to Canadians who do not approve of the hunt	+ 25 million	+ 50 million
Psychic benefits to sealers	–0	–5 million
External benefit to supporters of the hunt	–1 million	–3 million
Income gains to Canadians in other industries (multiplier effect)	–1 million	–3 million
Revised estimate	2 million[b]	5 million

a. The bottom of the range is the rounded difference between Watson's low estimates of costs and benefits, while the top of the range is the rounded difference between his high estimates of costs and benefits. If instead one subtracted his low estimate of costs from his high estimate of benefits, and vice versa, the range would be extended to $3.5 million–$54.5 million.

b. Due to rounding, figures do not sum to the totals shown.

George

George carried out a benefit-cost analysis along traditional lines. Non-economic factors and non-quantifiable economic factors were omitted from the calculations, though their possible importance was acknowledged.

Because of the special circumstances in which the hunt took place, George assumed that labour employed in the hunt and associated activities would have otherwise been unemployed. On theoretical and practical grounds, multipliers were not used.

Summary

After making adjustments, the revised estimates are:

Dunn (1976)	$3.2 million
King (1980)	$1.5 million
DFO (1982)	$2.6 million
George (1982)	$2.5 million
Watson (1984, but assuming a hunt the size of that of 1978)	$2–$5 million

All of these results would need adjustment upward if:

- the non-economic benefits of the hunt were significant;
- multipliers were deemed appropriate.

They would need downward adjustment if:

- because of the existence of the hunt the extra expenses of the federal government were higher than the $0.7 million incorporated in the above figures for Dunn, King, DFO and George, and the $0.5–$1.5 million assumed by Watson;
- non-economic costs and economic costs difficult to quantify were significant;
- the assumption that labour employed in the hunt or in seal processing would otherwise have been unemployed and therefore unproductive was deemed unrealistic.

Appendix 15.3 Cash Earnings from the Hunt

Northern Labrador

Cash income from the sale of sealskins has been important to individuals and households in northern Labrador. For fishermen and part-time wage earners, it provided critical bridging precisely at the time when unemployment insurance benefits were running out and preparations for the next fishing season were beginning. When market prices were high in 1980 and 1981, the most successful seal harvesters augmented their individual income by $5,000–$6,000. By comparison, income from the salmon fishery averaged about $3,000 (Williamson, 1986). In this same period, hunters primarily concerned with seal hunting for food could augment their annual incomes by between $500 and $1,000. Not all skins were sold; according to one survey, 73% of the hunters of Rigolet sold all their skins, and 64% of the seal hunters of North West River did the same. Unsold skins were used for domestic purposes or for craft/cottage-industry activities (Boles et al., 1983). The loss of income from seal pelts, coinciding with bad ice years, has brought considerable hardship to the people of Labrador, especially in northern Labrador, and has increased their reliance on welfare or unemployment-insurance payments.

Island of Newfoundland

The analysis in the preceding chapter underscored the importance of sealing income to Newfoundland sealers/fishermen. Up to 75 longliners operating along the northeast coast and the Baie Verte peninsula earned 25%–30% of their annual income from sealing. These vessels provided employment for about 350 persons. In addition, approximately 400 power-boat operators on the east coast of the northern peninsula had annual earnings from sealing averaging $500–$1,000. In 1982, six large vessels from Newfoundland carrying 163 sealers took part in the hunt, and the latter earned incomes of $3,000–$5,000 from this source. According to vessel owners, most of the sealers lived in communities along the northeast coast.

Tables 15.2 and 15.3 provide a picture of the total income from the landsmen hunt and the average income earned in recent years. Based on the number of sealers engaged in 1984, between 2,000 and 2,500 sealers earned an income from this hunt in Newfoundland. Sealers in Newfoundland/Labrador applying for price support for the 1982 and 1983 seasons num-

bered 783 and 661 respectively. In most cases, each applicant would represent up to four individuals. The numbers include sealers on longliners and large vessels as well as landsmen.

The tabulated data represent gross income based on pelt sales only. It is estimated that income from the sale of carcasses more than offsets operating expenses associated with the hunt. The estimates of sealing income, therefore, can be considered conservative.

Table 15.2
Distribution of Landsmen's Earnings from Sealing, Newfoundland/Labrador, 1976 and 1980

Gross Earnings from Sealing ($)	Proportion of Landsmen (%) 1976[a]	1980[b]
0	30.4	
1–100	32.9	
101–200	12.6	
201–500	14.7	
501–1,000	7.0	
1,000 +	2.4	
0		40.9
1–249		34.2
250–499		11.9
500–749		2.2
750–999		4.5
1,000–1,249		1.1
1,250–1,499		1.9
1,500–1,749		1.4
1,750 +		1.9

Source: a. Dunn (1977).
b. Calculated from King (1981).

Table 15.3 sets out the income information for landsmen by major sealing area. (See Figure 15.1.) In Area A, between Cape Norman and Cape St. John, the income level in some years was almost double the provincial average. The area has accounted for as much as 57% of the seal pelts harvested by landsmen in Newfoundland. There were approximately 400 active commercial landsmen in Area A, the majority of whom were concentrated in the St. Anthony, St. Lunaire and Griquet area on the end of the northern peninsula. Area B, between Cape St. John and Cape Freels, had more landsmen (500), but the income per sealer was considerably less than in Area A. The data suggest that the largest income losses from collapse of the hunt were concentrated in the northern part of Area A.

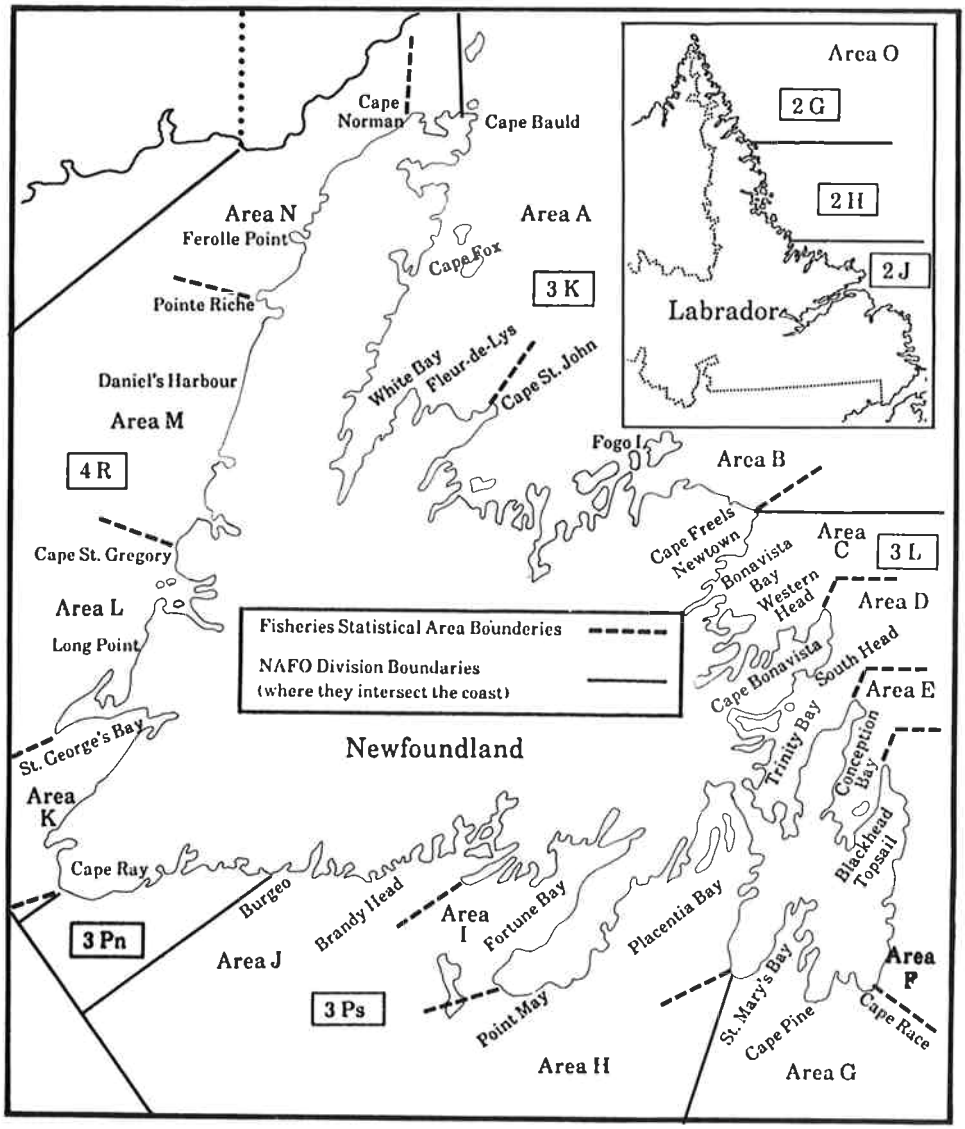
Table 15.3
Earnings from the Landsmen's Seal Hunt in Newfoundland, by Area, 1979–1983

	1979 ($)	1980 ($)	1981 ($)	1982 ($)	1983 ($)
Area A					
Total sealing income	271,037	393,104	294,011	334,507	157,257
Average income/sealer	678	983	735	836	393
Area B					
Total sealing income	141,503	159,086	102,967	114,488	88,884
Average income/sealer	282	318	206	229	178
Areas M & N					
Total sealing income	26,152	67,657	122,745	n.a.	n.a.
Average income/sealer	105	271	491	n.a.	n.a.
All Newfoundland					
Total sealing income	557,493	892,160	944,852	582,783	n.a.
Average income/sealer	338	541	573	353	n.a.

Source: Derived from DFO tabulations by Gardner Pinfold Consulting Economists Limited (1986).

The total income earned from pelt sales by longliners in Newfoundland, and the average earnings per vessel and per man, from 1980 to 1982, are shown in Table 15.4. The data indicate that a longliner sealer was able

Figure 15.1
Fishery Management Areas of Labrador and Newfoundland



to earn between $1,000 and $2,000 a season at that time. According to King (1981), longliners averaged 13.5 days actively hunting seals each season.

Table 15.5 shows that approximately 50% of longliners earn 90% of gross sealing income. Thus, if the vessels earning less than $5,000 gross per year are excluded, average incomes for vessels and sealers increase substan-

tially, from 65% to 96% higher for sealers. In 1981, the average sealer in this latter category grossed over $3,100. If meat sales cover the individual's share of expenses, then $3,100 is probably equal to the sealer's net return.

These data indicate that a substantial number of longliner sealers made a significant portion of their personal income from sealing activities. The total annual income from 1980 to 1982 for these fishermen/sealers ranged from $10,000 to $20,000. Thus it was possible for some individuals to earn 25%–30% of their annual income from sealing. The data indicate that approximately 350 individuals benefited in this way. The remaining longliner sealers (employed on vessels earning less than $5,000) accounted for less than 10% of total earnings from sealing. Per man, this amount averaged less than $1,000 a year.

Table 15.4
Longliner Sealing Income from Pelt Sales, Newfoundland, 1980–1982

Year	Longliners[a] (no.)	Sealers[b] (no.)	Total Sealing Income ($)	Average Earnings Per Vessel ($)	Average Earnings Per Sealer[c] ($)
1980	138	620	1,100,905	7,977	1,418
1981	145	650	1,479,748	10,205	1,814
1982	127	570	884,473	6,964	1,238

Source: Derived from DFO tabulations by Gardner Pinfold Consulting Economists Limited (1986).

a. Note that, for each of the years involved, the number of longliners (and sealers thereon) shown here as reporting income exceeds the numbers indicated as being actively engaged in sealing in Table 14.4, Chapter 14. The explanation appears to be that by-catches of seals occasionally are landed by fishing vessels licensed (or unlicensed) for sealing. (See also Table 14.2, Chapter 14).

b. Average of 4.5 men per longliner based on statistics recorded in Dunn (1977) and King (1981).

c. Average earning per sealer based on total earnings by vessel less 20% for vessel share, divided evenly among sealers – a common but not universal arrangement.

The fact that 50% of vessels earned 90% of income is not atypical of the fishing industry in Newfoundland. The report of the Task Force on the Atlantic Fisheries, *Navigating Troubled Waters* (Canada, 1983), noted that 90% of the Newfoundland groundfish catch was taken by 60% of the vessels. The Task Force's data indicated that "good" fishermen are consistently good

and "poor" fishermen are consistently poor. The same appears to be true of sealing activity.

The level of effort devoted to sealing to earn income can be estimated only roughly. In interviews with the Royal Commission's consultants, sealers said that sealing income was earned over a six-to-eight-week period, usually in March and April. Considering that the high-income vessels were generally ice strengthened, and that their crews, according to the interviews, were strongly committed to the seal hunt, the Royal Commission concluded that these vessels devoted more than the average level of effort to sealing (i.e., a longer period than the 13.5 days indicated by King), but exactly how much more is unknown.

Table 15.5
Longliner Sealing Income from Pelt Sales, for Vessels Earning at Least $5,000, Newfoundland, 1980–1982

Year	Longliners (no.)	Sealers (no.)	Proportion of All Longliners (%)	Proportion of Longliner Income (%)	Average Income Per Vessel ($)	Average Income Per Sealer ($)
1980	77	350	56	92	13,154	2,338
1981	76	340	52	92	17,913	3,185
1982	57	200	45	88	13,655	2,428

Source: Derived from DFO tabulations by Gardner Pinfold Consulting Economists Limited (1986).

Sealers on the large vessels earned more from sealing than either landsmen or crews sealing from longliners. Large-vessel owners reported that sealers on their vessels earned between $3,000 and $5,000 from all seal products in the last few years of the hunt. In most instances, this income was earned in one month and represented one-third to one-half of the individual's total annual income. It was earned at a time of year when no alternative income could be earned. For many, it helped to finance the start-up costs of the spring fishing operation.

North Shore, Quebec

Since 1976, there has been a steady decline in the number of licensed landsmen sealing on the lower north shore. Dunn (1977) recorded 1,013 licensed hunters, with a participation rate of approximately 40%. By 1980, the number of active hunters had dropped to 121 (King, 1981), although, according to the Institute of Social and Economic Research at Memorial University, Newfoundland, there were still 649 licensed sealers in this area in 1982. With the decline of the commercial hunt, some of the traditional hunting families have reduced their efforts. The Robertsons of La Tabatière, for example, no longer operate their net fishery.

Estimates of cash income from the hunt vary considerably. According to one observer, the seal fishery generally provided between $400 and $1,000 for the average north shore hunter, depending on the type of nets used, ice conditions and the size and location of the herd (Bobbit, 1985). However, Leonard Robertson has stated (Blanchard, 1985b) that he cleared $2,000 in each of the last three or four years of the fishery and, in good years like 1979, he made $4,000. These figures are probably higher than average, since the Robertsons had one of the larger sealing operations.

The sealing labour force along the north shore of Quebec consisted of about 120–150 people, most of whom lived in the Harrington–La Tabatière area. The lower north shore sealers were mainly inshore fishermen during the summer months. The incomes earned from the seal fishery fluctuated from year to year, and on a gross basis, reached a maximum total of about $160,000 in 1980. (See Table 14.17, Chapter 14.) The commercial hunt has declined steadily since that year, and it effectively ceased in 1982. With changes in the local economy, sealing is no longer a major source of cash income, but some families still hunt seals on a small scale for meat.

Magdalen Islands

From the data available on landsmen it appears that as many as 1,000 sealing licences were issued to Magdalen Islanders in any given year. Active hunters would probably account for 300–400 of the licensed landsmen. The cash incomes earned by the active landsmen varied, averaging about $300 in 1980. In that year, almost three-quarters of the active hunters earned no cash income, and a further 17% earned sealing incomes of less than $250 (Table 15.6). On the other hand, in 1980, a few sealers earned incomes in the $1,000–$2,000 range, figures confirmed in interviews with

sealers. For many Magdalen Islands sealers, unpredictable ice conditions meant that their sealing income varied sharply from year to year.

For the years 1978–1981, sealing data combine landsmen and longliner activity. The best of these years was 1979, when over 16,000 seals were taken, with a gross value of $288,000. If there were between 300 and 400 active sealers, the average gross income would fall between $720 and $960, but this is clearly an overestimate because the income data include the longliner catch. The corresponding income ranges in 1982 and 1983, for which it was possible to isolate the landsmen's gross income, are $630–$850 and $270–$360 respectively.

Table 15.6
Income Accruing to Landsmen from the Seal Hunt, Magdalen Islands, 1980

Earnings Level (1980$)	Landsmen (no.)	Proportion per Level	
		Cumulative (%)	Adjusted[a] (%)
0	441	74.3	
1–249	102	91.6	67.1
250–499	33	97.1	88.1
500–749	7	98.3	93.4
750–999	0	98.3	93.4
1,000–1,249	2	98.7	94.7
1,250–1,499	6	99.7	98.6
1,500–1,749	0	99.7	98.6
1,750–1,999	0	99.7	98.6
2,000–2,999	2	100.0	100.0
Non-response	17		
Total	610		

Source: King (1981).

a. Omitting zero category.

Using averages based on all licensed sealers to infer sealing income may be misleading, as King (1981) shows. According to that survey, an estimated 610 landsmen participated in the Magdalen Islands seal hunt. As the income distribution data presented in Table 15.6 demonstrate, however, 441, or 74%, of these hunters earned no income from the seal hunt. Of those hunters who did earn income, 102, or 17%, reported incomes below $250. Adjusting for the non-earners, the average gross earnings per landsmen sealer in 1980 was $296. If the results of the 1980 survey are typical of all years, they indicate that in the Magdalens most of the landsmen hunters earned a very small income from the seal hunt, while fewer than 10% earned income accounting for 10%–20% of their total income for the year.

Because these earnings figures represent only cash income, they understate the full value of sealing to the landsmen. Since sealers keep some seals for their own use, many of the sealers reporting a zero cash income from sealing are likely to have gained income in kind (King, 1981); the fact that these sealers earn no cash income may not affect their continued interest in sealing.

Longliners provided sealing employment for another 100–150 persons. Incomes for this group varied from year to year and may have been earned by 40–50 sealers in any given year. The longliner results in Table 14.10, Chapter 14, show that in 1982, for example, 18 vessels, with a total crew of 141, were licensed for the hunt. However, the longliner catch of 10,617 seals was taken by only 10 vessels, with a total crew of 78. Four of these vessels accounted for 83% of the longliner catch. Based on an average 1982 price in the Gulf of $20 per seal, this works out to average gross earnings on the high-catch vessels of about $5,000 per crew member. In 1983, the catch declined sharply. Although 21 vessels were licensed, the 2,825 seals harvested were taken by just six vessels. None of the four vessels with the highest catches in 1982 were among these six.

According to one source (Chambre de Commerce des Îles-de-la-Madeleine, 1985), crewmen on a longliner earned about $3,000 per year from the seal hunt. The 1982 longliner data show that such an earnings level is possible, but probably not typical. Some of the sealers interviewed reported earnings in the $3,000 range, but several stated that their sealing income varied a good deal from year to year. Both the 1982 and 1983 longliner results reviewed above are consistent with high variability. Still, the available information does show that it was possible to earn a reasonable income from longliner sealing. For crew members reporting earnings from sealing in the $3,000 range, these earnings would have accounted for 10%–20% of

the sealer's annual income; this level of earnings may have been received by a relatively small number of longliner sealers.

About 40 sealers from the Magdalen Islands were employed on large vessels during the hunts prior to 1983. Their pelts were taken to Blandford, Nova Scotia, for processing or landed at Port Aux Basques, Newfoundland, and trucked to Dildo for processing there. Once the vessel's share was deducted from pelt revenue, the remainder was split among the sealers and crew on a share basis. The sealers realized additional income from the sale of flippers and carcasses.

Large-vessel sealers generally earned a higher income than hunters operating from longliners or as landsmen. Specific income information for this group of sealers is unavailable but, judging from the harvest levels, sealing earnings were in the $3,000–$5,000 range. This income would be earned in a two-to-four-week period, and, if the Newfoundland experience applies, it would represent from one-third to one-half of the sealer's total annual income. When large vessels were active in the Gulf, this income was important for the vessel owners as well, and it could have accounted for between 20% and 50% of the vessel's annual gross revenue. Except for sealing, it is reported, the vessels mentioned would have been inactive at the time.

Cape Breton Island

When the catch in Cape Breton was large enough, and the price for pelts was sufficient, the sealers trucked pelts to processors. Some flippers and meat were sold locally on the island, and personal consumption was also an important end use. The seal hunt in Cape Breton has not been an important regular component of the Atlantic sealing economy. Sealing income came as a windfall in years when the ice carried the seals close enough to the shore to make sealing possible. Even then, except for 1981, earnings from sealing were a very small proportion of the sealers' total annual income.

Cash Income from the Processing of Seal Products

The last year in which a significant portion of total household income came from seal processing was 1982 (Table 15.7). Seal-processing workers have been unable to replace this lost income. A detailed examination of the household-income data revealed that, as late as 1984, the plant worker was

still the principal wage earner in each of the survey households. In several households, however, the worker's spouse appears to have entered, or more intensively participated in, the labour force.

Table 15.7
Income Characteristics of Workers at the Dildo Seal-Processing Plant

Income Distribution

Employment Income

Year	$2,000–$4,999 (no.)	$5,000–$9,000 (no.)	$10,000+ (no.)
1984	14	7	1
1983	9	11	2
1982	6	6	10

Unemployment-Insurance Income

Year	$2,000–$4,999 (no.)	$5,000–$9,000 (no.)	$10,000+ (no.)
1984	1	16	0
1983	2	14	0
1982	3	9	0

Total Household Income

Year	$5,000–$9,999 (no.)	$10,000–$14,999 (no.)	$15,000–$19,999 (no.)	$20,000+ (no.)
1984	2	15	4	0
1983	5	12	4	0
1982	1	11	7	2

Source: Gardner Pinfold Consulting Economists Limited (1986).

Appendix 15.4 Food Supply

Mackey (1985) explains why country foods are central to the well-being of coastal Labrador communities:

> *Community economies are marked, in the present as in the past, by the relative abundance or scarcity of game. While imported foodstuffs have recently become more available in coastal communities, access to "country food" or "wild food", the term residents use for game which they obtain themselves, continues to be important not only to the economy but also to the health and social well-being of families.*

Table 15.8 indicates the importance of "wild food" to residents of northern Labrador in 1979. Health and nutritional problems in the region have been attributed, in part, to changes in dietary habits, including increased consumption of imported foodstuffs.

Table 15.8
Value of Meat and Fish Consumed, Northern Labrador, 1979

Species	Edible Weight (lb)	Proportion of Total Country Food (%)	Value per Pound ($)	Total Value ($)
Caribou	151,625	25.4	4.00	606,500
Seal	119,525	20.0	4.00	478,100
Birds and small game	44,000	7.4	2.50	110,000
Fish	282,000	47.2	2.00	564,000
Total	597,150	100.0	–	1,758,600

Source: Usher (1982, Table 2.7).

In 1980/81, a Labrador food study was undertaken to examine sources of food supplies and consumption patterns for the purpose of analysing nutrients available to the residents of Black Tickle, St. Lewis, Rigolet and Makkovik. In Table 15.9 the importance of seal meat is related to that of other country foods. The Labrador food study identified distinctive patterns of consumption of country foods, which correspond to the six seasons of game availability and abundance: summer, early fall, late fall, winter, early spring and late spring. The relative contribution of seals to the country-food supply for each community is summarized by season in Table 15.10.

Table 15.9
Sources of Country Food Consumed, Four Labrador Communities, 1981[a]

Species	Community			
	Black Tickle (%)	St. Lewis (%)	Rigolet (%)	Makkovik (%)
Fish	68	70	44	30
Shellfish	1	1	0	0
Seals	15	16	23	11
Dolphins	0	0	0	1
Land Mammals	1	5	16	39
Birds	15	9	16	19
Total	100	100	100	100

Source: Mackey (1985).

a. Due to rounding, columns may not add to 100% exactly.

The significance of seal-meat consumption in terms of overall health and nutrition is described as follows:

> *Seal meat is an exceptionally nutritious food. It contains more high quality protein, needed for body growth and repair, and less crude fat than domesticated animals such as beef and pork and the flesh of fat or moderately*

fat fish. Seal meat is a very rich source of iron (7.5 times as much as beef) needed for the development of haemoglobin, the carrier of oxygen, in the blood. Seal meat is also a rich source of Vitamin A, containing 20 times the amount found in the muscle tissue of beef. Seal meat is low in fat and the fat that is present is relatively unsaturated as determined from its iodine number (121). Because of its low fat content and high content of myoglobin, seal meat has a high nutrient density with one-third of the energy equivalents found in beef (Boles et al., 1983).

Table 15.10
Seals as a Percentage of Total Country Food, Recorded by Season

Season	Community			
	Black Tickle (%)	St. Lewis (%)	Rigolet (%)	Makkovik (%)
Summer	2	–	2	2
Early Fall	2	2	16	4
Late Fall	11	8	7	16
Winter	35	35	48	40
Early Spring	27	50	22	4
Late Spring	2	5	10	24

Source: Mackey (1985).

Some households use much more seal meat than others. In Rigolet, for example, 53 of 59 households participating in the Labrador food study consumed ringed seal meat in amounts ranging from 1 kg (2.2 lb) to almost 180 kg (400 lb). Thirteen households reported average consumption of more than 45 kg of seal meat. The substitution value of ringed seal meat was calculated to range from $158/household to $2,147/household (Boles et al., 1983).

Seal meat makes a substantial contribution to the economy. The meat of one seal is worth $140, assuming a rate of $8.80/kg. If subsistence

hunting of seals were to cease, the cost of replacing seal meat alone would amount to nearly half a million dollars, based on the 1979 consumption rate cited earlier. Nor is it clear that the same nutritional equivalent to seal meat would actually be substituted; if it were not, a variety of health risks might result.

While seal meat is most important to Inuit communities, other residents of the Atlantic region also use the meat extensively. Reference was made to this fact in Chapter 14, and other sections of the present chapter provide additional information on the benefits associated with the consumption of seal meat.

Appendix 15.5 Sealing and the Fisheries: Further Details on their Interdependency

The seal hunt continues to attract sealers, as reflected in licence renewals in Newfoundland and the Magdalen Islands. In Newfoundland sealing retains a perceived value, despite the loss of the export market. Numbers of licensed landsmen actually increased between 1981 and 1983. (See Table 14.5, Chapter 14.) Longliner activity remained relatively stable in the 1970s, but has fallen off sharply since 1982. High levels of regional unemployment may provide a partial explanation for licence renewal. Other factors, however, such as the desire to demonstrate a commitment to community and to the value of work may also be important motivations.

A high licence-renewal rate is also characteristic of sealers in the Magdalen Islands, where other employment opportunities are similarly scarce. The decision to renew sealing licences in the Magdalen Islands, despite the knowledge that markets are very weak, is indicative of three facts.

First, fishermen have witnessed how non-renewal of licences in other fisheries has led to elimination from future participation, thereby reducing the number of total options (Québec, Ministère de l'Industrie et du Commerce, 1975).

A second factor may be a sense of determined optimism that Madelinots will succeed in their efforts to develop a viable, locally based, seal-fur industry. Magdalen Islanders have accepted the fact that the European markets for seal products probably are lost indefinitely, but they believe that a new industry, based on Canadian and local tourist demand, is a realistic

Crews' quarters on sealing vessel

goal. L'Association des chasseurs de phoque des Îles-de-la-Madeleine (ACP) and the Madelinot community at large, despite several setbacks historically, are enthusiastic about the potential of local seal processing and craft production to provide renewed marketing opportunities for sealers and new employment opportunities for others. A number of concrete steps to that end are being initiated.

The third factor encouraging annual sealing licence renewal is based on social and cultural aspirations. Sealers have been frustrated and angered by anti-hunt protesters. The act of wearing a sealer's badge is perceived as an expression of cultural and community defence against outside interference and misrepresentation (Simon, 1985). Madelinots and Newfoundlanders, in particular, are puzzled and angered by the international protest, but are also perplexed by the lack of support for their culture and way of life from other Canadians. They cite the publication of hate letters and cartoons in the national media as examples of cultural bigotry and slander. As a consequence of their history, Madelinots have become defiant and determined to protect their way of life against all threats. The incident that

occurred in 1984, when a helicopter belonging to protesters was overturned at the Cap aux Meules airport, was widely recognized as a long-overdue expression of cultural self-defence.

Newfoundland/Labrador

The renewal of sealers' licences in the Atlantic region is testimony to the complementary role that sealing plays with other income and employment opportunities. It is also testimony to the lack of such other opportunities. In northern Labrador, for example, survival for the majority of Inuit people is based on a combination of income derived from seasonal and casual wage employment, transfer payments, earnings from the sale of local commodities, and domestic or subsistence consumption of locally harvested resources. In 1979, income in cash and kind from local resources was estimated at $3 million, or slightly less than half the total economy. Seasonal fish-plant work during the months of July to November engages approximately 35% of the labour force. Some 80% of adult and adolescent males still hunt seals sporadically for a variety of reasons: to supplement domestic needs, to satisfy nutritional requirements and the preference for country foods, to demonstrate individual hunting skills, and to express a sense of cultural pride and identity.

The importance of sealing income is related to the time of year in which it is earned. During the sealing season, the northeast coast of Newfoundland experiences heavy ice conditions, making fishing activity impossible. The only source of income (besides unemployment-insurance benefits) at this time of year has been sealing activity, and extra income was particularly useful to fishermen just prior to the start of the fishing season. The other factor of significance, especially along the northeast coast, is that unemployment-insurance benefits for fishermen stop on 15 May. It is often well into June before fishing gets underway, and there is no other way to earn an income. Income earned from sealing helped fishermen over these periods.

A longliner fishing vessel which participated in the seal hunt had an opportunity to earn a return on investment over eight months, rather than during just a six-month fishing season. The longliner is a heavy capital investment for individual inshore fishermen. This type of vessel was first introduced to the Newfoundland fisheries in the 1960s to extend inshore fishing operations seasonally and spatially. Since a fisherman must go into debt to purchase a longliner, stable levels of income are necessary to cover

debt repayment. With a longliner a fisherman is able to take better advantage of fish-stock concentrations and market opportunities. Along the northeast coast of Newfoundland, from 1977 to 1980, fishermen received good incomes from the herring fishery and from sealing. Many invested in larger, more expensive vessels. Severe restrictions followed the collapse of the herring fishery in 1981, and sealing was abandoned after 1982. Many longliner enterprises have experienced serious financial difficulties as a result. Furthermore, the groundfish fishery in Newfoundland is currently suffering from depressed markets. Thus, although northern cod-stock availability has been improving since the imposition of the 200-mile national fishery-management jurisdiction in 1977, little benefit has accrued to fishermen because prices have been weak.

The relative importance of longliner sealing activity is shown in Table 15.11. Sealing income contributed up to 20% of total income earned by sealing longliners in Newfoundland between 1979 and 1983. Table 15.12 indicates that sealing income for fishermen using longliners was particularly important in Areas "A" and "B". [3]

Aside from primary fishing activities along the northeast coast of Newfoundland, the second leading type of employment is fish processing. In the communities of Twillingate and La Scie (see Figure 14.2, Chapter 14), major fish plants provide seasonal employment for 400 people. The main source of supply for these plants is the local longliner fleet, and the communities are dependent on the economic health of the fleet. Hence, although it made little contribution directly to secondary economic activity in these Newfoundland study areas, sealing activity was important for its contribution to maintaining a strong, financially viable longliner fleet.

In smaller communities, longliner fleets can play a major role. In the village of Wild Cove, on the Baie Verte peninsula, for example, a fleet of five longliners has been supplying a small "feeder" fish plant which in turn has provided seasonal employment for more than 35 people. Wild Cove is a community of 40 families, and this longliner fleet is vital to its existence.

3. For area key, see Figure 15.1 (Appendix 15.3).

Table 15.11
Newfoundland Longliner Sealing Income from Pelt Sales as a Proportion of Total Vessel Income

Year	Longliners Reporting[a] (no.)	Longliner Sealing Income ($)	Share of Total Vessel Income (%)
1979	84	375,030	8.5
1980	138	1,100,905	18.5
1981	145	1,479,748	19.7
1982	127	884,473	12.1
1983	85	251,175	5.2

Source: DFO, special tabulation.

a. See note (a), Table 15.4 (Appendix 15.3).

Area A: Cape Norman to Cape St. John

The major centres for sealing in this area are around St. Anthony on the northern peninsula and on the Baie Verte peninsula. (See Figure 15.1 in Appendix 15.3, and Figure 14.2.) The community of Fleur-de-Lys has been the sealing centre for all ports on the Baie Verte peninsula. Table 15.13 sets out the number of longliners and the relative importance of sealing income to total vessel income for Area A.

To put this in perspective, according to DFO data, longliners that participated in the seal hunt accounted for about one-third of all longliners in Area A, as shown in Table 15.14. In 1981, sealing contributed 31.6% of the total income of longliners in Area A that participated in the seal hunt. This figure was almost 12% higher than the provincial average for longliners during the same period.

In Tables 15.15 to 15.17, the performance of sealing longliner enterprises in Area A is compared with that of the provincial longliner fleet as a whole. These data indicate that during the last four years of significant sealing activity by longliners, the area accounted for between 30% and 40% of Newfoundland longliner sealing income. In two of the three years, the

Table 15.12
Longliner Sealing Income in Relation to Total Vessel Income by Fisheries Statistical Area, Newfoundland, 1980–1982

Area	Sealing Income ($)	Total Vessel Income ($)	Percentage of Total
		1980	
A	431,519	1,579,635	27.3
B	507,805	2,143,041	23.7
M	49,691	663,873	7.5
N	90,698	568,313	15.9
		1981	
A	602,265	1,903,190	31.6
B	493,406	1,851,012	26.7
M	68,415	769,694	8.9
N	184,292	1,500,293	12.3
		1982	
A	313,144	2,218,175	14.1
B	497,602	2,650,979	18.8
M	7,952	166,057	4.8
N	23,349	956,190	2.4

Source: DFO, special tabulation.

a. The data represent gross earnings from the sale of pelts only; meat sales would add 15–20%, on the average, to these figures.

area's average is significantly higher than the provincial average. In 1981, for example, Area A's average sealing income per longliner was 40% higher than the provincial average. Average individual earnings of $2,500–$3,000 per season from sealing also are recorded in a significant number of instances.

Table 15.13
Longliner Sealing Income from Pelt Sales as a Proportion of Total Vessel Income: Area A

Year	Longliners Reporting (no.)	Sealing Income ($)	Share of Total Vessel Income (%)
1979	19	119,245	12.8
1980	40	406,121	27.3
1981	42	602,256	31.6
1982	44	313,108	14.1

Source: DFO, special tabulation.

Table 15.14
Longliner Participation: Area A

Year	Sealing Longliners (no.)	Total Longliners (no.)	Percentage of Total
1980	40	121	33
1981	42	137	31
1982	44	149	30

Source: Gardner Pinfold Consulting Economists Limited (1986).

Table 15.15
Longliner Dependence on Sealing: Area A Compared with Province

Year	Number of Longliners Reporting		Income from Sealing ($)		Comparison (%)	
	Area A (1)	Nfld. (2)	Area A (3)	Nfld. (4)	1/2	3/4
1979	19	84	119,245	375,030	23	32
1980	40	138	406,121	1,100,905	29	37
1981	42	145	602,256	1,479,748	29	41
1982	44	127	313,108	884,473	35	35

Source: Computed from DFO data by Gardner Pinfold Consulting Economists Limited (1986).

Table 15.16
Average Income per Longliner from Pelt Sales: Area A Compared with Province

Year ($)	Area A ($)	Newfoundland ($)
1980	10,153	7,977
1981	14,339	10,205
1982	7,116	6,964

Source: DFO, special tabulation.

Table 15.17
Average Income per Longliner and per Sealer from Pelt Sales, for Vessels Earning at Least $5,000: Area A and Province

Year	Area A Longliners Reporting (no.)	Area A Sealers Engaged (no.)	Average Income per Longliner ($)	Average Income per Sealer ($)	Provincial Average per Longliner ($)	Provincial Average per Sealer ($)
1980	25	110	14,945	2,655	13,154	2,338
1981	25	110	18,221	3,240	17,913	3,184
1982	18	80	14,785	2,628	13,655	2,428

Source: Derived from DFO data by Gardner Pinfold Consulting Economists Limited (1986).

Area B: Cape St. John to Cape Freels

This area encompasses Notre Dame Bay, New World Island, Fogo Island and Hamilton Sound. (See Figure 15.1 in Appendix 15.3 and Figure 14.2.) The major longliner sealing activity is centred on New World Island, particularly around the community of Twillingate. Nearly 20% of the total Newfoundland longliner fleet was located in Area B during the 1980–1982 period. As the following DFO vessel data show (Table 15.18), sealing was a significant activity in Area B, although sealing vessels constituted a smaller proportion (18%–23%) of all vessels in Area B than in Area A (30%–33%).

Table 15.18
Longliner Participation: Area B

Year	Sealing Longliners (no.)	Total Longliners (no.)	Percentage of Total
1980	61	271	23
1981	47	265	18
1982	55	264	21

Source: Gardner Pinfold Consulting Economists (1986).

Table 15.19 sets out the number of longliners and the relative importance of sealing income to total vessel income. In 1980 and 1981, sealing income accounted for approximately 25% of total income earned by the vessels. Over the four-year period, the number of vessels involved ranged from 35 in 1979 to a high of 61 in 1980. Within a given area, the number of longliners participating in the hunt may vary considerably from year to year. If ice conditions are bad, older vessels or vessels not ice strengthened may be withheld from the hunt. Alternatively, if the seal resource is poorly situated, some vessel captains may decide not to participate, anticipating that the high operating cost of their vessels will not be covered by a poor seal harvest.

The number of longliners in Area B and their sealing income is compared with the corresponding provincial figures in Table 15.20.

Table 15.19
Longliner Sealing Income from Pelt Sales as a Proportion of Total Vessel Income: Area B

Year	Longliners Reporting (no.)	Sealing Income ($)	Share of Total Vessel Income (%)
1979	35	119,245	12.8
1980	61	507,805	24.0
1981	47	493,406	26.6
1982	47	497,602	18.6

Source: DFO, special tabulation.

Table 15.20
Longliner Dependence on Sealing: Area B Compared with Province

	Number of Longliners Reporting		Income from Sealing ($)		Comparison (%)	
Year	Area B (1)	Nfld. (2)	Area B (3)	Nfld. (4)	1/2	3/4
1979	35	84	119,245	375,030	42	32
1980	61	138	507,805	1,100,905	44	46
1981	47	145	493,406	1,479,748	32	33
1982	55	127	497,602	884,473	43	56

Source: Computed from DFO data by Gardner Pinfold Consulting Economists Limited (1986).

In three of the four years, this area accounted for between 42% and 44% of the number of longliners participating in the seal hunt. These vessels earned between 32% and 56% of the total sealing income earned by provincial longliners from 1979 to 1982.

Table 15.21 shows that, from 1980 to 1982, average income per vessel in Area B exceeded the provincial average for longliner income from sealing.

Table 15.21
Average Income per Longliner from Pelt Sales: Area B Compared with Province

Year	Area B ($)	Newfoundland ($)
1980	8,325	7,977
1981	10,498	10,205
1982	9,047	6,964

Source: DFO, special tabulation.

Information for vessels earning over $5,000 per season is set out in Table 15.22.

Table 15.22
Average Income per Longliner and per Sealer from Pelt Sales, for Vessels Earning at Least $5,000: Area B and Province

Year	Area B Longliners Reporting (no.)	Area B Sealers Engaged (no.)	Average Income per Longliner ($)	Average Income per Sealer ($)	Provincial Average per Longliner ($)	Provincial Average per Sealer ($)
1980	28	125	15,959	2,837	13,154	2,338
1981	25	112	18,221	3,239	17,913	3,184
1982	34	155	13,464	2,393	13,655	2,428

Source: Derived from DFO data by Gardner Pinfold Consulting Economists Limited (1986).

North Shore, Quebec

On the north shore of Quebec, sealing activity has been a significant source of family income. Of the approximately 200 families in the Harrington Harbour area, up to one-third derived some income from sealing and related activities. Average total household earnings have been estimated at $7,000 (Evans et al., 1985). Leonard Robertson of La Tabatière estimated

that earnings in good years averaged $4,000 each for the six shareholders of his seal-netting crew. His last major seal-net fishery was in 1980, although he has taken a few seals annually since then, primarily for food. Robertson stated:

> *It's bad with no market. During the last three to four years of the fishery, you'd make $20 for each skin, and $2,000 for two weeks of work was good. There wasn't much expense involved, either. Now we can't afford to operate the fishery (Blanchard, 1985b).*

Sealing income was earned by a relatively small portion of the lower north shore population. The sealers were predominantly inshore fishermen during the fishing season. As in the other sealing areas, income from the seal hunt, although not large, provided capital for the maintenance of summer fishing equipment.

For a few individuals along the middle and lower north shore, seals provide other opportunities to earn cash income. For example, fishermen are paid for each seal tag turned in to DFO. The Department also pays bounties on grey seals, and in 1983, paid out $11,415 to north shore residents. Occasionally, it hires fishermen to provide special collections and, since 1969, those fishermen engaged from the Tadoussac region have earned from $5,000 to $10,000 annually as a group for collecting harp seal samples.

Magdalen Islands

Magdalens' sealers and the Islands in general derived four major benefits from the hunt. First, the hunt provided income primarily used to maintain or buy fishing equipment at a very convenient time of year. Secondly, the income from sealing supplemented the fishing industry and therefore may ultimately have helped to provide employment in fish-processing plants on the islands. To the extent that the seal hunt has drawn tourists and other people to the Magdalens, it generated a third income benefit. Finally, the seal hunt maintained a tradition which has existed since the settlement of the islands.

As in Newfoundland, individual sealers had the opportunity to earn a significant income in roughly two to three weeks. For many Magdalen Islanders, this work came at a time of the year when the most likely alter-

native was dependence on unemployment insurance. The seal hunt also offered a rare opportunity for the vessels to earn income during the winter freeze-up.

Some 50% of the total population (14,500) of the Magdalen Islands is dependent on earnings from fishing and related activities. The seal-hunt earnings have always been an important component of fishing income. Sealers' estimated annual average earnings from the hunt ranged from $1,000 to $3,000, depending on the size of boat used, catches and prices. Total individual gross earnings from all fishing activities are estimated to average $13,000–$14,000; lobster fishermen may earn incomes of over $25,000 (Chambre de commerce des Îles-de-la-Madeleine, 1985). Although seals are still taken for domestic household use, limited commercial (restaurant) use, and local craft production, sealers have not exerted the same effort to harvest seals since the EC ban was imposed on imports of juvenile harp and hooded sealskins. In a Radio-Canada interview of April 1985, Madelinot sealers expressed their sense of loss at non-participation:

> *Here, in the month of March, at five o'clock in the morning, all the fishermen – sealers are fishermen – were up, getting ready to go sealing. Everybody was working, while today, they come, they go . . . Now, in the Islands, at eight or nine o'clock, people still sleep; they wait for their unemployment insurance check. They don't work any more. There is nothing for them now, in the Islands (Willie Lebel).*
>
> *It's strange, we were used to seal on large vessels, as big as sixty feet long . . . school of seals, every year, and this year, it's impossible to go (Reynald Vigneault).*
>
> *Our parents were doing it, and our grand-parents also; we grew up with it. They showed us how. All of a sudden, no more sales and we are forced to stop. We don't know any more . . . we have to keep going . . . We went this year, three or four times. We went for the meat, but now, it's over. Everybody has meat (Serge Solomon).*
>
> *Normally, at this time of the year, we would be sealing, but . . . not enough money for spring; we always need money for the boat. There are always some paint jobs to do, some traps to repair (Ghislain Cyr). (Translation)*

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Chapter 16

Future Prospects

It is apparent from studies done by the Canadian Sealers Association in conjunction with both levels of Government that the door is open for a gradual revitalization process in Canada; that many additional jobs can be created in the Northwest Territories and Newfoundland and Labrador where the industry is important at the community level; and that even European politicians who are recommending an extension of the two year ban on whitecoat seals have accepted an eventual regrowth of the market for indigenous furs from Greenland and Canada (Canadian Sealers Association, 1985).

Export Markets

In this section, the past record and future market prospects of the Canadian sealing industry are examined within the context of world-wide supply and demand for seal products. The products are: raw and dressed or tanned skins; blubber and oil; meat; and manufactured products, especially garments, footwear, souvenirs and leather articles.

There is a distinction between the *analysis* of market prospects and a market *development* study. It would have been inappropriate for the Royal Commission to undertake market-development studies; it was necessary, however – in accordance with the Commission's terms of reference – to undertake the analysis of market prospects[1].

1. In this analysis, unless otherwise stated, prices are quoted in Canadian dollars. Exchange rates used to convert other currencies into Canadian dollars are those valid in June 1985:

$1 Canadian	=	0.73	US dollars (US$)
	=	8.03	Danish kroner (Dkr)
	=	6.42	Norwegian kroner (Nkr)
	=	192.31	Japanese yen
	=	1.69	Deutschmark (DM) (Federal Republic of Germany)
	=	6.80	French francs (FF)
	=	1.00	European currency unit (ECU)

The European Community

The European Community (EC) has traditionally been the largest market in the world for sealskins. Between 1979 and 1983, net imports, that is, imports less exports by the Community, amounted to an annual average of about 298,000 skins representing 50–60% of those produced world-wide and 70–75% of the total quantity entering international trade. Since 1983, EC imports of sealskins have declined dramatically, as shown in Table 16.1. The sharp decline in imports in 1984 coincided with the Community directive that prohibited the import of harp and hooded pup sealskins, and that took effect in October 1983. In most countries, as a result of the anti-sealing movement, consumer demand for sealskin products had sharply declined, and in several countries the fur trade had already decided to impose a voluntary ban on the use of pup sealskins.

Table 16.1
Total European Community Imports of Sealskins, 1979–1985

Year	Raw Skins (no.)	Dressed Skins (no.)	Total (no.)
1979	170,678	238,261	408,939
1980	148,225	309,804	458,029
1981	160,897	302,091	462,988
1982	145,487	252,908	398,395
1983	125,792	129,356	255,148
1984	62,604	56,004	118,608
1985[a]	46,368	41,291	87,659

Source: European Statistical Office (Eurostat), as reported by Market and Industry Analysts (MIA, 1986).

a. First 10 months.

The Council of the European Community in Council Directive 83/129 EEC prohibited the import into the Community of:

Raw furskins and furskins, tanned or dressed, including furskins assembled in plates, crosses and similar forms:

- *of pups of harp seals (whitecoats)*
- *of pups of hooded seals (bluebacks).*

Articles of the furskins referred to above.

This ban was to apply initially for a period of two years from 1 October 1983, to 1 October 1985. (See Chapter 10.) In September 1985, the Council of Ministers renewed the Directive, but only for a further four years, to 1 October 1989.

The ban does not apply to products of Inuit hunting. In fact, in justifying its proposal to the Council, the European Commission said that "the negative reactions to be expected in case the Directive is not prolonged will do further and maybe irreparable damage to the fur industry as well as to the economy of Inuit in Canada and Greenland."

Market Size and Structure

No commercial sealing takes place within the EC (Greenland is now outside the EC). Over a sufficiently long period of time, net imports should correspond to consumption, but this is not necessarily so in the short term. In particular, during the last year or two, there is evidence that large quantities of skins have been added to inventories, for lack of purchasers.

The net imports of 84,000 raw skins annually between 1979 and 1983 were the result of average annual imports of 150,000 skins and re-exports of 66,000. (See Tables 16.2–16.4B.) The 84,000 raw skins remaining in the Community were processed within the EC. A considerable proportion of the exported raw skins were sent to Norway and Sweden for dressing, and many of them were subsequently re-imported into the Community. The main sources of raw skins have been Greenland, Canada, South Africa and, to a lesser extent, Norway. Raw skins from Greenland are almost all imported by Denmark and most of those from South Africa went to Germany. Canadian raw skins have gone mainly to the United Kingdom and Germany.

During the period from 1979 to 1983, the EC imported an average of 246,000 dressed skins a year and exported 32,000, giving net imports of

Table 16.2
EC Imports: Complete Raw Furskins of Seals and Sea Lions, 1975 and 1979–1983

Origin	Number of Skins						Annual Average 1979–1983
	1975	1979	1980	1981	1982	1983	
Intra EC	47,811	33,074	18,590	9,294	12,257	2,563	15,155
Extra EC[a]	171,145	170,678	148,225	160,897	145,487	125,792	150,216
Norway	16,548	12,837	13,274	8,965	11,100	6,000	10,435
Greenland	53,715	101,621	74,255	66,695	67,183	51,282	72,207
Canada	50,296	47,444	39,390	43,197	37,933	9,805	35,554
United States	–	–	–	–	–	81	16
South Africa	28,002	–	18,130	38,018	28,875	57,219	28,448
Uruguay/Peru	7,456	–	–	–	–	–	–
Total[b]	218,956	203,752	166,815	170,191	157,744	128,356	165,372
Value (ECU '000)	5,780	4,242	3,764	3,928	3,334	2,195	3,493
Average value per skin (ECU)	26.4	20.8	22.6	23.1	21.1	17.1	21.1

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

a. Because of incomplete source list, figures do not add to the total.
b. Because of statistical discrepancies, intra and extra EC figures do not always add exactly to the total.

Table 16.3
EC Imports: Tanned or Dressed Furskins of Seals and Sea Lions, 1975 and 1979–1983

Origin	Number of Skins						Annual Average 1979–1983
	1975	1979	1980	1981	1982	1983	
Intra EC	34,517	29,581	41,736	75,247	90,219	205,188	88,394
Extra EC[a]	190,379	238,261	309,804	302,091	252,908	129,356	246,484
Norway	84,108	135,945	151,728	144,255	132,782	87,529	130,448
Greenland	3,609	14,768	46,515	40,985	37,625	8,109	29,600
Soviet Union	–	15,822	11,821	18,125	15,892	5,064	13,345
Canada	–	464	2,738	12,075	2,865	1,855	3,999
United States	36,103	4,701	7,951	2,674	2,795	2,857	4,197
South Africa	–	441	2,102	286	2,300	1,000	1,226
Uruguay	3,927	1,481	210	–	330	–	404
Sweden	42,010	40,787	46,769	40,803	14,711	9,940	30,602
Finland	–	22,473	39,599	41,138	42,802	12,941	31,791
Total[b]	224,896	267,842	351,540	377,338	343,127	334,544	334,878
Value (ECU '000)	6,630	8,239	10,633	12,513	11,120	6,743	9,850
Average value per skin (ECU)	29.5	30.8	30.2	33.2	32.4	20.2	

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

a. Because of incomplete source list, figures do not add to the total.
b. Because of statistical discrepancies, intra and extra EC figures do not always add exactly to the total.

Table 16.4A
EC Net Imports (Apparent Consumption) of Furskins of Seals and Sea Lions, 1975 and 1979–1983

	Number of Skins						Annual Average
	1975	1979	1980	1981	1982	1983	1979–1983
Extra EC Imports							
Raw skins	171,145	170,678	148,225	160,897	145,487	125,792	150,216
Dressed skins	190,379	238,261	309,804	302,091	252,908	129,356	246,484
Total	361,524	408,939	458,029	462,988	398,395	255,148	396,700
Extra EC Exports							
Raw skins	46,892	74,189	75,659	66,052	71,218	44,674	66,358
Dressed skins	22,124	42,455	36,445	17,683	36,273	27,270	32,025
Total	69,016	116,644	112,104	83,735	107,491	71,944	98,384
Net Imports							
Raw skins	124,253	96,489	72,566	94,845	74,269	81,118	83,857
Dressed skins	168,255	195,806	273,359	284,408	216,635	102,086	214,459
Total	292,508	292,295	345,925	379,253	290,904	183,204	298,316

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

214,000. By far the most important source of dressed skins has been Norway, which exported an average of 130,000 skins a year to the EC during the period. The dressed skins imported from Norway included skins from Canada, the East and West Ice, and skins sent for processing to Norway by dealers in the United Kingdom, Denmark and elsewhere. The other main sources of dressed skins have been Sweden and Finland. Neither of these countries has a sealing industry, but both have well-developed fur industries and dressing facilities.

A considerable proportion of the skins from Sweden and Finland (especially those from Finland) have originated in Canada. Significant quantities of dressed skins have been imported from the Soviet Union (although it is understood that most, if not all, of these skins have been sent by the Rieber company for auction at Leningrad) and from the United States (Pribilof fur seals from the Fouke Fur Company). The significant imports of dressed skins from Greenland must be considered incorrectly classified. Greenland has no dressing plant, and the skins have been only roughly dressed.

Informants in the European fur trade consider that most of the Community's exports of raw skins, averaging 66,000 a year during the period 1979–1983, have found their way back to the Community in the form of dressed skins. The European Statistical Office's (Eurostat) records of imports indicate that there was a considerable level of intra-Community trade, amounting on average to 15,000 raw skins and 88,000 dressed skins a year during the period 1979–1983. The Community has also exported an average of 32,000 dressed skins a year, mainly from Germany.

Based on net imports during the period 1979–1983, average annual consumption of (raw and finished) sealskins by the five major seal-product consuming countries of the EC was as follows:

Germany	81,743
Denmark	78,815
Italy	52,323
France	51,846
Greece[a]	38,389

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

a. MIA (1986) estimate based on 1981 and 1982.

Table 16.4B
EC Net Imports of Furskins of Seals and Sea Lions, by Age of Animal, 1984–1985

	1984			1985[a]		
	Pups[b] (no.)	Other (no.)	Total (no.)	Pups[b] (no.)	Other (no.)	Total (no.)
Extra EC Imports						
Raw skins	159	62,445	62,604	1,772	44,596	46,368
Dressed skins	8,017	47,987	56,004	114	41,177	41,291
Total	8,176	110,432	118,608	1,886	85,773	87,659
Extra EC Exports						
Raw skins	388	59,461	59,849	1,424	38,413	39,837
Dressed skins	3,577	41,483	45,060	1,022	13,101	14,123
Total	3,965	100,944	104,909	2,446	51,514	53,960
Net Imports (Exports)						
Raw skins	(229)	2,984	2,755	348	6,183	6,531
Dressed skins	4,440	6,504	10,944	(908)	28,076	27,168
Total	4,211	9,488	13,699	(560)	34,259	33,699

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

a. January–October inclusive.
b. Harp and hooded seals.

It should be emphasized that, especially in the present disturbed state of the market, net imports do not necessarily correspond to consumption, since it is thought in trade circles that stocks have greatly increased.

Federal Republic of Germany

West Germany and Denmark traditionally have been the largest consumers of sealskins in Europe. Germany has been also an important pro-

ducer of sealskin garments, especially those using Cape fur seals (for which Germany has provided much the biggest market), and of footwear, particularly from skins of ringed seals. Germany also has an important fur-dressing industry; it has been a large net importer of raw skins and an important exporter of dressed skins. Since 1981/82, the German market for sealskin garments and footwear has declined sharply, and a number of companies have been forced out of business.

Before the almost complete collapse of imports in 1984, the steady decline between 1979 and 1983 (Table 16.5) was chiefly the result of a decline in imports of dressed skins from Norway (from 87,000 in 1979 to 24,000 in 1983). The other main source of dressed skins was the United Kingdom, with exports to Germany of between 10,000 and 20,000 a year up to 1982, falling to 5,000 in 1983. German imports of raw skins came principally from South Africa, Canada, Denmark and Norway.

Table 16.5
Germany: Net Imports of Sealskins, 1979–83

	Number of Skins					Annual
	1979	1980	1981	1982	1983	Average
Imports						
Raw skins	54,596	42,647	65,687	67,410	69,896	60,047
Dressed skins	108,041	80,361	97,313	88,360	33,928	81,601
Total	162,637	123,008	163,000	155,770	103,824	141,648
Exports						
Raw skins	2,446	12,300	600	1,523	2,950	3,944
Dressed skins	47,239	50,498	59,778	77,225	45,064	55,961
Total	49,685	62,799	60,378	78,748	48,014	59,905
Net Imports	112,952	60,209	102,622	77,022	55,910	81,743

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

Until the early 1980s, of net imports of 100,000 or more skins, at least 60,000 were used for footwear and most of the remainder in the

garment industry. This allocation produced about 100,000 pairs of footwear and up to 10,000 coats. Some 2,000 skins were used by the trade in souvenirs and small leather articles. The German market was not expected to absorb more than 20,000–25,000 skins in 1985.

The German fur-coat market, with a retail value of DM 1.31 billion ($780 million) in 1984 is the largest in the world after that of the United States. Although sealskin coats never made up more than about 1% of the total value of the fur-coat market (Kurschneiverband, 1985), there was a reasonably consistent demand. Demand declined slowly over the years, but in 1981, the market collapsed. The retail price of coats declined by 40% between 1980 and 1984. Many important retail organizations have stopped selling sealskin garments. German mail-order firms that used to show from five to 10 sealskin garments in their catalogues no longer do so.

Luna Schuhfabrik, the only company now manufacturing sealskin footwear in Germany, bought 5,000 skins in 1984, which would produce 8,000–10,000 pairs of après-ski boots. The market for these has fallen by 90% since the late 1970s. The industry mounted a DM 100,000 ($59,000) public relations campaign to counteract the anti-sealing agitation, apparently with little effect. An industry spokesman (Heid, 1985) said that they had approached the Canadian government for financial participation. Canada's refusal caused some ill-feeling.

There is still some demand for seal-leather products such as wallets and purses, despite the very high prices of these goods. Other sealskin products such as sports goods (ski-skins, rucksacks, etc.) have now totally disappeared from the market in favour of articles made of synthetic materials.

As far as consumer attitudes are concerned, it seems clear that because of changes in fashion, there had been a slow, but long-term, trend away from seal products, which, in any case, appealed to a minority. The sudden collapse of the market in 1981/82 reflected the intensification of the anti-sealing campaign. The decision of major retailers to stop handling seal products was a defensive move which deprived the consumer of the opportunity to buy such products.

The immediate prospects for a revival of the German market appear poor. Even if the conditions created by the anti-sealing campaign could be overcome in the medium term, the industrial infrastructure and necessary manufacturing skills are likely to be lost.

Denmark

In 1984, Denmark was the only EC country with an active trade in sealskins. Apparent Danish consumption of over 100,000 skins a year in the recent past (Table 16.6) would be sufficient for the manufacture of 20,000 sealskin coats, and it seems that production was at that level or higher. Until 1981, total world production of sealskin coats, according to Levitan of K.V. Stampe and Sønne, was 70,000–80,000 a year, but it has now dropped to 10,000. Purchases by Levitan's firm, which represented a very high proportion of world supplies, formerly included large quantities from the Hudson's Bay Company (HBC) but are now restricted to Greenland ringed seals. About 60% of the sealskin coats manufactured in Denmark are exported, mostly to Germany but also to Norway and Austria. These markets, particularly the German, are in decline.

Table 16.6
Denmark: Net Imports of Sealskins, 1979–1983

	Number of Skins					Annual
	1979	1980	1981	1982	1983	Average
Imports						
Raw skins	110,267	68,003	60,346	56,476	47,967	68,612
Dressed skins	76,220	147,719	94,651	66,885	29,950	83,085
Total	186,487	215,722	154,997	123,361	77,917	151,697
Exports						
Raw skins	77,928	79,690	55,362	70,420	48,081	66,296
Dressed skins	6,077	4,151	5,722	10,862	6,118	6,586
Total	84,005	83,841	61,084	81,282	54,199	72,882
Net Imports	102,482	131,881	93,913	42,079	23,718	78,815

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

The attitude taken by the Danish fur trade to the protest movement is exceptional. Unlike the fur trade in other European countries, the Danish

trade neither imposed a voluntary ban on the use of pup sealskins before the EC directive nor co-operated with the Danish government in enforcing the directive. As a result Denmark is the only EC country to introduce official regulations to enforce the ban.

Italy

Table 16.7 shows that Italian imports of sealskins increased over the period 1979–1983. Particularly for 1983, the increase is explained as stockpiling in anticipation of the EC ban. Italy's principal supplier is Norway (43% of imports in 1983), followed by West Germany (21%), the United Kingdom (14%) and Finland (10%).

Expectations for an increase in consumer demand for sealskin products appear to have been misguided. According to statements made by the chairman of the *Associazione Italiana della Pellicerria* (Market and Industry Analysts, 1986) at the fur-trade fair in Milan, the trade in sealskin garments

Table 16.7
Italy: Net Imports of Sealskins, 1979–1983

	Number of Skins					Annual
	1979	1980	1981	1982	1983	Average
Imports						
Raw skins	4,600	–	492	657	–	1,150
Dressed skins	32,324	49,109	56,895	50,838	71,693	52,172
Total	36,924	49,109	57,387	51,495	71,693	53,322
Exports						
Raw skins	–	–	–	–	–	–
Dressed skins	266	1,055	748	524	2,381	995
Total	266	1,055	748	524	2,381	995
Net Imports	36,658	48,054	56,639	50,971	69,312	52,327

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

has virtually ceased, and there is little hope for a revival. Not one sealskin garment was to be found at the Milan fair in March 1985.

In the opinion of the trade, the decline in the Italian sealskin market has resulted from the EC ban on imports of whitecoats and bluebacks (affecting leather-product manufacture in particular) and the Italian ban on all imports of harp seals, regardless of age. On the other hand, the curious Italian ban on imports of pup sealskins shorter than 50 centimetres has had no effect, given that the average length of seals at birth is considerably greater than that.

Conversations with Italian exhibitors at the Milan fair indicate that changing fashions have had as much, if not more, effect on demand for sealskin garments as the anti-sealing campaign. According to Balzani, a leading Roman furrier, "The problem is that sealskin fur tends to make women look old so why pay money to put on years?" The more fashionable longer-haired furs, on the other hand, provide "a rejuvenating lift". Italian furriers consider that a possible means to revive the product's fortunes would be to try out new, lighter colours or red shades (similar to beaver). Such experiments with dyeing might help to open up a new market among the young, "thereby creating a new image for the product" (Market and Industry Analysts, 1986). In other words, furriers believe that to sell, sealskin fur must not look like sealskin, which has acquired an old-fashioned image.

R. Cascinari (1985) of the *Associazione Italiana Manufatturieri Pelli-Cuoio e Succedanei* reports that the production in Italy of leather articles made of sealskin has virtually ceased. The reason for the product's demise is lack of supply of pup skins and the very high price of such items, which are as much as 10 times more expensive than other leathers.

France

French imports of sealskins have fluctuated over the period 1979–1983, although there was a sharp decline in 1983, when raw skin imports fell by 35% and dressed skin imports dropped by 47% (Table 16.8). Over 60% of raw skin imports originated in Norway and the balance in Greenland; Norway also supplied over 80% of dressed skins. The presence of raw skin imports without any corresponding exports is surprising, since the last French seal-leather tanner (Luxor) went out of business in 1980 (Descottes, 1985). Figures for the first nine months of 1984, however, show that virtually no raw sealskins entered France that year, and that there was a further decline in dressed sealskin imports.

Table 16.8
France: Net Imports of Sealskins, 1979–1983

	Number of Skins					Annual
	1979	1980	1981	1982	1983	Average
Imports						
Raw skins	14,388	23,153	19,973	14,914	9,629	16,411
Dressed skins	26,290	44,160	61,364	55,580	29,270	43,333
Total	40,678	67,313	81,337	70,494	38,899	59,744
Exports						
Raw skins	952	975	–	–	–	385
Dressed skins	5,518	1,817	2,905	23,156	4,168	7,513
Total	6,470	2,792	2,905	23,156	4,168	7,898
Net Imports	34,208	64,521	78,432	47,338	34,731	51,846

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

It is generally acknowledged that the French market for sealskin products has been dormant for some 15 years. This market has never been as large as the German market, but its earlier decline derived from the greater impact of the French anti-sealing campaign led by Brigitte Bardot. There is no national legislation covering sealskin imports, although as early as 1976, the fur trade introduced a "Charte de la Fourrure" (fur charter) apparently under pressure from President Giscard d'Estaing. Point 3 of the charter states that "the industry is totally opposed to the slaughter of baby seals and to the use of their pelts." As in other markets, the public did not distinguish between "baby" and adult seals so that demand for all seal products was severely hit (Richard, 1985).

The fur industry maintains that the anti-sealing campaign virtually killed the market as long ago as the late 1960s. As a result, women became very reluctant to be seen wearing fur items which had become so emotionally charged. Despite the voluntary ban on imports mentioned above, whitecoat pelts were used widely in France until the late 1970s, as trimmings and fur accessories. Sales of, and demand for, seal-fur garments, however, have been

virtually nil over the last few years. At the Paris Salon de la Fourrure exhibition in 1985, not one sealskin item was displayed.

There are a few manufacturers of sealskin après-ski boots in France, although their production, amounting to about 50,000 pairs a year, is very marginal compared with total French shoe output. Decline is attributed to a series of mild winters, very high selling prices for what is a utility product, changing tastes in fashion and lack of appeal for young people. The anti-sealing campaign is not considered to have had a negative effect on sales, possibly because footwear is less "visible" than a garment.

There used to be a limited output of, and demand for, small articles such as wallets and purses of seal leather, but according to the *Fédération nationale de la maroquinerie* (Market and Industry Analysts, 1986), high prices and the anti-sealing campaign have effectively killed the market. A key problem is the lack of supply of the pup skins needed for this sector. The advantages of seal leather are its extreme thinness, which is ideal for non-bulky wallets, for instance, and its exceptional hard-wearing, yet supple qualities. It is also a leather which ages well. The trade association believes that demand could be revived with appropriate publicity, assuming that there were adequate supplies of raw material and freedom to import it.

Greece

Demand for sealskin garments in Greece is quite buoyant (Table 16.9). In contrast to the warm summer months, winters in Greece can be quite cold, particularly in the north. Furthermore, the anti-sealing campaign has had little effect in Greece. The ecological movement is very weak

Table 16.9
Exports of Dressed Sealskins from Germany to Greece, 1981 -1984

	1981	1982	1983	1984[a]
Number of Skins	24,748	34,488	9,517	11,350

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

a. First nine months.

there, and Greeks appear to have no inhibitions about wearing seal (or other) fur garments. It seems, however, that Greek imports of sealskins have been used primarily in the manufacture of garments on behalf of German fur companies for re-export to Germany.

United Kingdom

The United Kingdom has never been a particularly important market for sealskin garments or footwear. Its importance has been as a trading centre for sealskins and to a lesser extent as a processing centre, particularly for the tanning of hides for leather. Canada has long been the main source of raw sealskins traded in the United Kingdom; it supplied 100% of the raw skins imported in both 1982 and 1983. Table 16.10 gives a breakdown of net imports of sealskins in the United Kingdom.

Table 16.10
United Kingdom: Net Imports of Sealskins, 1979–1983

	Number of Skins					Annual
	1979	1980	1981	1982	1983	Average
Imports						
Raw skins	19,781	36,971	23,693	18,158	1,763	20,073
Dressed skins	24,461	29,904	32,755	38,371	9,228	26,944
Total	44,242	66,875	56,448	56,529	10,991	47,017
Exports						
Raw skins	19,715	32,037	25,250	15,406	5,732	19,628
Dressed skins	25,265	30,149	47,029	42,308	32,909	35,532
Total	44,980	62,186	72,279	57,714	38,641	55,160
Net Imports	–738	4,689	–15,831	–1,185	–27,650	–8,143

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

The U.K. sealskin industry now consists of one important trading company, a few other fur dealers who handle sealskins and one tanner of seal leather. Perhaps some companies are still manufacturing sealskin garments, but such manufacture has not been confirmed. If such production does exist, it is certainly on a very small scale. In recent years one major trading company and several tanners have withdrawn from the market.

In various quarters it was strongly suggested that Canada must bear a large part of the responsibility for the present state of the market for sealskins. According to Hugh Dwan (1985), managing director of Hudson's Bay and Annings Limited, and Arthur Frayling, chairman of the International Fur Trade Federation, the Canadian authorities ignored repeated warnings from the trade that the anti-sealing movement posed a serious threat and, despite repeated requests, failed to co-operate with the trade in refuting the anti-sealing case. Much the same point was made by the managing director of Winkelmann Publications, publisher of an international fur directory and of a weekly trade paper. (See also Chapter 9.)

Ivy Sharp, the editor of *Fur Review*, one of the leading fur trade journals, has said that sealskin garments were never very popular in the United Kingdom, and the market is now virtually dead. Sealskin garments had a rather special appeal as a sporty fur, but now it would be very difficult to resurrect the market. Apart from having lost its place in the retail market, the sealskin garment requires a different type of manufacturing process from other furs and many of the old craftsmen have retired or died.

It is clear that many companies have withdrawn from trade in sealskin, either because the production was no longer profitable or for fear of the adverse effects of the anti-sealing campaign on other aspects of their businesses. The United Kingdom is one of the countries in which the anti-sealing movement has a very large following.

Belgium

According to the National Fur Trade Federation (Market and Industry Analysts, 1986), until the early 1970s, sealskin jackets were quite fashionable. They were hard-wearing, relatively cheap and were generally worn as sports or casual clothing. The skins were usually those of adult seals. There was virtually no manufacture using whitecoats. Sealskin has now "completely gone out of fashion", and it would be difficult to find a sealskin garment for sale anywhere in Belgium.

The ban on seal-pup imports "does not worry the Belgian Fur Federation in the slightest", according to its President, since there was no production and little sale of articles made of pup sealskin. The Belgian sealskin garment market collapsed partly because of adverse publicity and partly because of change in fashion. If public opinion would accept them, clothes made from adult sealskin might find a market but the whole fur trade is now under pressure.

Other West European Markets

Switzerland

As in EC markets, there has been a marked decline in demand for sealskin products in Switzerland since the late 1960s. Indeed, most Swiss respondents talk of the market being "dead" over that period. Although there is no national legislation and Switzerland is not affected by EC legislation, sales have not improved. Switzerland has a particularly strong and long ecological tradition. Franz Weber, of the Franz Weber Foundation, spearheaded the local anti-sealing campaign at an earlier stage in Switzerland than in other markets. The Swiss fur industry introduced a voluntary ban on seal-pup imports in 1967.

Available data indicate that the Swiss market in 1980 used about 10,000 skins. The Swiss furriers confirmed that coats made of sealskin had all but disappeared from the market. There is still a very small demand for fur-seal fashion hats, requiring no more that a few hundred skins annually. The Swiss trade sees no prospect whatever for seal products in their market.

Austria

Austrian consumption of sealskin garments has been much reduced in the last few years, a trend similar to that in West Germany. The downturn in Austria must be ascribed to the anti-sealing campaign, to changing consumer tastes or both, since Austria is not a member of the EC (and thus is not affected by the import ban), has no national legislation on sealskin imports and has not introduced a voluntary trade ban. The market for seal-leather articles has also shown a significant decline and is now marginal.

Until the 1960s, Austria was an important market for sports articles of seal fur, particularly items associated with skiing and climbing, such as

boots, rucksacks, pouches and the like. Two former producers of sealskin boots, Koflach and Kastinger, confirmed their withdrawal from the market in the early 1970s because of changing fashions and high prices. It is clear that the demise of sealskin in the sports sector is not a result of the anti-sealing campaign, but of declining market demand.

Finland and Sweden

Finland has been a relatively important centre for the processing of sealskins and, in particular, took a large proportion of the Canadian seals purchased by the Karlsen Shipping Company; imports have now declined almost to nothing. Since Finland does no sealing, it is assumed that there is practically no domestic production of sealskin products. The situation in Sweden is similar to that in Finland. One Swedish company, Tronos, has a world reputation for the dressing of ringed sealskins. Sweden is a country where the conservation movement is particularly strong, and all reports agree that there is no consumer demand for sealskin products there.

Markets in the Orient

Japan

Interviews with importers and manufacturers suggest that about 6,000 sealskins are imported into Japan annually. In addition, about 1,500 seals are hunted each year along the coast of northern Hokkaido, and their skins are used by local seal-product manufacturers. Total consumption of sealskins is therefore estimated to be 7,500 per annum. This number has not changed during the last three years, and it is probable that it will not change substantially during the next three to five years.

Japan does import sealskin products such as fur coats, après-ski boots, slippers, toys, wallets and belts, either directly or as souvenirs brought back to Japan by travellers, but the volume of these imports is insignificant.

A small number of blueback sealskins are used for luxury fur coats. Sealskin coats are now less popular and are seldom seen in retail stores. Consumers prefer mink. Imported harp sealskins are used to produce purses, wallets, handbags, shoulder bags, belts, ladies footwear, accessories and small souvenirs.

Sealskin products carry an image of the northern islands, and so they are normally sold at souvenir stores in Hokkaido, except for some expensive fur coats which are sold in fur stores in Tokyo or Osaka. Typical retail prices of seal products are:

Blueback fur coats	Yen 1,000,000	($5,200)
Handbags	Yen 40,000–70,000	($210–$365)
Ladies footwear	Yen 10,000–40,000	($52–$210)
Wallets	Yen 2,000–3,000	($10–$12)

The industry consists of importers, wholesalers, tanners and dressers, and manufacturers of finished articles. In some cases, wholesalers may serve as importers and tanners, while manufacturers may serve as importers, tanners and producers of the final commodities. The number of companies involved in the sealskin trade is estimated at:

- 5–10 importers who may import sealskins from time to time according to customers' requirements;
- 10–15 wholesalers who can handle or have had the experience of handling sealskins;
- 5–10 manufacturers of sealskin coats, handbags or souvenirs.

It is difficult to market foreign consumer goods in Japan and most unlikely that Canadian manufacturers could succeed in selling souvenir items in Japan's remote northern islands. The Japanese market is somewhat more open to foreign luxury goods such as French perfumes and Scotch whisky. It is doubtful that Canadian-made furskin coats would be widely accepted, in view of the Japanese preference for mink coats and the existence of an indigenous fur-garment industry.

As far as sales of skins are concerned, the industry has adapted to importing dressed, rather than raw, skins and the requirement is for juvenile harp skins. In attempting to meet this demand Canada would encounter stiff competition from the Rieber Company in Norway.

Although Japan has been unaffected by the anti-sealing movement, the Japanese market seems to offer only limited prospects. Furskin garments are neither fashionable nor popular, and other items appeal mainly as souvenirs. Industry sources anticipate little growth.

Hong Kong and China

The exact size of the sealskin market in Hong Kong cannot be determined, but all indications are that it is very small. To the limited extent that sealskin is used in Hong Kong, it appears to be mainly that of Pacific fur seal imported from the United States.

The Hong Kong market for sealskins appears to depend on the tourist trade rather than on local consumption. Hong Kong winters are not cold and, while wealthy inhabitants readily buy mink and other light fur coats, there would be little or no local demand for the heavier seal-fur coats. Similarly, there is no local demand for sealskin footwear. Extensive investigations produced no evidence of local manufacture of small items and souvenirs from sealskin, and none were found for sale.

Several fur-garment manufacturers said that they can make up seal garments to order, for which they buy the half-dozen skins required from a trading company. These sales are said to be exclusively to tourists. No sealskin garments were found for sale "off the rack". Several traders indicated that demand for sealskin is lower than it has been in the past.

According to the replies of respondents, the problems of selling sealskin to Hong Kong can be summarized as follows:

- There is no demand from local people for sealskin garments which are too heavy for the climate.
- Mink, fox and other furs are more fashionable and acceptable.
- The small quantities in demand mean that large stocks cannot be held, although suppliers in distant places (the United States or Europe) expect orders of a minimum size.
- Delivery times for skins ordered can be several months.
- There is no promotion of sealskin garments.

None of the respondents interviewed could foresee any increase in the demand for sealskin.

Traders and informants in the Hong Kong fur industry have no knowledge of any imports of sealskin into China. It is thought that the Chinese would be unlikely for some time to import sealskin for their own use in view of the poverty of the country. China is an important exporter of furskins, particularly skins of farmed mink. The most likely market for sealskins in China would be among manufacturers of products sold to foreign tourists or re-exported.

The United States Market

The U.S. market has been effectively closed to imports of seal products since the United States *Marine Mammal Protection Act of 1972* was passed. The Act prohibits the entry of skins, leather, meat, oil and manufactured products from marine mammals, unless prescribed conditions (relating to integrity of species stock, humaneness of kill, etc.) are met. It currently applies to all seals, including harp, hooded and ringed seals. To gain exemption for a particular species requires a public hearing, and it appears unlikely that such an approach would succeed.

In the past, the United States had been an important market for Canadian-made sealskin footwear. The closing of this market caused severe problems for several Canadian footwear manufacturers. At present, the U.S. domestic market for seal products is almost entirely confined to the use of Pacific fur sealskins for the manufacture of fur coats, apart from the local use of seal products in the Pribilof Islands themselves.

The statistical record indicates that the U.S. domestic market in recent years has absorbed, at most, only several thousand skins, and that these quantities have been declining. Trade sources confirm that there has been a long-term downward trend in the sales of Pribilof fur-seal garments, because of several factors, including changing fashions and the protest movement. Several informants put part of the blame for this trend on the Canadian government, saying it should have stopped the hunt for pups in time to defuse the protest movement.

Experiments using Pribilof seal meat on mink farms in the continental United States failed on economic grounds related to transportation costs. Spokesmen for the major U.S. pet-food manufacturers such as Ralston Purina and Quaker Oats advised the Royal Commission's consultants that they had banned the use of marine mammal meat in their products in all countries where they produce, including Canada.

Table 16.11
Worldwide Sealskin Price Trends, 1975 and 1979–1984

Area of Catch	Seller	Buyer	Species of Seal	Type of Skin[a]	Currency	Average Price Per Skin 1975	1979	1980	1981	1982	1983	1984
Eastern Arctic	Hunters	Hudson's Bay Co.	All	R.Dr.	C$	20.68	20.29	22.40	16.06	11.71	11.92	8.43
Greenland[d]	Hunters	RGTD	Ringed	R.Dr.	Dkr	74.1	115.7	126.3	135.5	150.1	169.0	175.5
			Harp	R.Dr.	Dkr	115.8	163.4	171.0	181.7	201.7	215.3	217.3
Newfoundland	Sealers	Processors	Harp[b]	Raw	C$	20.9	22.1	27.2	25.4	25.4	12.6	11.3
West Ice	Sealers	Processors	Harp/ Hooded	Raw	Nkr	240.1	197.2	216.9	201.9	223.8	207.7	107.3
East Ice	Sealers	Processors	Harp	Raw	Nkr	126.5	132.9	138.5	171.6	n.a.	n.a.	n.a.
NW Pacific	Fouke Fur Co.	Auction	Fur	Dr.	US$	77.69	109.94	111.81	90.44	64.11	67.63	n.a.
Greenland	RGTD	Auction	Ringed[c]	R.Dr.	Dkr	259/221	133/129	174/144	127/101	93/83	58	62/46
			Harp	R.Dr.	Dkr	302	267	315	289	217	79	56
			Hooded	R.Dr.	Dkr	193	308	388	309	354	n.a.	121

Source: Market and Industry Analysts (1986).

a. Dr. = dressed; R.Dr. = roughly dressed.
b. Includes small numbers of hooded seals.
c. Two auctions per year are held for ringed sealskins.
d. Supported prices.

The prospects for a revival of the U.S. market are not good. If, as is highly possible, Congress decides to end the Pribilof hunt entirely (the hunt was suspended in 1985), there would be even less likelihood of seal products from outside the United States being admitted. The possibility of exemption for Inuit products, under the treaty of 1794, is discussed in Chapter 13.

World Price Trends for Sealskins

Predictably, the general world decline in demand for sealskins has had a profound effect on world price trends. As shown in Tables 16.11 and 16.12, unsupported auction prices in 1984 were less than half what they had been in 1980. In real terms (i.e., after adjusting for inflation), the decline is even more dramatic.

Table 16.12
Worldwide Sealskin Price-Trend Index, 1975 and 1979–1984

Area of Catch	Species of Seal	Type of Skin[d]	Price Index 1980 - 100						
			1975	1979	1980	1981	1982	1983	1984
Eastern Arctic[a]	All	R.Dr.	92	91	100	72	52	53	38
Greenland[a, f]	Ringed	R.Dr.	59	92	100	107	119	134	139
	Harp	R.Dr.	68	96	100	106	118	126	127
Newfoundland	Harp[c]	Raw	77	82	100	93	93	46	42
West Ice[a]	Harp/ Hooded	Raw	111	91	100	93	123	114	59
East Ice[a]	Harp	Raw	91	96	100	124	–	–	–
NW Pacific[b]	Fur	Dr.	69	98	100	81	57	60	–
Greenland[b]	Ringed	R.Dr.	163/139	84/81	100[e]	80/64	58/52	36	39/29
	Harp	R.Dr.	96	85	100	92	69	25	18
	Hooded	R.Dr.	50	79	100	80	91	–	31

Source: Based on Table 16.11.

a. Prices to sealers/hunters.
b. Auction prices.
c. Includes small numbers of hooded seals.
d. Dr. = dressed; R.Dr. = roughly dressed.
e. Average of both auctions.
f. Supported prices.

Potential World Supply

Major Sources

Between 1970 and 1982, more than 400,000 seals were killed annually, world-wide, for commercial (export trading) purposes. In the period 1979–1982, the world-wide annual average was about 420,000. In 1983, that number fell to just over 200,000; by 1984, it was well below 200,000. The decline continued in 1985. Table 16.13 indicates the main regions of commercial seal supply, during the period 1979–1983.

Table 16.13
The International Trade in Sealskins, 1979–1983

Major Sources of Supply		Per Cent
Canadian Atlantic coast		42
Canadian Arctic		7
Greenland		16
West Ice	Norwegian Sealing	6
East Ice	Norwegian Sealing	4
South Africa and Namibia		18
United States (Pribilof Islands)		7
Total		100

The Soviet Union is an important sealing nation, with a catch estimated at 100,000 animals a year from the White Sea, the north Pacific and the Caspian Sea. A few Soviet sealskins enter the international market by way of the Leningrad fur auctions, but this quantity is not considered commercially significant. The relatively small Uruguayan sealskin production apparently is marketed within South America.

Outside the main commercial sealing areas, several thousands of seals (mainly grey and harbour seals) are killed each year, mostly to control seal populations and to protect fisheries. These animals are sometimes sold

to commercial enterprises, usually at giveaway prices; even if the skins are not always of value, the blubber can be used. The figures for commercial availability used here also exclude the large numbers of seals that are killed for local use, and that do not enter commerce. Such seals are often of substantial economic importance to individuals and communities, although they are not sold in any marketplace. This is notably so in Greenland, where only about 60,000 of the 100,000 seals killed each year enter commercial channels. Similarly, many seals killed in the Canadian Arctic and on the Labrador coast are not sold commercially.

Finally, it should be said that the figures cited in this chapter usually refer to those species which are the object of commercial hunts and exclude small numbers of seals of other species. Thus the Canadian Atlantic coast hunt is for harp and hooded seals, although a few thousand of other types such as ringed, grey and harbour seals have been killed each year.

The cited figures refer to the number of *skins* which become available. The meat and blubber of seals caught for commercial purposes are not always exploited commercially.

Canada

As Table 16.13 shows, in the period 1979–1983, Canadian sources provided about 50% of the world trade in sealskins. Traditionally, Canada has provided an even higher proportion of supply: in 1975, 52%, and in 1981, 55%. Most skins have come from the Atlantic coast industry, but the Canadian Arctic has also been a significant source on a world level. Up to and including 1982, the production of the Canadian Atlantic coast included seals caught by Norwegian sealers off Newfoundland. From 1979 to 1982, Norwegian sealers took an average of 28,000 seals a year (15%) out of an average of 186,000 harvested in this region.

The Canadian sealing industry has depended almost totally on foreign-owned processing companies and foreign markets. Except for some tanning of skins for leather, Canada has had primary processing facilities at only two locations: the Karlsen Shipping Company Limited in Nova Scotia and the Carino Company Limited in Newfoundland. Canadians have used an average of about 19,000 skins each year. The remainder, averaging about 175,000 skins annually (for the period 1979–1982), have been exported to Europe for final processing and end use. (See Table 16.38.) Most of the skins processed by Carino went to the parent G.C. Rieber and Company A.S. in Norway, the largest sealskin processor in the world, while many of those

processed by Karlsen were sent to Finland for final processing. A high proportion of the Arctic skins were bought and auctioned by the Hudson's Bay Company, mainly to European buyers.

The blubber from the Atlantic coast hunt was rendered into oil at the two main processing plants in Canada, and most of this oil also found its way to Europe. Approximately 30% of the carcasses (excluding blubber and exclusive of subsistence use) from the Atlantic hunt were exploited commercially, but only in the immediate region of the hunt. Virtually none of the meat was sold elsewhere in Canada, and none was exported.

At the moment, the Canadian commercial sealing industry is virtually dead. The prospects for revival are reviewed later in this chapter. A subsistance hunt continues in the Arctic and in some parts of the Atlantic region. Canada's production of seal products has been fully described in Chapter 14.

Norway

While Canada has been harvesting more seals than Norway, Norway has by far the largest and most developed sealing industry in the world. It receives substantial financial and political support from government. With the possible exceptions of the much smaller American and Soviet industries, Norway is considered by Christian Rieber of G.C. Rieber and Company to be the only country in the world capable of performing all the operations essential to the industry: catching seals, undertaking initial processing, carrying out the final processing of the skins, meat and blubber, and marketing the processed materials.

The Norwegian industry, however, is in a process of rapid contraction, as Tables 16.14 and 16.15 show. The sealing fleet has diminished considerably, the catch has fallen and processing facilities are being reduced. In Rieber's opinion, if the present situation continues for more than a few years, despite government subsidies, the industry will collapse so far that it will be extremely difficult to resurrect.

The commercial catch by Norwegian ships has fallen from over 80,000 in the mid-1970s to less than 20,000 in 1985. The catch first declined in 1977, when the Norwegian quota in Canada was reduced drastically. A further decline took place in 1983, following the decision by the Rieber Company not to buy pup skins. Norwegian ships withdrew entirely from

Canada and severely reduced their activities on the West Ice. Quotas for 1985 were: East Ice, 19,000 harp seals; West Ice, 8,000 hooded and 7,000 harp seals.

The Rieber Company, in 1985, had an unsold inventory of 200,000 raw skins, despite a decline in the purchase of raw skins from 200,000 in 1980 to 50,000 in 1985. Because of the reduced demand and the high inventory, the company's requirements can now be met from the Greenland and Norwegian hunts, and it has ceased to buy from Canada. The Company has closed the plant at Dildo and does not anticipate a return to Canada, either for sealing or for processing, in the near future.

Christian Rieber has said that his decision not to buy whitecoats cannot be justified logically, but his company was under intense pressure from protest groups, and he had little practical choice. As far as the future is concerned, he believes that with the discontinuation of the whitecoat hunt, a market for other seal products could be built up once again. Rieber occupies a key position in the world seal market and is an authority on skin processing and sales. Following the decline in the European market for seal products, he has been exploring the potential of alternative markets, especially in the Far East.

Table 16.14
Norwegian Sealing Effort and Harvest, 1976 and 1979–1984

	1976	1979	1980	1981	1982	1983	1984
Fleet							
Vessels (no.)	26	18	15	12	10	6	6
Tonnage (GRT)	6,078	5,011	4,593	4,001	3,871	n.a	n.a.
Crew							
Total (no.)	352	247	204	170	155	n.a.	n.a.
Catch							
Seals (no.)	85,090	75,088	60,746	68,745	68,211	21,490	11,436
Value (Nkr '000)[a]	12,247	12,809	10,294	11,621	13,027	2,315	1,233

Source: Market and Industry Analysts (1986).

a. Valuation, at first sale, of skins plus blubber (excluding blubber subsidy).

Table 16.15
Norwegian Seal Catch by Area and Species, 1979–1984

	1979	1980	1981	1982	1983	1984
Newfoundland	28,594	25,920	27,749	28,800	–	–
Harp	20,288	20,213	22,382	24,238	–	–
Hooded	8,306	5,707	5,367	4,562	–	–
West Ice	32,961	19,623	23,520	23,155	3,404	2,560
Harp	12,780	9,874	11,782	9,692	3,318	1,978
Hooded	20,181	9,749	11,738	13,463	86	582
East Ice						
Harp	13,531	15,202	17,465	17,456	18,089	8,876
Total Harp	46,599	45,289	51,629	51,386	21,407	10,854
Whitecoats	n.a.	n.a.	21,496	n.a.	–	–
Total Hooded	28,487	15,456	17,105	18,025	86	582
Bluebacks	22,829	12,378	14,653	14,389	–	–

Source: Market and Industry Analysts (1986).

Fashion is against sealskin coats and in favour of furs such as mink. But if fashion can change once it can change again. In any event, sealskin garments are not necessarily fashion garments. Rieber envisages a market for sports clothes, using sealskin. Leisure garments could be made of skins which are not of sufficient quality for fur coats. He estimates that only about 10% of the harp sealskins and 30% of the ringed sealskins now available are of sufficient quality for fashion garments.

Sealskin leather with the hair on is of the highest possible quality for footwear. The resulting article is both warm and totally waterproof, although rather expensive. Rieber sees no particular advantage in adult sealskin leather without the hair, compared with competitive leathers such

as cowhide. He has made experiments which led to this conclusion. Leather made from whitecoats is extremely fine, but now unmarketable.

Until the decline in the catch in 1983, substantial quantities of seal blubber were landed in Norway each year and converted into oil. According to Rieber, 1 kilogram of blubber will produce roughly 0.75 litres of oil, so that Norwegian seal-oil production was in the range of 750,000 to 1.5 million litres per year. Rieber has said that he can sell all the oil he produces at $0.60 (Nkr 4) per litre, and he confirms Barzdo's (1980) statement that most of the oil is used in the manufacture of margarine. Seal oil commands a higher price than fish oil and has qualities not possessed by fish oil. Nevertheless, the landed price of blubber has fallen sharply, and until 1982, was maintained only by subsidization.

Since 1983, Norwegian sealing ships have not been allowed to abandon seal carcasses at sea. On the East Ice, this restriction has been at the insistence of the Soviet authorities, who wish to prevent pollution of the sea. The Norwegians have imposed similar rules for the West Ice, where the subsidy paid to ship owners is conditional on recovering the carcasses.

Fiskeriteknologisk Forskningsinstitutt (the Norwegian Institute for Fisheries Technological Research) has been studying the technical and economic problems related to preserving the carcasses on board and in processing carcasses into marketable commodities (Stormo, 1983). Researchers there have reached the preliminary conclusions that it is possible to exploit the carcass with a reasonable economic return, that marketing opportunities for animal feed (especially in the fur-animal industry) are good, but that use of the meat for human consumption will probably require considerable marketing effort. Experiments have shown that it is not possible to use seal meat as feed in salmon farms.

Calculations by the Institute indicate that full exploitation of the meat and offal for human and animal food has the potential to increase the first-sale value of the catch by 50%, and provided that the sealing ships are used as fishing boats outside the sealing season, the required investment should be profitable.

The value of Norwegian exports has declined sharply since 1982. In 1984, it was about one-quarter of the 1982 value (see Tables 16.16–16.18). Norway's main export markets have been within the European Community, especially West Germany, Denmark, France and Italy. Exports to the Soviet Union have been significant, but they ceased in 1983. Skins exported to the

Table 16.16
Value of Sealskin Exports in Norway's Foreign Trade, 1979–1984

	(Nkr '000)					
	1979	1980	1981	1982	1983	1984
Domestic catch[a]	12,809	10,294	11,621	13,027	2,315	1,233
Imports	18,202	13,917	24,620	16,969	12,043	n.a.
Total	31,011	24,211	36,241	29,996	14,358	n.a.
Total exports	46,274	52,994	51,582	42,004	25,954	12,026
Net exports	15,263	28,783	15,341	12,008	11,596	n.a.

Source: Central Bureau of Statistics and Norwegian Fisheries Directorate, as reported by MIA (1986).

a. Value at first sale.

Soviet Union have been for sale at the Leningrad auctions for subsequent re-export. Japan has been a regular, but relatively small, market for Norwegian exports, although in 1983, exports to Japan increased substantially. Norway still has considerable stocks of whitecoat and blueback skins which it cannot export to the EC, and for which other markets must be sought.

Until the early 1970s, Norway exported several hundred tonnes of seal oil each year. With the decrease in the Norwegian catch, beginning in the mid-1970s, the amount of oil produced by Norway declined and exports virtually ceased. (See Table 16.19.) They now represent only a few thousand kroner per year. As exports stopped, Norway began to import considerable quantities of seal oil from Canada. Figures produced by Barzdo (1980, p. 39) suggest that a very high proportion of Canada's production of seal oil was exported to Norway.

For ecological, social, economic and political reasons, Norway subsidizes the sealing fleet and encourages continued sealing. With the collapse of the price for pelts, official encouragement is also being given to finding alternative economic uses for the seals that are taken. This policy of support is expected to continue in the foreseeable future. Nevertheless, it is recognized that if the market for sealskins remains at very low levels for more than a few years, the whole industrial infrastructure of the sealing and processing industries may collapse.

Table 16.17
Norwegian Imports of Sealskins, by Main Source, 1979–1983[a]

	(Nkr '000)				
	1979	1980	1981	1982	1983
Total	18,202	13,917	24,620	16,969	12,043
Raw	17,156	13,353	24,269	15,143	10,650
Dressed	1,046	564	351	1,826	1,393
Source[b]					
Canada	10,358	9,355	17,633	13,618	10,557
Greenland/Denmark	2,153	1,445	2,772	1,064	1,150
South Africa	3,559	–	1,597	448	–

Source: Central Bureau of Statistics, Norway, as reported by MIA (1986).

a. Data for 1984 not available.

b. Because of incomplete source list, figures do not add to the total.

Table 16.18
Norwegian Exports of Sealskins and Main Destinations, 1976–1984

	(Nkr '000)								
	1976	1977	1978	1979	1980	1981	1982	1983	1984
Total exports	40,445	36,238	42,090	46,274	52,994	51,582	46,004	25,954	12,026
Raw	4,037	2,946	2,866	1,924	2,608	2,091	3,627	563	n.a.
Dressed	36,408	33,292	39,224	44,350	50,386	49,491	42,377	25,391	n.a.
Destination (dressed skins)									
West Germany	15,127	17,075	22,370	25,753	25,656	22,193	17,301	6,642	n.a.
France	2,416	2,110	1,944	5,241	8,319	11,366	10,125	4,766	n.a.
Denmark	7,210	3,088	4,559	2,680	4,945	3,373	4,234	2,051	n.a.
Italy	3,271	1,556	1,572	2,284	3,445	3,547	3,722	3,964	n.a.
Soviet Union	3,472	4,887	4,855	3,242	3,435	3,913	1,498	–	n.a.
Japan	195	365	711	1,088	1,228	1,451	730	2,496	n.a.
Spain	1,574	2,499	1,104	1,678	1,075	1,458	1,346	646	n.a.
Other	3,143	1,712	2,109	2,384	2,283	2,190	3,421	4,826	n.a.

Source: Central Bureau of Statistics, Norway, as reported by MIA (1986).

Table 16.19
Norwegian Production of Seal Oil, 1979–1984

	1979	1980	1981	1982	1983	1984
Blubber Landings						
Quantity (tonnes)	1,475	1,008	1,322	1,348	631	342
Price (Nkr/kg)	n.a.	1.45	1.33	0.75	n.a.	n.a.
Subsidy (Nkr/kg)	n.a.	1.49	1.50	1.40	n.a.	n.a.
Landed Value (Nkr'000)	n.a.	2,964	3,737	2,896	n.a.	n.a.
Oil Production[a]						
Quantity ('000L)	1,106	756	992	1,011	473	257
Value (Nkr '000 @Nkr 4/L)	4,424	3,024	3,968	4,044	1,892	1,028
Exports of Oil						
Value (Nkr '000)	6	3	10	n.a.	n.a.	n.a.

Source: Norwegian Fisheries Directorate, as reported by MIA (1986).

a. Estimated by MIA (1986).

Although sealing is of marginal importance to the Norwegian economy, and even to the Norwegian fishing industry, it is important for certain communities and provides an activity complementary with fishing in areas where there are few other employment opportunities. The Norwegians believe there are ecological reasons to continue sealing. In the last five to six years, there has been a large increase in the number of harp seals in the Finnmark district of northern Norway. These seals, which have moved westward from the White Sea, cause considerable losses to the fishing industry by damaging nets. (See Chapter 25.) Under international agreement with the Soviet Union, harp seals may not be hunted in Finnmark waters, but a continuing hunt in the White Sea may keep the problem in check. Seals also are believed to be responsible for a parasitic infection in cod stocks which adds seriously to the costs of fish processing. (See Chapter 26.) Norway therefore intends to retain an option to control seal stocks in areas of economic and strategic importance to the country.

The Norwegian government policy on sealing is based on the belief that it is a biologically justified activity. (See Chapter 19.) Scientists advise that sealing can continue without threatening stocks. In fact, the catch could be increased without endangering the population of either harp or hooded seals. The official Norwegian attitude towards the killing of pups appears to be that it is not wrong in principle, but that without a market, there is no point in continuing this kill.

The subsidy paid to sealing enterprises forms part of overall state support for the fishing industry. The extent and form of subsidization are established by negotiations between the fishing-industry trade organizations *Norsk Sjorannsforbund* (Norwegians Seamen's Association) and *Norges Fiskarlag* (Fishermen's Association of Norway, which includes skippers and shipowners) and the Ministry of Fisheries. Subsidies for sealing form a very small part of the total subsidy for fishing, as Table 16.20 shows.

Table 16.20
Norway: State Support for the Fishing Industry, 1983–1985

	(Nkr '000,000)		
	1983	1984	1985
Support for sealing	4.49	4.26	4.85
Total support	1,100.00	1,100.00	1,375.00

Source: Ministry of Fisheries, Norway.

Sealing subsidies have increased substantially in recent years, and the operating basis of the subsidy has been changed. Until 1982, the major subsidy was based on the landed value of the blubber. Since 1983, subsidies have been designed to induce the sealing ships to go to sea and to take their quotas. The direct subsidy for the ships is a fixed payment to each ship that takes its total quota. To the extent that the quota is not taken, proportionately less money is paid. There are additional payments for participation in scientific work (tagging). In 1984 and 1985, grants were given to ships which had previously taken part in the seal hunt, but did not put to sea in those years. The sealing fleet also receives benefits common to all Norwegian fishing boats, but these are almost insignificant. The average sealing ship, for example, depending on its tonnage, is paid about Nkr 5,000 for

each week at sea. Fishermen who bring to shore dead seals that have been caught in their nets receive a payment of Nkr 400. This payment encourages fishermen not to abandon carcasses, and compensates them for damage to nets.

Greenland

As noted in Table 16.13, Greenland accounted for over 15% of all commercially available sealskins during the period 1979–1983, and in 1984, the proportion was about 20%. Greenland sealskins are of very high quality, and the sealing industry there is heavily subsidized. This production is likely to provide the major competition on the world market for any revived Canadian industry.

Seals in Greenland are hunted by Inuit, using mainly guns and nets. The hunt takes place the year round. There are almost no restrictions on the numbers and species that may be hunted, although the Northwest Atlantic Fisheries Organization (NAFO) has taken the Greenland hunt into account in calculating its overall quotas for harp and hooded seals.

The seals hunted are both juveniles and adults. While statistics are not available, it is understood that a high proportion of the seals taken are under one year old. Approximately 78% of seals caught between 1979 and 1983 were ringed seals. The harp-seal proportion has increased from 8% in 1971 to 12% in 1979 and 21% in 1983. According to NAFO, one probable reason for the larger catch of harp seals is the increasing abundance of this species in Greenland.

Between 1979 and 1983, an average of just under 100,000 seals was killed each year (Table 16.21). From this hunt an average of about 60,000 skins a year came onto the market by way of the *Den Kongelige Grønlandske Handel*, the Royal Greenland Trade Department (RGTD), which buys the skins from the hunters at guaranteed prices (Table 16.22). There is a published scale of prices which depend on the species, size and quality of the skin. The 1985 price schedule ranged from Dkr 90–Dkr 305 per skin ($11–$38). The RGTD and private buyers also purchase between 100 and 200 tonnes of meat and blubber from the hunters each year.

The RGTD ships the skins to Denmark, where they are sold either by auction in Copenhagen or privately. Skins which cannot be sold are shipped back to Greenland for local use. Profits from the Danish sales are returned to the hunters as bonuses. The skins not sold to the RGTD are used locally for

Table 16.21
Catches of Seals in Greenland, 1971–1983

Species	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Ringed	64,534	67,714	77,775	74,051	72,793	71,882	81,168	90,528	97,326	74,543	76,989	71,491	67,182
Harp	5,608	6,036	9,300	7,244	6,146	8,074	10,031	10,978	12,963	12,623	14,081	17,561	19,153
Hooded	2,378	4,208	3,331	4,019	4,764	5,048	5,978	6,404	5,916	6,416	6,197	6,449	5,485
Bearded	707	707	661	616	685	864	642	679	784	698	658	888	918
Harbour	92	71	49	68	72	83	58	37	38	44	37	64	56
Total Number	73,319	78,736	91,116	85,998	84,460	85,951	97,877	108,626	117,027	94,324	97,962	96,453	92,974

Source: Ministry for Greenland, Denmark, as reported by MIA (1986).

Table 16.22
Commercial Sealskin Production in Greenland, 1971–1984

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Quantity (no.)														
Ringed	46,067	38,292	50,786	50,016	49,484	52,372	63,825	64,488	72,124	54,035	47,997	45,152	39,070	43,594
Harp	1,630	1,715	2,955	2,540	2,859	4,248	5,708	5,404	6,977	6,790	5,641	7,319	7,240	7,505
Other	847	752	514	2,367	2,521	2,600	3,533	2,788	3,442	2,548	1,955	2,474	1,510	1,347
Total	48,544	40,759	54,255	54,923	54,764	59,220	73,066	72,680	82,543	63,373	55,593	54,945	47,820	52,446
Value (Dkr'000)														
Ringed	3,305	1,828	2,479	2,974	3,689	4,754	6,563	7,092	8,343	6,825	6,505	6,777	6,603	7,652
Harp	145	105	177	219	331	610	871	862	1,140	1,161	1,025	1,476	1,559	1,628
Other	84	39	29	239	353	363	479	388	466	430	204	453	292	300
Total	3,534	1,972	2,685	3,432	4,373	5,727	7,913	8,342	9,949	8,416	7,734	8,706	8,454	9,580
Bonus	133	1,020	2,721	4,920	6,090	3,823	–	–	102	860	63	17	–	–
Grand Total	3,667	2,992	5,406	8,352	10,463	9,550	7,913	8,342	10,051	9,276	7,797	8,723	8,454	9,580

Source: Ministry for Greenland, Denmark, as reported by MIA (1986).

such items as traditional clothing, footwear, sledge blankets and leather goods. The 100,000 seals killed in Greenland provide 2,000–3,000 tonnes of meat and blubber, almost all of which is consumed by the hunters' families and their dogs. The 100–200 tonnes sold commercially are marketed mainly in Greenland. Table 16.23 shows purchases of seal meat and blubber for the years 1976–1983.

Table 16.23
Purchases of Seal Meat and Blubber in Greenland, 1976–1983

	1976	1977	1978	1979	1980	1981	1982	1983
Volume (tonnes)								
RGTD	86	129	100	165	167	133	63	60
Private enterprises	25	22	44	23	48	37	49	75
Total	111	151	144	188	215	170	112	135
Value (Dkr '000)								
RGTD	246	380	326	468	636	760	320	350
Private enterprises	133	98	234	153	425	446	453	672
Total	379	478	560	621	1,061	1,206	773	1,022
Average price (Dkr/kg)								
RGTD	2.9	2.9	3.3	2.8	3.8	5.7	5.1	5.8
Private entreprises	5.3	4.6	5.3	6.7	8.9	12.1	9.2	9.0
Combined	3.4	3.2	3.9	3.3	4.9	7.1	6.9	7.6

Source: Ministry for Greenland, Denmark, as reported by MIA (1986).

According to the 1976 census, 680 adult workers and their families (2,323 people, or 4.4% cent of the population) depended on sealing and other hunting activity. The way of life in their communities depends on sealing, if only because seals provide food for the dogs which are their means of transport. In recent years, cash income from sealing has amounted to Dkr 9 million to 10 million per year, 90% of which is made from skins and 10% from

meat and blubber. Although the guaranteed prices for skins have been increased each year, no significant bonus has been paid since 1980, and the real income of hunters declined by over 40% between 1979 and 1983. As a point of comparison, the Greenland fishing and fish-products industry is worth close to Dkr 1 billion.

Because of the collapse of sealskin prices, the RGTD is now taking heavy losses on its transactions. On average, the hunters were paid close to Dkr 200 ($25) for their skins in 1984. Taking into account handling and transport, the RGTD, to break even, needs to be able to sell at an average of Dkr 250 ($31) a skin. In the second 1984 Copenhagen auction, the price of the main species, the ringed seal, fell below Dkr 50 ($6) per skin. The RGTD can therefore be said to be subsidizing the Greenland hunters by up to Dkr 200 ($25) per skin, or by about Dkr 10 million a year. The giveaway prices at the Copenhagen auctions have maintained sales at a significant level. Forty-two thousand skins were auctioned in 1984, and several thousand others were sold privately. (See Tables 16.24 and 16.25.)

Table 16.24
Sales Volume of RGTD Auctions, 1974 and 1979–1984

	Number of Skins						
Species/Age	1974	1979	1980	1981	1982	1983	1984
Ringed	42,231	60,016	65,510	61,230	39,195	11,249	35,260
Harp							
beater/bedlamer	1,679	4,556	6,112	5,349	4,842	4,480	4,729
adult	315	588	775	1,034	942	1,040	691
Hooded	1,234	2,721	2,383	2,461	1,319	–	1,181
Total	45,459	67,881	74,780	70,074	46,298	16,769	41,861

Source: Royal Greenland Trade Department, as reported by MIA (1986).

The future of the Greenland sealing industry depends on political decisions to be taken by *Grønlands Hjemmestyre* (the Greenland Home Rule government) which took over responsibility for the RGTD from the Danish

Table 16.25
Average Prices at RGTD Auctions,[a] 1974 and 1979–1984

	(Dkr per skin)						
Species/Age	1974	1979	1980	1981	1982	1983	1984
Ringed	209	133	174	127	93	56	62
	209	129	144	101	83		46
Harp							
beater/bedlamer	249	267	315	289	217	79	56
adult	283	261	301	341	224	86	59
Hooded	296	308	388	309	354	–	121

Source: Royal Greenland Trade Department, as reported by MIA (1986).

a. Usually two auctions per year for ringed seal, one for other species.

government on 1 January 1985. That government will have to decide whether or not to continue to subsidize the industry from its own resources. The alternative is to allow the industry to cease and accept the abandonment of a number of communities and the end of a traditional way of life. The government was considering (1985) the appointment of an expert to analyse the problem. The analysis would include an examination of the possibility of building up a local industry based on seal products.

Production of sealskin items for local use employs a number of people; in addition, one small factory has employed about 10 people to produce sealskin garments for sale to tourists. It recently went bankrupt, but was rescued by the government. Production of garments other than traditional Inuit items, however, would have to depend on dressed skins reimported from Europe. It is difficult to see this possibility as an economic proposition. Apart from the bleak economic outlook, fewer and fewer women are prepared to do the rough dressing of the sealskins. The RGTD has also been making efforts to exploit blubber and oil.

If, for social reasons, the government continues to subsidize sealing, Greenland sealskins will continue to be sold at depressed prices. Ringed seals and beater or older harp seals, as well as some bluebacks, are directly

competitive with all the types now hunted in the Canadian Arctic and on the Atlantic coast, assuming that the hunt of whitecoats (which are not found in Greenland) is definitely finished. The skins come onto the market at heavily subsidized prices, and Greenland benefits from well-established marketing channels. One of the reasons given by the Carino Company in Newfoundland for not purchasing Canadian seals in 1985 was that its parent company, G.C. Rieber and Company, could obtain them more cheaply from Greenland. (See also Chapter 19.)

United States[2]

Pacific or "northern" fur seals had been harvested by the United States and the Soviet Union under an international convention (the Interim Convention on Conservation of North Pacific Fur Seals) to which Canada and Japan were also signatories. Under the convention, the United States had been harvesting an average of 25,000 fur seals a year on the Pribilof Islands, while the Soviet Union had been taking somewhat less than 10,000 a year on the Robben and Commander Islands. Both countries shared 30% of their harvest with Japan and Canada. Excepting these quantities, none of the Soviet harvest of northern fur seals is believed to have been traded in the international market.

In October 1984, a protocol was signed extending the international convention for a further four years, though with certain modifications. However, this protocol had to be ratified by the U.S. Senate. The Senate did not ratify the protocol before the 1985 harvest, and as a result it was not possible to conduct the hunt. The protocol revised the convention by allowing the signatories to discontinue the hunt unilaterally in case of "unforeseen circumstances". This escape clause was included by the United States because of the continuing decline in the seal population and because of the strength of the anti-sealing movement. The escape clause was somewhat contradictory to the stated wish of the Administration to provide assurance to the Pribilof Islanders of a long-term future for the seal industry. The fact that the protocol extended the convention for only four years rather than for six years, as had been originally proposed, was a further indication that the Administration did not feel able to commit itself to sealing in the long term. The convention may now (1986) be considered to have lapsed.

2. This section is largely based on the *Environmental Impact Statement on the Interim Convention on Conservation of North Pacific Fur Seals (EIS)*, prepared by the U.S. Departments of State and Commerce in preparation for the extension of the Interim Convention on Conservation of North Pacific Fur Seals (United States, 1985).

The U.S. commercial kill took place on St. Paul Island. Virtually all seals taken were juvenile or sub-adult males. For this reason, most scientific opinion holds that the hunt has not been responsible for the declining population. (See Chapters 22 and 23.) A few hundred seals were also taken on St. George Island for local subsistence purposes. Initial processing of the skins was carried out locally, and the skins were then shipped to the Fouke Fur Company of Greenville, South Carolina. This company has had an exclusive contract for the dressing and marketing of U.S. fur sealskins for over 50 years; it also dressed the Japanese and Canadian shares, since it possesses a processing method which has not been duplicated elsewhere. (See Table 16.26.)

In 1985 the harvest was placed under the control of the local people, but it was limited to between 3,000 and 15,000 animals annually, to be taken for subsistence purposes only. A large amount of seal meat is consumed locally; one estimate is that current subsistence needs of the Pribilof residents amount to 12,000 animals a year. When the commercial hunt was being conducted, the remaining carcasses were the property of the Tanadgusix Corporation (a Native-controlled company established under the terms of the land-claims settlement), which conducted the hunt and processed meat and offal for crab bait, dog food, fox food and human consumption.

The seal hunt had considerable economic importance for the inhabitants of St. Paul Island. Out of a population of about 500 persons, 80 were employed for five to 11 weeks a year in harvesting and in the initial processing of seals. A detailed study in 1980 (United States, 1983) showed that out of an earned income of US$2,180,566, US$232,950, or 10.7%, consisted of payments by the National Marine Fisheries Service (NMFS) for work on the seal harvest. In 1983, the NMFS spent US$500,000 on the seal harvest.

Until 1983, the government paid the Fouke Fur Company a fixed price for dressing the skins. Fouke repaid the government from the receipts of the skin auctions, after deducting payment for dressing. Before 1982, this system resulted in gross revenues to the Fouke Company of about US$1 million a year and receipts to the government of a similar amount, considerably more than the cost of the harvest. With the collapse of prices for skins and a fall in the number of skins sold in 1982 and 1983, the U.S. government received considerably less than the cost of the harvest. The gross revenues of the Fouke Company have also declined, to the extent that the company is understood to have considered abandoning the trade in sealskins.

Table 16.26
United States Fur Seal Industry, 1975 and 1979–1984

	1975	1979	1980	1981	1982	1983	1984
Number of seals harvested on St. Paul Island	29,148	25,762	24,327	23,928	24,828	25,768	22,066
Number of skins sold by Fouke Fur Company	25,157	15,591	18,145	17,364	21,709	9,571	n.a.
Total proceeds of skin sales ($US '000s)	1,954.5	1,714.1	2,028.8	1,569.6	1,391.8	647.3	n.a.
Average sale price per skin ($US)	77.69	109.94	111.81	90.44	64.11	67.63	n.a.
Amount received by U.S. government ($US '000s)	1,022.4	815.2	993.4	479.5	153.6	143.5	n.a.

Source: United States (1985), as reported by MIA (1986).

The contract with the Tanadgusix Corporation, whereby the corporation received US$500,000 plus the stock of skins from the 1981 and 1982 harvests, obviously was not a profitable one for the government, which was nevertheless obliged, under the convention, to ensure proper conduct of the harvest. (See Chapter 13.)

Alaska is promoting an economic diversification program for the Pribilof Islands, primarily designed to exploit the fisheries potential of the region, but also to increase tourism and to "establish a locally operated fur sealing industry that is profitable and continues to employ local residents at approximately historic levels." It is hoped that a new harbour, under construction on St. Paul Island, will "reduce transportation costs involved in shipping products off the island and enhance the development of further markets. The seal by-products operation could eventually become a significant part of the local economy" (United States, 1985).

To establish new markets for Pribilof sealskins and by-products of the harvest, the government wished to provide long-term assurance of dependable supplies of seal products. However, an officially sponsored study of employment and income foresees no growth in either employment or income from the sealing industry up to 1990.

Meanwhile pelt sales have been declining. The decline is viewed as a result of:

> *. . . economic conditions in the United States and Europe, including high interest rates and the strength of the US dollar abroad. Other factors such as changes in fashion towards longer hair furs, lack of promotion and advertising and the influence of the environmental movement have also affected skin sales (United States, 1985).*

Soviet Union

The Soviet Union harvests seals in the north Atlantic, the north Pacific and Arctic Oceans and also in Lake Baikal and the Caspian Sea (Table 16.27). The total catch is estimated to be on the order of 100,000 seals annually. The harvests on the East Ice and the West Ice are undertaken within quotas agreed upon between the U.S.S.R. and Norway.

The Soviet hunt in the White Sea, or East Ice, is for harp seals (mainly whitecoats). It is now carried out exclusively by landsmen who go out by helicopter from state farms along the sea coast. The Soviets stopped using ships in 1965, at the same time that strict quotas were enforced to enable the stocks to recuperate. Since 1976, it has been possible to increase the overall quota gradually to about 80,000, comprising over 60,000 for the Soviets and the remainder for the Norwegians. The Soviets take almost their full quota each year.

Table 16.27
Soviet Seal Quotas and Catches, 1980–1985[a]

	Quantity (no.)					
	1980	1981	1982	1983	1984	1985
East Ice						
Harp seal (quota)	34,000	42,500	57,500	64,000	62,000	61,000
West Ice						
Harp seal (quota)	4,000	4,000	4,000	4,500	4,500	4,500
Hooded seal (quota)	3,300	3,300	3,300	3,300	3,300	3,300
North Pacific						
Fur seal (catch)	5,643	8,653	7,940	n.a.	n.a.	n.a.

Source: Market and Industry Analysts (1986).

a. Although a very high proportion of the East Ice quota is, in fact, caught, only a small part of the West Ice quota is achieved. In 1984, the total Soviet catch on the West Ice amounted to only a few hundred seals.

The West Ice hunt is for both harp and hooded seals. Since the Soviets returned to the area in 1976, they have sent out two to three ships a year. The Soviet quota in recent years has been about 4,000 harp seals and 3,000 hooded seals, but in no year have either the Norwegian or the Soviet sealers succeeded in taking their full quotas. This is especially so for hooded seals, which are often difficult to find.

The Soviet hunt for fur seals in the north Pacific has been conducted under the terms of the Interim Convention on Conservation of North Pacific Fur Seals, the signatories to which are the Soviet Union, the United States, Canada and Japan. Fewer than 10,000 seals a year have been taken since the mid-1970s, although previously the numbers were somewhat higher.

Little information is available on the Caspian Sea hunt. Caspian seals are similar to harp seals, though a little smaller, and the hunt is for pups similar to whitecoats. It is understood that, in the past, as many as 10,000 skins a year from this source were sold at the Leningrad auctions, but no sales have been noted since 1982. Since the skins are usually dyed, it is not easy to distinguish between the Caspian seal and the harp seal. Other species also are harvested (Table 20.1, Chapter 20).

Although Soviet sealskins are offered for sale at the Leningrad auction, it is thought that actual exports of Soviet sealskins are minimal.

South Africa

The South African hunt (Table 16.28) is for Cape fur seals, which have characteristics and uses similar to the northern fur seals of the Pribilof Islands. Cape fur seals are also killed in Namibia. The Namibian catch is exported to South Africa, and the combined supplies are exported to Europe, since South Africa has neither processing facilities nor a market for the skins. The skins are sent chiefly to Norway and Germany. The final market for the dressed skins is mainly in Germany, and the collapse of the German market for sealskin coats has caused a crisis for the South African hunt, which is now conducted for the purpose of wildlife management.

Table 16.28
South African/Namibian Fur-Seal Harvest, 1979–1983

	1979	1980	1981	1982	1983
Number of skins	75,470	66,521	68,605	91,425	45,969[a]

Source: Market and Industry Analysts (1986).

a. Namibian catch only.

During the period 1978–1982, South African exports reported by the Convention on the International Trade in Endangered Species (CITES) averaged 48,000 skins a year. Although CITES statistics refer to licences issued rather than actual trade, and although there are discrepancies between the reports of importing and exporting countries, the evidence is that since 1983 the market for Cape fur seals has collapsed (Dixon, 1984).

Principal Species in Commercial Harvesting

The main types of commercially important seals have been the harp and hooded seals from the north Atlantic, ringed seals from the Arctic and fur seals from the north Pacific and southern Africa (Table 16.29).

Harp Seals

Harp seals have been the most commercially exploited seals for many years. Before 1983, when the whitecoat hunt stopped, an average of over 200,000 harp seals were harvested each year (Table 16.30). During the period 1979–1982, the average numbers harvested each year for international trading purposes from the main sealing areas were as follows:

Canadian Atlantic coast	173,000
Canadian Arctic	4,000
Norway: East and West Ice	27,000
Greenland	7,000
Total	211,000

The harp seals harvested in the Canadian Arctic and Greenland were juveniles ("beaters" and "bedlamers") and adults. A high proportion of the harps taken on the Atlantic coast, however, and a significant proportion of those caught at the East and West Ice, were whitecoats. Since the commercial hunt of 1982, no whitecoats have been harvested by Norwegian sealers, and few have been taken by Canadian sealers. Table 16.31 indicates that in 1982 the majority of harp seals harvested in Canadian territory were whitecoats.

Table 16.29
World-Wide Availability of Sealskins for Commercial Use, 1975 and 1979–1984, by Area of Catch

Source of Skins	Number of Skins							Annual Average 1979–1983
	1975	1979	1980	1981	1982	1983	1984	
Northwest Atlantic Regulated Catch								
Harp	158,885	160,541	171,929	189,731	169,484	57,889	30,900	149,915
Hooded	15,611	15,125	13,116	13,676	10,393	128	444	10,488
Sub-total[a]	174,496	175,666	185,045	203,407	179,877	58,017	31,344	160,402
Norwegian East and West Ice Regulated Catch								
Harp	15,769	26,311	25,076	29,247	27,184	21,407	10,854	25,845
Hooded	25,963	20,181	9,749	11,738	13,463	86	582	11,043
Sub-total[a]	41,732	46,492	34,825	40,985	40,647	21,493	11,436	36,888
Purchases in Canadian Arctic	42,065	28,934	34,954	28,820	17,740	17,760	4,492	25,642
Purchases in Greenland	54,764	82,543	63,373	55,593	54,945	47,820	52,446	60,855
South African and Namibian Catch of Cape Fur Seals	75,731	75,470	66,521	68,605	91,425	45,969	n.a.	69,598
U.S. Catch of Northern Fur Seals	29,148	26,113	24,677	24,278	24,818	25,768	22,066	25,131
Total	417,936	435,220	409,395	421,688	409,416	216,827	n.a.	378,509

Source: Market and Industry Analysts (1986).

a. A few thousand seals of other species are also caught each year in these areas, e.g., an average of 1,200 ringed seals annually on the Labrador coast.

Table 16.30
Commercial Availability of Harp Sealskins, 1979–1984

Source of Skins	Number of Skins					
	1979	1980	1981	1982	1983	1984
Canada (Atlantic)						
whitecoat	100,199	82,735	138,252	91,006	–	–
juvenile	32,135	54,040	29,820	46,807	56,492	26,806
adult	7,919	12,538	7,378	4,688	1,397	2,047
Sub-total	140,253	149,313	175,450	142,501	57,889	28,853
Canada (Arctic)[a]						
Sub-total	4,000	4,000	4,000	4,000	2,000	1,000
Norway						
whitecoat	33,362	36,351	21,496	33,471	–	–
juvenile			11,701		21,407	10,854
adult	13,237	8,938	18,432	17,915		
Sub-total	46,599	45,289	51,629	51,386	21,407	10,854
Greenland[b]						
Sub-total	6,977	6,790	6,641	7,319	7,240	7,505
Total	197,829	205,392	237,720	205,206	88,536	48,212

Source: Market and Industry Analysts (1986).

a. Estimated purchases by Hudson's Bay Co.
b. Purchases by Royal Greenland Trade Department (evidently about half the annual harvest).

Table 16.31
Numbers of Harp Sealskins from the Atlantic Coast, by Age of Seal, 1982

Age	Canadians	Norwegians	All
Whitecoat	91,006	23,444	114,450
Beater	30,565	259	30,824
Bedlamer	16,242	-	16,242
Adult	4,688	535	5,223
Total	142,501	24,238	166,739

Source: Department of Fisheries and Oceans, Canada; Norwegian Fisheries Directorate.

For 1981 (the latest year for which detailed statistics are available), the Norwegian catch of harp seals at the West Ice and East Ice broke down as shown in Table 16.32.

Table 16.32
Norwegian Catch of Harp Seals, East and West Ice, 1981

Age	Number	Per Cent
Whitecoats	6,680	23
Juveniles	4,556	15
Over 1 year old	18,011	62
Total	29,247	100

Source: Norwegian Fisheries Directorate.

These data indicate that, until the commercial whitecoat hunt stopped, close to 60% of the harp seals harvested world-wide each year were whitecoats, and a further 30% (more or less) were juveniles. A completely accurate breakdown is not possible because data on the ages of harp seals taken in Greenland and the Canadian Arctic are not available.

Hooded Seals

Hooded seals have been taken principally at the Norwegian West Ice and on the Canadian Atlantic coast. Smaller numbers are also taken in Greenland. Until 1983, the numbers harvested each year ranged between about 25,000 and 40,000 (Table 16.33). Hooded seals thus accounted for less than 10% of the seals harvested world-wide. In both Canadian and Norwegian areas, hooded seal pups, usually called "bluebacks", accounted for over 70% of the hooded seals harvested. By area, the catch was approximately as follows:

Newfoundland	10,000–15,000
West Ice, Norway	10,000–20,000
Greenland	6,000

Of the total 132,000 hooded seals harvested over the period 1979–1982, at least 87,597 (66%) were bluebacks taken at the West Ice and off Newfoundland. Since some of the Greenland catch also consists of bluebacks, the total proportion of bluebacks in the hooded seal catch has probably been in the order of 70%.

The cessation of the Canadian and Norwegian hunt for bluebacks has meant the virtual end of the hunt for hooded seals, except in Greenland. The skin of the adult hooded seal has little commercial value.

Ringed Seals

Ringed seals are obtained almost exclusively from the Canadian Arctic and Greenland, in which areas ringed seals provide by far the most important part of the harvest. They are also hunted in the U.S.S.R. There are no quota restrictions on the catch of ringed seals in Canada, but regulations of local application and the customs of the hunt do put a limit on the numbers caught.

Most of the meat of ringed seals is kept for local consumption. In Greenland, for example, only about 10% of the meat from the harvest is sold commercially. As far as the Royal Commission's consultants were able to determine, the blubber or oil is not now exploited commercially, although until the 1960s, oil was marketed from the Greenland harvest. The main problem in using the blubber is logistical: the hunt takes place year-round in very remote localities so that it is awkward and expensive to collect the blubber. For these reasons, the RGTD stopped manufacturing oil.

Table 16.33
Commercial Availability of Hooded Sealskins, 1979–1984

Source of Skins	Number of Skins					
	1979	1980	1981	1982	1983	1984
Canadian (Atlantic)						
blueback	5,168	6,166	6,577	4,428	–	202
adult	1,651	1,243	1,732	1,403	128	242
Sub-total[a]	6,819	7,409	8,309	5,831	128	444
Norway						
blueback	22,829	13,378	14,653	14,398	–	–
adult	5,658	2,078	2,452	3,427	86	582
Sub-total[a]	28,487	15,456	17,105	17,825	86	582
Greenland[b]						
Sub-total	2,721	2,383	2,461	1,319	–	1,181
Total	38,027	25,248	27,875	24,975	214	2,207

Source: Modified from Market and Industry Analysts (1986).

a. Including research catches (minor quantities).
b. RGTD sales at auction, amounting to about one-third of an annual harvest averaging approximately 6,000 animals.

The total number of ringed seals harvested averaged about 70,000 a year between 1979 and 1984. Purchases by the RGTD averaged 52,000 a year in the period 1979–1983 (Table 16.34). Exact data for the Canadian Arctic are not available, but over 85% of an average of about 20,000 sealskins purchased annually by the Hudson's Bay Company in the early 1980s were from ringed seals. Since 1983, the harvest of seals in the Canadian Arctic has declined sharply, as the price offered by the HBC fell from an average of

$22.40 in 1980 to $8.43 in 1984. In 1984, HBC bought fewer than 5,000 seals of all species. In Greenland, however, where hunters receive guaranteed and subsidized prices, availability has continued at previous levels, and 44,000 skins were sold to the RGTD in 1984. This means that Greenland is now supplying at least 90% of all ringed seal production.

Table 16.34
Commercial Availability of Ringed Sealskins, 1979–1984

	Number of Skins					
Source	1979	1980	1981	1982	1983	1984
Canadian (Arctic)						
Purchases by HBC[a]	24,593	29,711	24,497	15,079	15,096	3,818
Greenland						
Purchases by RGTD[b]	72,124	54,035	47,997	45,152	39,070	43,594
Total Purchases	96,717	83,746	72,494	60,231	54,166	47,412
Sales at RGTD auctions	60,016	65,510	61,230	39,195	11,249	35,260

Source: Modified from Market and Industry Analysts (1986).

a. Based on assumption that 85% of skins purchased are from ringed seals.
b. Purchases average two-thirds of the annual harvest.

Fur Seals

Fur sealskins enter the international market mainly from South Africa and Namibia, and from the U.S. catch on the Pribilof Islands. Fur sealskins from the Soviet catch in the north Pacific, except for those supplied to Canada and Japan, are not known to enter international trade, although occasionally a few thousand fur sealskins from Uruguay appear. Dealers in furs consider that fur sealskins (which are almost all used for making fur coats) are not directly competitive with Canadian hair seals, at any rate not more so than other types of fur that can be used for making garments. Several sources in the trade in both Canada and Europe have stated that, precisely because they do not look like seal pelts, coats made of fur seal are still in demand by consumers.

In recent years, an average of some 100,000 fur sealskins have become available each year (Table 16.35), including about 25,000 from the United States and 70,000 from southern Africa. Because of falling demand, however, there has been no commercial sealing in South Africa since 1983. In 1985, there was no commercial harvest in the United States either, since the U.S. Senate had failed to ratify the International Convention which governs the northern fur-seal harvest.

Table 16.35
Commercial Availability of Fur Sealskins, 1975 and 1979–1984

	Number of Skins						
Source	1975	1979	1980	1981	1982	1983	1984
South Africa/ Namibia	75,731	75,470	66,521	68,605	91,425	45,969[a]	n.a.
United States (Pribilof)	29,148	26,113	24,677	24,278	24,818	25,768	22,000
Total	104,879	101,583	91,198	92,883	116,243	71,737	n.a.

Source: Market and Industry Analysts (1986).

a. Namibia only.

Summary and Conclusions

Prospective Markets: Export

This section draws together the previous findings to project the export market potential for Canadian seal products.

Raw Skins

Prior to 1982, the international demand for sealskins amounted to over 400, 000 skins a year. At least 70% of these skins found a market in

Western Europe. The Western European market has now collapsed, and the markets in other regions are still very small. It would be unrealistic to think that during the next few years the European market will regain its former size or that other markets can be developed rapidly enough to compensate for the decline in Europe. This is so particularly because about 150,000 of the total used annually were whitecoat and blueback skins, which are now completely excluded from EC countries. It is unlikely that this exclusion will be lifted. Even if legal restrictions were removed, the trade (processors, manufacturers and retailers) would probably refuse to handle pup skins, and consumers would refuse to buy products made from them. The same resistance applies in several other non-EC European countries. The anti-sealing movement has had no influence in some other markets (e.g., Japan), although it might have in the future. The EC ban on the imports of seal-pup pelts extends to products such as garments manufactured from pup sealskins. There is, therefore, no "back door" into the EC through countries such as Yugoslavia or other eastern European states that manufacture fur garments for sale in the EC.

Currently, some observers perceive indications that the EC sealskin market, although still extremely depressed, may have passed its lowest point. Net imports of sealskins into the EC during the first 10 months of 1985 approximated 34,000 units, compared with less than 14,000 for the whole of 1984. Foreign trade data for just one or two years, however, are not a reliable guide to consumer demand: inventory levels, while possibly becoming more "manageable", are said to be still excessively high. Similarly, an improvement in the demand for sealskins from footwear manufacturers is attributed to the effects of severe weather conditions in certain parts of Europe, rather than to a fundamental change in the market. The estimated sales of sealskin coats during 1985, chiefly in Denmark, represented a demand for about 10,000 skins. In any case, net EC imports of sealskins in 1985 were hardly more than one-tenth of those prevailing before 1982. It is too soon, therefore, to predict a revival of the demand for sealskins in Europe.

The evidence suggests that the world market for sealskins in the short term is likely to be in the range of 100,000–150,000 skins a year. A high proportion will continue to go to Europe, in particular to Denmark, Germany and Norway. To meet this demand, there are likely to be annual supplies of about 50,000 from Greenland, 10,000 or more from Norwegian sealing, and at least 50,000 from southern Africa and Canada. In 1985, because the Senate had not ratified the fur seal Convention, there was no U.S. commercial hunt, but an estimated 3,700 seals were taken by local inhabitants for subsistence purposes.

The potential for Canadian sealskins is affected by existing large stocks of unsold skins: 300,000–400,000 in the hands of the major suppliers and unusually large quantities further along the distribution system. Canadians must also take into account the special situation of the Greenland and Norwegian sealing industries, which supply the same types of skin as Canada does. Both the Greenland and Norwegian sealing industries are characterized by heavy subsidies and inelasticity of supply to price. Greenland skins are being auctioned at prices representing one-fifth of the cost of obtaining them; Norwegian sealing ships, in 1984, received subsidies equivalent to Nkr 372 ($58) for every seal caught, while the average landed price was Nkr 108 ($17) per skin.

Norwegian supplies are being maintained for non-commercial reasons. Norway intends to take its full quota of harp seals on the East Ice regardless of economic factors. On the other hand, it would be difficult for that country to increase its catch substantially, unless the U.S.S.R. agreed to increase Norway's East Ice quota. This is because exploitation of the other traditional Norwegian sealing areas, Newfoundland and the West Ice, depend on the catch of whitecoats and bluebacks. There is apparently no possibility of Norway resuming the hunt for pups, and the economic viability of a West Ice hunt without catching pups is dubious. It is even more so for a hunt off Newfoundland by Norwegian ships.

In Greenland, the main purpose of the seal hunt is to obtain meat for humans and dogs; the skins are a by-product. There is no evidence that the prices paid to the hunters substantially affect the supply of skins, although there is evidence that the supply of skins is declining because the hunters find it less worthwhile to take the trouble to prepare the skins for sale. The hunters receive guaranteed prices, and there is no likelihood that these prices will either increase or decrease enough to have a significant effect on supplies.

Both Norway and Greenland, therefore, may be expected to continue supplying a given quantity of seals even if prices fall further. Neither country, however, would be in a position to increase supplies significantly, even if prices rose very much higher than they are at present. The actual quantities supplied each year will vary with environmental conditions but can be estimated approximately as follows:

Species	Norway	Greenland	Total
Ringed	–	40,000	40,000
Harp	14,000	7,000	21,000
Hooded	1,000	1,000	2,000
Total	15,000	48,000	63,000

Except for some bluebacks from Greenland, all these seals would be juveniles or adults.

In international markets, Greenland and Norway would have an advantage over Canada because both have established marketing channels, whereas the withdrawal of the Karlsen and Carino companies from the Canadian scene has partially cut Canada's traditional channels to markets abroad (Table 16.36). Most of the Norwegian catch is processed by G.C. Rieber and Company and sold by that company to established clients worldwide. The Greenland catch is auctioned in Copenhagen, either to fur dealers or to processors such as Rieber; again, distribution to the final user is assured.

Viewing opportunities from a narrow commercial standpoint, Canada could conceivably look for a competitive advantage by resuming the hunt for whitecoats and bluebacks, which are almost unavailable from Greenland, and which Norway has decided not to hunt. Although the EC market would be closed to these skins, markets could be sought elsewhere. Processing the skins would be a problem, since the Rieber Company has announced that it will not handle pup skins.

On the basis of this analysis, it seems unlikely that there can be a significant international market for Canadian raw skins in the short term. In the longer term, market access would require a substantial increase in world demand.

Dressed and Tanned Skins

Sealskins are dressed and tanned in Canada, but Canada has never exported dressed skins in significant quantities, and it is questionable whether this country could be competitive at present on world markets in terms of either price or quality. The question applies particularly to skins for fashion garments.

Table 16.36
Canadian Exports of Sealskins, 1979–1984

Destination	1979	1980	1981	1982	1983	1984[a]
Quantity (no.)[b]						
Norway	106,032	93,443	156,243	103,614	63,836	–
Finland	22,984	17,819	33,712	14,243	–	–
United Kingdom	16,473	22,748	19,565	15,817	1,025	–
West Germany	11,064	13,294	9,725	563	–	170
Sweden	5,403	14,520	1,369	1,885	–	–
Total	165,082	170,748	224,115	137,164	65,629	838
Value ($ '000)	4,680	3,191	6,007	3,689	1,442	38
Average Price ($ per skin)	28.3	18.7	26.8	26.9	22.0	45.3

Source: Modified from Market and Industry Analysts (1986).

a. First 11 months
b. Figures do not add to the total due to incomplete data.

Leading European fur dealers (e.g., Levitan) believe that only a few companies, such as Rieber and Tronos in Europe, and Fouke in the United States, have the capability of dressing sealskins of adequate quality for fashion-garment purposes. Canadian fashion-garment manufacturers seem to agree. Even for quality footwear, one Canadian sealskin manufacturer obtains dressed skins from Europe (Research Associates, 1985), although some Canadian companies are tanning sealskins for the footwear, leather and sports-garment industries.

In most countries, raw skins are not subject to customs duties, but dressed skins usually are. In the European Community, the tariff is 4%. In the opinion of European fur dealers, even this relatively low level is a consid-

erable disincentive, especially as there is no reason to believe that processing costs are lower in Canada than in Europe. Transport costs also have to be taken into account. Because Canada has never exported dressed sealskins, new marketing channels, different from those for raw skins, would have to be developed. All things considered, in the short to medium term there seems even less scope for exporting dressed skins than for exporting raw skins.

Oil

According to Canadian foreign trade statistics, Canada, in 1984, exported 2,851 tonnes (62,854 hundredweight) of "other fish and marine animal oil" valued at $1,337,000, an average price of $0.47 per kilogram (or $21.3 per cwt, see Table 16.37). This category of statistics excludes cod, herring and whale oil. Presumably, a significant proportion was seal oil. The price is in line with that prevailing in Norway for seal oil, although, using the rule of thumb that the average seal produces 20 kilograms of blubber, which can be rendered into 15 litres of oil, the figure of 2,851 tonnes would correspond to the oil from 190,000 seals.[3] According to Barzdo (1980, p.39), most of Canada's exports of seal oil have been made by way of the Carino Company to Norway and have averaged about 1,200 tonnes per year in recent years. Since Carino has closed its Dildo plant, this outlet presumably will cease to exist. According to Christian Rieber, there is a ready market for seal oil, and the oil can easily be sold at a price of $0.60 per litre. The only source of seal oil other than Canada appears to be Norway. Greenland has not been a source of oil since the 1960s, and there is no indication that seal oil is being produced in substantial quantity elsewhere. It seems, therefore, that there is a considerable potential for exporting Canadian seal oil. The scale of the sealing operation, however, would have to justify the expense of installing the necessary processing equipment.

Meat

To date, as far as can be determined, there has been no international trade in seal meat either by Canada or by any other sealing country. Almost

3. See Chapter 14, where returns from seal-oil production are calculated on the basis of an output of approximately 1,500 tonnes per year.

Table 16.37
Canadian Exports of Other Fish and Marine Animal Oils, 1979–1984[a]

Destination	1979	1980	1981	1982	1983	1984
Quantity (cwt)						
United States	31,195	30,211	51,326	40,443	39,694	47,454
Norway	57,087	12,532	–	780	4,265	–
Netherlands	–	11,116	–	28,069	8,751	15,400
Other	–	8,000	35,444	834	–	–
Total	88,282	61,859	86,770	70,126	52,710	62,854
Value ($ '000)	2,074	1,174	1,727	1,462	1,259	1,337
Average Price ($ per cwt)	23.5	19.0	19.9	20.8	23.9	21.3

Source: Market and Industry Analysts (1986).

a. Excluding cod-liver, herring and whale oil.

all consumption of seal meat by humans occurs in areas where sealing takes place. Norwegian experiments using seal meat for animal food and on mink farms seem to be promising. On the other hand, the Norwegians have concluded that seal meat is not suitable for salmon farms, and its use in the manufacture of pet food is doubtful.

Major multinational pet food manufacturers contacted by the Royal Commission's consultants gave totally negative replies to questions about the use of seal meat. Linda Mitchell (1985), meat buyer for Pedigree Petfoods Ltd., which is part of the Mars group in the United Kingdom, said that the company had never had any interest in seal meat and that it was highly unlikely that they ever would. Mars was "acutely aware of the problems which might be posed by conflicting with the animal-rights people." Both Mars and Spillers Foods Ltd. in the United Kingdom said that they had stopped using whale meat in the 1960s, following campaigns by conserva-

tionist groups. The Spillers spokesman said that even though the anti-sealing campaign was directed principally against the culling of pups, "the pet-owning public makes no distinction and would describe as wholly heartless any supplier who made use of the carcass of any seal of any age" (Plant, 1985). Major pet food manufacturers contacted in the United States said that they had banned the use of any marine mammal meat in all their plants world-wide, including their Canadian manufacturing facilities.

On the whole, it would be more fruitful for the Canadian sealing industry to look for markets for seal meat in Canada before considering possible export markets.

Manufactured Goods

There is some production in Canada of goods manufactured from sealskins, such as souvenir items, non-fashion garments and footwear. There is no indication that there is any significant production of fashion garments from sealskins. Sealskin footwear is manufactured on a small industrial scale by established companies. Souvenir items and garments appear to be manufactured mainly by cottage industries. There seems little point in looking for export markets for these manufactured items, until the industry has established itself on a more secure base in the home market.

Domestic Market

The existing demand for sealskins in Canada is estimated to be not more than 20,000 skins a year. Commercial demand for the meat is concentrated on the Atlantic coast, and only a small proportion of the meat has been processed commercially. The blubber of seals delivered to the primary processing plants has been fully utilized and converted into oil, which reportedly finds a ready market in Europe and perhaps elsewhere.

Skins

Calculations of consumption (domestic production minus exports) indicate average consumption of 18,639 skins per year in the period 1979–1983 (Table 16.38). The calculation has not been extended to include 1984, since in that year, although nearly 38,000 skins became available from the Atlantic hunt and the Arctic, exports were less than 1,000 skins. A high proportion of the skins available in 1984 are presumed to be in storage with

HBC and Carino. Other estimates, based on interviews with fur dealers, put Canadian domestic consumption at about 9,000–14,000 skins per year: 5,000–7,000 for footwear, 2,000–3,000 for handicrafts, and 2,000–4,000 for garments.

Table 16.38
Canadian Catch, Exports and Apparent Consumption of Sealskins, 1979–1984

Source	Number of Skins						Annual Average
	1979	1980	1981	1982	1983	1984	1979–1983
Atlantic hunt	150,434	166,495	192,752	153,536	64,509	33,337	145,545
Arctic hunt (HBC purchases)	28,934	34,954	28,820	17,740	17,760	4,492	25,642
Total availability[a]	179,368	201,449	221,572	171,276	82,269	37,829	171,187
Exports	165,082	170,748	224,115	137,164	65,629	838	152,548
Domestic retention	14,286	30,701	–2,543	34,112	16,640	36,991	18,639

Source: Market and Industry Analysts (1986).

a. Excluding receipts of fur sealskins from the United States and U.S.S.R., averaging 3,800 and 1,100 skins per year, respectively, or just under 5,000 altogether.

Garments

There is a distinction to be made between fashion garments (fur coats) and sports or leisure-wear items. As far as the fashion sector is concerned, the Royal Commission's research confirms that in Canada, as elsewhere in the world, fashion is in favour of lighter and softer skins. For this market, fur seals are more suitable than hair seals and, in the present climate of opinion, have the advantage of looking less like seals than do hair seals. Interviews with fur retailers in Canadian cities showed that some stores, such as Holt Renfrew, Alexandor Furs and Simpson's were selling Alaska fur-seal coats, but none of the stores visited had hair-seal coats. Some of the retailers contacted, such as Eaton's, were afraid to carry seal garments, and numerous (but unsubstantiated) stories were told about people wearing sealskin coats being abused in the streets.

A substantial domestic Canadian market for fashion sealskin garments would require not only a change in fashion, but also a very considerable change in public attitudes. In the absence of a strong domestic demand for fashion sealskin garments, the possibility of Canada exporting such items has been analysed, but the prospects do not look bright. Although this country has developed a successful export trade in other fur garments, such a trade would be much more difficult to achieve for sealskin garments. To be competitive with European manufacturers, who have seen their own markets shrink, Canada would have to import the necessary high-quality dressed skins. The cost structure of the Canadian fur-garment industry, which pays higher wages than do the European industries, would prohibit this development.

Levitan (1985) breaks down the cost of a sealskin coat manufactured in Denmark as follows:

	US$	Cdn$
6 raw skins at US$5	30	41
Dressing at US$6 per skin	36	49
Making-up costs	75	103
Manufacturer's profit	39	53
Total	180	246

The foregoing is the wholesale price. Retail mark-up, plus 25% value-added tax, bring the retail price of the coat to US$400 (Cdn.$550).

In the opinion of Levitan, the making-up costs of the same coat in Canada would be about US$100 (Cdn.$137). Because of the necessity of re-importing the dressed skins, the wholesale price of the equivalent Canadian manufactured coat would be higher by at least US$50 (Cdn.$68). Consequently, the retail price would be at least US$100 (Cdn.$137) higher. This would mean that the coat would not be competitive in European or other markets. For high-priced coats such as those of mink fur, where Canada has access to pelts at better prices than do European manufacturers, and where the labour costs of manufacturing are a smaller proportion of the final cost, Canada appears to have a competitive edge, but this does not apply to sealskin garments.

The domestic Canadian market for non-fashion sealskin clothing probably offers better possibilities. These garments do not require the highest quality of dressed skins, and since they are not luxury items, they are

perhaps less subject to criticism. They could also be the products of local handicraft industries established in the sealing communities. It should be possible to establish dressing facilities for the types of pelts which would be required. Initially, producers of these garments could look for their markets in regions, such as Newfoundland and parts of Quebec, where the protest movement has little influence. It would take time to build up a garment industry of this sort, but local demand might absorb production in the early stages.

Footwear

The production of sealskin boots presently provides the largest single domestic outlet for Canadian sealskins. This market might be increased. Sealskin boots with the hair on are exceptionally good products: they are warm, waterproof and hardwearing. The tanning of skins for footwear is a less sophisticated operation than is the dressing of skins for garments. The majority of skins obtained in Canada could be made available for footwear. Sealskin boots are not luxury items and, like sealskin sports garments, would be less open to opposition. The quantities produced from the available skins (perhaps 100,000 pairs) would not be particularly large, and again, a high proportion of sales might initially be made in the sealing areas themselves. Terra Nova Shoes Limited of Harbour Grace, Newfoundland, has the capacity to produce several hundred thousand pairs of footwear a year and is already looking at the possibility of expanding production of sealskin boots.

Norwegian manufacturers make maximum use of raw materials by producing both boots and slippers. The boots retail at about Nkr 500–600 (Cdn. $78–Cdn. $93) and the slippers at Nkr 300 (Cdn. $47).

Oil

Evidence of domestic consumption of commercially sold seal oil was not found. It is understood that both Karlsen and Carino shipped the oil they produced to Europe. No source of seal oil other than these two companies is known. In Europe, seal oil is used mainly in the manufacture of margarine, but it also finds a market in several other industries including pharmaceuticals and cosmetics. Christian Rieber claims that there is a ready market for seal oil in Europe. If he is correct, there may be no urgent need to look for potential Canadian buyers.

Meat

The meat from the Canadian Atlantic harvest of seals has been used for human rather than animal food. (See Chapters 14 and 15.). Canadian seal consumption has been mainly of fresh and frozen meat – a relatively small number of carcasses have been used for canned meat. Of the three canning companies previously using seal meat, only one is still in operation; this suggests that canned seal meat is not widely consumed, even though it is highly nutritious. Virtually all meat sold commercially has been marketed in the Atlantic provinces. There is sufficient demand in these provinces for fresh and frozen seal meat to absorb the catch now envisaged, provided that prices do not escalate. Although Norwegian experiments suggest that canned seal meat in game sauce has good consumer acceptance, there is no immediate reason to look for new markets for Canadian seal meat. On the contrary, it will be difficult for a much reduced catch to satisfy the existing local demand for fresh and frozen seal meat. Other types of seal-meat preparation are not promising. Norwegian tests, for example, show that the fat content of seal meat creates problems if the meat is used in the manufacture of cured sausages.

Animal Food

There is merit in trying to use seal offal, which is not suitable for human consumption, for animal food. This use is established in the Pribilof Islands and under investigation in Norway. While a detailed feasibility study is outside the scope of this market analysis, whatever the economics of the operation may be, the use of seal meat by well-known manufacturers of pet foods is out of the question. Norwegian results also indicate that seal meat and offal are not suitable foods for fish farms, but have been found to be excellent food for farmed fur animals. The economics of using the carcasses in this way would have to be examined in detail. It seems probable that it would be better to supply local fur-animal farms rather than to ship the food to distant destinations. It was found uneconomic, for example, to export seal meat from the Pribilofs to the continental United States for this purpose. At best, the use of the carcasses for fur-animal food would provide supplementary income. According to Norwegian data, the marketed value of the animal food is approximately 30% of the value of the meat used for human food (Stormo, 1983).

Supply Outlook

The collapse of the European market for sealskins and the competition from Greenland and Norway have led to the collapse of supply in Canada itself. In 1984, the low prices offered ($10 per skin) attracted less than 10,000 skins compared with the previous average of 35,000–40,000 from the arctic and sub-arctic areas. (See, Chapter 13.) Carino's decision not to buy in 1985, following a similar decision by Karlsen in 1983, meant that only 23,200 seals were caught on the Atlantic coast in 1985. Many of the pelts were left on the ice (George, 1986). The closing of the Karlsen and Carino processing plants means that there is now no capacity to process the Atlantic regional catch. At least as far as the Atlantic coast is concerned, unless initial processing facilities are provided, sealskins cannot be marketed and blubber and oil cannot be exploited. The meat alone is not an adequate basis for a commercially viable industry. The processing problem is less serious in the Arctic, since the hunters, as in Greenland, undertake this task themselves.

Discussions with Christian Rieber make it clear that he would not be interested in reopening the Carino plant at Dildo unless he had an assured supply of, and assured market for, about 100,000 skins a year. The Dildo plant has a maximum annual capacity of 200,000 skins. If the numbers processed fall below a certain level, the operation is not economic. Figures supplied by Carino show that the cost of processing was $3–$4 per pelt in 1980, when 150,000 skins were processed; this cost rose to $14 in 1984, when only 29,000 were processed. Although the Karlsen plant at Blandford is smaller, similar considerations apply.

It has been proposed by various parties, including the Canadian Sealers Association (CSA) and the Department of Fisheries and Oceans, that an indigenous Canadian-owned processing industry be developed. The most concrete proposal, sponsored by the CSA, contemplates a plant for initial processing at Fleur de Lys, Newfoundland. This proposal, which is under feasibility study (NewLantic Group, 1984), calls for a plant with a capacity of "10,000–15,000 pelts in the first few years." The plant would have no facilities for rendering the blubber into oil. The present situation is that there is no initial processing capacity for the Atlantic coast catch. Until one becomes available, there can be no market for this catch except for food.

Based on historial evidence and taking into account quota restrictions imposed by NAFO, the annual production of seals in Canada might be approximately as shown in Table 16.39.

Table 16.39
Potential Annual Sealskin Supply from Canadian Sources

Species	Arctic	Atlantic	Total
Harp	4,000	185,000	189,000
Hooded	–	15,000	15,000
Ringed	40,000	–	40,000
Total	44,000	200,000	244,000

Source: Estimated by Market and Industry Analysts (1986).

Such a yield would depend on harvesting whitecoats, which have accounted for approximately 125,000 of the annual catch in the recent past. In terms, of sustainable-yield, two pups are equivalent to one older animal (see Chapter 21), so that if the 125,000 whitecoats were excluded, they could be replaced by about 62,500 older harp seals. Similarly, if bluebacks were excluded, they could be replaced by about 5,000 older hooded seals. With an average of 55,000 older seals traditionally harvested, the maximum total Atlantic coast harvest of the two species combined would be approximately 120,000–125,000. In fact, if the whitecoat hunt is abandoned, it is far from certain that catches of that size could be achieved, since it is unlikely that without the whitecoat hunt, large ships could be used economically.

Any Canadian Atlantic coast hunt excluding whitecoats, therefore, is likely to be confined to landsmen and longliners. Historically, the catch of landsmen and longliners has fluctuated much more than that of the large ships. Discussions with Harold Small of the Canadian Sealers Association (1985) suggest that landsmen and longliners could produce an annual average catch of 50,000–60,000 seals. The longliner potential, at least, hinges on restoration of the price for pelts to about its 1980–1982 level.

Including the Arctic potential, and provided that initial processing facilities are established, Canada might be able to rely on a supply of about 100,000 seals per year. This catch would break down by type of seal as shown in Table 16.40.

Table 16.40
Estimated Potential Canadian Annual Supply of Sealskins by Type and Source

Species/Age	Atlantic	Arctic	Total
Harp			
beater	30,000	n.a.	n.a.
bedlamer	15,000	n.a.	n.a.
adult	5,000	n.a.	n.a.
Sub-total	50,000	4,000	54,000
Hooded (adult)	1,000	–	1,000
Ringed	–	40,000	40,000
Other	4,000	–	4,000
Total	55,000	44,000	99,000

Source: Estimated by Market and Industry Analysts (1986).

According to information supplied by Christian Rieber, skins are used as follows:

Ringed seals: *30% for garments and 70% for footwear.*

Other seals
beaters: *suitable for leather without the fur and for garments;*
others: *70% suitable for footwear, 30% for souvenir-type articles.*

On this basis, and provided with secondary processing capability, a hypothetical Canadian catch might provide skins for the purposes given in Table 16.41.

As far as can be established, there are a number of companies in Canada willing and able to tan sealskins for leather and footwear. These include:

- Final Touch Leather, which, in collaboration with HBC, has been experimenting in the promotion of sealskin leather;

Table 16.41
Conjectural Seal Harvest and Utilization

	Number of Skins
For garments:	
30% of 40,000 ringed seals	12,000
Beaters	30,000[a]
Total	42,000
For footwear:	
70% of 40,000 ringed seals	28,000
70% of 29,000 others	20,300
Total	48,300
For souvenirs:	
30% of 29,000 others	8,700
For leather (without the hair):	
Beaters	30,000[a]

a. Alternative uses.

- Canada Blue Tanning Co., which, according to Christian Rieber, would be interested in purchasing raw sealskins at $10.75 per square metre;
- Maranda & Labrecque, which is currently dressing sealskins for footwear; and,
- D. Cohn-Transcanada, which is tanning for Inuit co-operatives in the Eastern Arctic.

Bernard Nygaard of the Carino Company has indicated to the Royal Commission that, if the company's plant were reopened, the chrome tanning facility operated in 1984 could be used, and alum tanning facilities could be added, for the dressing of skins for garment purposes. There are people in Norway with the necessary skills who would be willing to come to Canada to

help start such an operation. As already mentioned, however, Carino would require a large throughput for initial and secondary processing, as well as some guarantees about the long-term future of such an enterprise.

As it is, according to informants in the European fur trade, such as Levitan, Canada lacks the capability of dressing fur skins suitable to be made up into quality fur coats. Dressing is a more sophisticated operation than tanning, and only a few companies in the world are capable of it. The 42,000 garment-quality skins could be made into 7,000 coats or about 15,000 jackets or a combination of the two, and the 48,300 footwear-quality skins could be manufactured into about 100,000 après-ski boots or similar items.

As far as the meat and blubber are concerned, the products for commercial marketing would have to come mainly from the Atlantic coast hunt. According to Harold Small (1985), the yield of meat and blubber by type of seal is as shown in Table 16.42.

Table 16.42
Estimated Yield per Seal of Meat and Blubber, by Species and Age

Species/Age	Blubber (kg)	Meat (kg)
Harp		
beaters	14–18	9
bedlamers	32	22
adult	45–54	36–45
Hooded		
bedlamers	59	32–45
adult	68–91	68–79

On the basis of a hypothetical Atlantic coast harvest of 55,000 seals, the quantities of blubber and meat available would be approximately 1.3 million kilograms and 885,000 kilograms respectively. The blubber, if rendered, would provide about one million litres of oil. According to data from Norway, 20% of the meat (177,000 kilograms) would be suitable for human consumption, and the remainder (708,000 kilograms) would be usable for animal food.

It is doubtful, however, that all the meat could be made available. In 1982, the Canadian Atlantic coast harvest amounted to 153,536 seals, and of these, 91,006 were whitecoats. These, apart from their flippers, have been largely underutilized, as there is very little meat on a whitecoat carcass. (See Chapter 14.) As shown in Chapter 14, of the total numbers killed, the carcasses of 23,686 seals were kept by the sealers, and those of 44,901 were sold commercially, that is, 45% of the total. Of the carcasses sold commercially, 90% were sold as fresh or frozen meat, and only 10% were sold to canners.

If the hunt is confined to landsmen and small boats, a particular problem is that the oil content of the meat causes the carcass to go rancid quickly (the carcass must reach the processing facility within 24 hours of death). This problem could be aggravated if, because there is no whitecoat hunt, the harvest takes place later in the season when temperatures are higher.

The Future Prospects for Sealing

There remains great interest among sealers in restoring a viable sealing industry in the Atlantic region. The prospects for a modified harvest of seals and the processing of seal products are reviewed in this section.

Critical factors relevant to any future, modified seal hunt are the current and expected future demand for sealskins and other seal products, the ability of the sealing industry to harvest seals and to process them economically in the volume demanded, and the stance the governments concerned choose to take regarding the issues affecting the industry.

Several characteristics of sealers and their eastern Canadian environment need to be kept in mind. Most sealers work as fishermen for six months of the year. Although skilled as fishermen, they are not highly educated in a formal sense and their labour-market flexibility is limited. Most want to stay in their communities and in the commercial fisheries. Ice and weather conditions severely curtail economic activity in the winter months in all sealing areas. The fisheries have always been the main, if not the only, economic resource base in most of these areas.

Potential Demand for Seal Products

As detailed earlier in this chapter, no significant export market for Canadian sealskins is likely to exist in the near future, that is, within at least the next five years. Historically, the export market absorbed virtually all of the Canadian harvest, with pelt sales usually in the 100,000–150,000 pelt range. The U.S. market is now closed by law. As a result of the controversy surrounding the whitecoat hunt, the EC market too is now minimal. Seal-product markets in the countries of the Far East are either very small and expected to remain static (Japan) or else unknown (Korea and Hong Kong); China is unlikely to become a consumer of sealskins in the foreseeable future. In any case, many of these countries have domestic fur industries that would compete with Canadian seal products. Information about the market potential abroad is summarized in Table 16.43.

The best prospects for a sealskin market are in Canada, where current commercial demand is presently in the vicinity of 18,000 pelts per year. (See Table 16.38.)[4] Reluctance among Canadian retailers, who are afraid of broader boycotts of all fur products, to support the sale of sealskin products is likely to limit growth in major commercial markets. Nevertheless, the garment and clothing market currently absorbs 2,000–4,000 sealskins, mainly alum-tanned pelts imported from Norway. A potential may exist for sales of sports items like sealskin hats and vests, and the armed forces and police forces could become outlets. No market for such items currently exists, and developing it would require deliberate government policy and some financial assistance. The novelties and commercial handicraft market uses 2,000–3,000 skins per year. Sealskin leather has potential, but this would be constrained by established imports of kid and other animal hides. Developing such a market behind protective tariffs or quotas is a marginal possibility, but the size of the potential market is unknown. It would require developing, however, and it would be vulnerable to the same anti-sealing attitudes as the retail market for garments. Information about the Canadian market is summarized in Table 16.44.

Seal meat and seal oil are not presently of high enough independent value to sustain commercial seal hunts. In sealing areas, seal meat has an economic value as a most nutritious food for human consumption, both for

4. The outlook assessment summarized in Table 16.44 indicates a maximum demand currently for 14,000 skins and a potential for an additional requirement of 2,000–4,000 skins only with strenuous marketing effort. This may reflect allowance for public resistance to the fur trade at present and in the immediate future.

Table 16.43
Potential for Continued Sealing: Export Markets

United States	Western Europe	Far East	Eastern Europe
No market	No market	Japan	Fur products used
Importation of seal products banned by United States *Marine Mammal Protection Act of 1972*	EC ban on imports of whitecoats and bluebacks, and generally negative market	Imports 6,000 skins per year	Domestic (U.S.S.R.) source of supply exists
		Local supply 1,500	Potential unknown
		No growth expected	
	No immediate prospects for revival	Hong Kong	
	Subsidies by Norway and Denmark support a price of $10 per skin which is too low to attract Canadian hunters	Extremely limited use of sealskins	
		Local fur industry sees little potential for sealskin products	
		Market being explored by Canadian Sealers Association	
		China	
		Very unlikely to use sealskin	
		Exports fur, mainly mink	
		No potential	
		Korea	
		Increasing interest in fur processing	
		Market potential unknown	

Table 16.44
Potential for Continued Sealing: Domestic Market by Type of Product

Garments, Clothing	Novelties, Handicrafts	Leather	Boots, etc.
Current demand for 2,000–4,000 skins per year, high quality, alum tanned, imported from Norway Potential: with great marketing effort, additional demand of 2,000–4,000 skins Some potential for sports-type garments and possibly hats and vests for police/ armed forces, but no firm estimate of demand	2,000–3,000 skins per year Uses lower-quality skins	Demand unknown Uses lower-quality skins Potential appears limited by competition from imports of goat skins, etc.	5,000–7,000 skins per year Uses lower-quality skins
Meat	**Animal Food**	**Oil**	
Demand probably limited mainly to Newfoundland Currently only 1 processor operates Potential is limited without considerable development effort Meat price probably not high enough to sustain sealer interest Sealers' own consumption and dockside sales may sustain some demand	Nutrition and taste acceptable No current market Possible potential for use by fur-ranching industry in Atlantic Canada (needs to be explored)	Export market only Must compete with producers in Europe Price currently too low to justify hunt	

subsistence purposes and for some limited commercial exchange. Seal carcasses have also been used as a source of oil, which is exported for use in perfume manufacturing, among other products. Further research into alternate food products is warranted. The College of Fisheries in St. John's has begun to examine the use of seal meat in products such as hamburgers and sausages (King and Burke, 1985; see, however, Domestic Market: Meat, above). The use of seal meat for animal food, such as pet food or on animal farms, could be explored. It may also be possible to feed seal meat, in the form of a protein powder, to certain species of fish in aquaculture projects, thereby achieving an important complementarity with the emerging aquacultural sector.

Initiatives taken by the Canadian Sealers Association, among others, may serve to extend the market for seal products. The CSA is interested in establishing a market based on local production and processing in eastern Canada and has initiated action toward that goal. Firstly, a public opinion survey has concluded that an increase in demand for seal products could be achieved, but only through a public education program (Research Dimensions, 1985). Secondly, several studies have been undertaken in Newfoundland and in the Magdalen Islands on the feasibility of producing seal products through community-based, small-scale production. Products such as sealskin hats, slippers and mitts met with a very positive response in Newfoundland. These studies suggest that market potential exists for novelties and souvenirs for garment items such as those mentioned above and for jackets and vests, but not for high-fashion (and high-value) products. Although the CSA studies estimated that 31,250 sealskins could be used annually, effort would be needed to establish defined products, to decide on optimal production methods, design standards and quality-control mechanisms and to develop firm markets and marketing and distribution channels.

An Ontario manufacturer has also expressed some interest in receiving 30,000–50,000 seal pelts a year to make waterproof leather products for a national market. The pelts would be processed in Ontario after defatting and curing in Newfoundland. These processes, presumably, would be carried out at the proposed Fleur de Lys plant (referred to below). Some 5,000 pelts have been set aside to test the feasibility of this venture. Clearly, if such initiatives were to prove successful, the demand for seals would exceed the current demand estimates of some 14,000. Such ideas, however, are in the very early stages. They suggest that some possibilities are available – but not just around the corner.

In conclusion, there already exists a modest Canadian-based market for seal products. Other uses for sealskins and seal meat are also being considered and, taken together, they could provide the basis for a modified, small-scale, sealing industry. A further and critical component for any viable industry would be the role played by governments. For example, if a culling operation is undertaken to contain the size of the seal herd or if, as in Norway, the industry is subsidized to maintain a sealing capacity in case a culling operation is deemed necessary in the future (see Chapter 19), the basis for some incremental product development would be provided.

The Supply of Seals and Seal-Processing Capacity

Satisfying an annual demand for 20,000 seals would be no problem. Indeed, longliners and landsmen could supply up to 50,000 seal pelts if historical landings data are taken as a guide. A longliner operation is infeasible, however, at current and foreseeable price levels for sealskins, and the landsmen hunt is peculiarly liable to uncertainty with respect to annual catch potential. Without a subsidy, the large vessels almost certainly would find a hunt of this scale (based on juvenile and adult seals) to be uneconomic also, unless price levels were to soar beyond reasonably anticipated levels. Information on sustainable hunt levels is summarized in Table 16.45.

A critical supply-side constraint is likely to be availability of processing facilities. The economics of processing at the Dildo plant were touched on above. There the handling of throughput of less than 100,000 pelts per season is considered to be economically impractical. The plant at Blandford is somewhat smaller, but apparently has about the same unit costs. Whether this plant could profitably process the small harvest from longliner and landsmen hunting is unclear.

The other processing possibilities are at the proposal stage at this point. There is a proposal (NewLantic, 1984), already referred to, for a small facility at Fleur de Lys in northern Newfoundland to process about 25,000 pelts a year at a unit cost of $3.00. The facility could employ eight to ten people.

A small seal-processing industry in the Magdalens is also a possibility. A tannery under consideration would process 1,600–2,500 pelts per year, with a maximum capacity of 3,600 pelts. During other parts of the year, the tanning of a small number of other fur pelts and of up to 4,000 cod

skins, using a newly developed process, would make up the year's production (Econotech, 1983). The tanned seal pelts would, it is proposed, be sold to local artisans (including sealing families) for the production of patchwork quilts and rags, mitts, briefcases and the like to serve the local tourist market. The Magdalen Islands receive a total of about 25,000 visitors per year, of whom some 18,000 are tourists. A few sealers have already taken training courses in the care and treatment of pelts, but a number of production and market issues would need to be resolved before investment decisions could be made.

Table 16.45
Potential for Continued Sealing: Sustainable Hunt Levels

Number of Seals Taken			
250,000	100,000	50,000	25,000
Includes whitecoat hunt ±50,000, depending on age profile	No whitecoats Mainly beaters Use of large vessels and Carino processing plant necessary But, large vessels unlikely to be interested without whitecoats (animals too scattered)	No whitecoats No age-profile constraint Longliner/landsmen could supply[a] But, annual longliner/landsmen harvest ranged from 30,000 to 50,000, so stability of supply may be an issue Maintaining inventory of pelts as balancing mechanism would make this harvest level commercially feasible But, no economic processing facilities exist to handle this quantity of animals	No whitecoats No age-profile constraints Longliner/landsmen could easily supply No processing plant exists for this level of harvest, but feasibility study for primary processing plants in Fleur de Lys suggests this harvest level is feasible

a. Note, however, caveat in text.

Appropriate processing facilities could quite possibly be established if the more substantial problems relating to seal products and market development were resolved. A modified seal industry using up to 20,000 animals a year is practicable, and successful product and market development could push that figure substantially higher. The prospects for any return to the scale of pre-1982 seal-product markets, however, appear to be non-existent.

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Chapter 17

Alternatives to the Sealing Industry

> *But I do not think one has to generalize too much to realize that people who are into wildlife tourism are people who are not sympathetic to the hunting ethic. They simply want to photograph animals and that is all they want to do. I do not think that is actually a conflict. I think the two activities can take place at the same time. You just have to simply separate them somewhat geographically (Lewis, 1985a).*

Given the extremely pessimistic outlook for the sealing industry in Canada, and the dislocation and hardship imposed on many persons and communities by the loss of the seal hunt, an ongoing search for viable alternatives to sealing is imperative. In this chapter a broad survey is made of the industrial structure and circumstances of the communities and areas formerly dependent on sealing. (See Figures 14.1, 14.2, Chapter 14.) An examination of the characteristics of the sealing and seal-processing labour force also is undertaken.

This chapter, then, contains first a description of the socio-economic features of the coastal areas involved. There follows a review of options for economic development and, finally, a discussion of possible policy and program responses.

Socio-Economic Features of Sealing Areas

Newfoundland/Labrador

The province of Newfoundland is composed of two distinct regions: the island of Newfoundland and the mainland region of Labrador. The discussion of the economy covers both regions, while the sealing areas are dealt with separately.

Since Confederation with Canada in 1949, Newfoundland has experienced three broad stages in its economic development (McAllister, 1966; Newfoundland, Royal Commission, 1968; Economic Council of Canada, 1980; Matthews, 1983). The first phase, in the 1950s, was characterized by a relatively rapid growth of gross provincial product (4.5% annually). Government policies were intended to reduce dependency on raw material exports through the development of a diversified industrial base. The high cost of imported equipment, low productivity (the result, in part, of an inexperienced labour force), few economies of scale, distance from markets, and a dearth of capital infrastructure proved obstacles to these goals.

The second phase covers the 1960s and the early 1970s. A number of large projects, supported by improved roads, port facilities, expanded education systems, and hydroelectric plants at Bay D'Espoir and Churchill Falls, were seen as building blocks to accelerate economic growth. These projects included a shipyard at Marystown, a phosphorus plant at Long Harbour, new iron-ore mines in Labrador, a linerboard mill at Stephenville, and a refinery at Come-By-Chance. Strong demand for Newfoundland's natural resources, the construction phases of the large projects, increased government expenditure on infrastructure and an infusion of federal transfer payments produced a burst of strong economic performance.

The third phase began in the mid-1970s. It saw the closing down of both the linerboard mill and the Come-By-Chance refinery, a world-wide decline in the demand for many natural resources, including the fisheries, a falling-off in residential and industrial construction activity, and severe curtailment of expenditure by the federal and provincial governments.

Two aspects of Newfoundland's post-1949 economic development are significant for this review:

- None of the large projects were located in or near the sealing areas. These areas have remained firmly dependent on primary resources, particularly the commercial fisheries.

- The fisheries have suffered a series of crises since 1955. The most recent setback, in the early 1980s, was caused by a combination of stock depletion in some species, soft markets and serious financial difficulties for many processors. In Newfoundland's sealing areas, the acutely seasonal nature of the inshore fishing sector has intensified these problems. The same is true for Labrador.

In 1983, the fisheries (including processing and harvesting sectors) accounted for approximately 6% of Gross Provincial Product.

Table 17.1
The Sealing Areas of Newfoundland/Labrador

Area[a]	Licensed Sealers 1984	Licensed Sealing Vessels (35′–65′)	Annual Seal Landings (no.) 1980	1981	1982	1983	1984
A	1,656	35	27,806	33,861	21,493	22,679	11,791
B	1,991	42	22,610	20,931	21,146	15,781	5,187
C	872	4	1,302	1,239	1,174	835	844
D[b]	1,075	8	50,697	58,547	71,014	7,165	3,486
E	468	2	56	106	30	36	180
F	191	0	0	0	6	5	125
G	63	0	2	0	0	0	6
H	4	0	1	2	6	2	0
K	1	0	42	0	20	0	0
L	52	0	1	145	15	0	0
M	141	7	4,702	7,170	537	0	432
N	887	26	4,274	8,672	2,764	646	4,785
O[c]	633	1	10,731	22,294	3,819	1,916	3,545

Source: Compiled by Gardner Pinfold Consulting Economists Ltd. (1986) from DFO statistics.

a. These are essentially fishery-management areas.
b. Area D includes Dildo, the location of the sealskin-processing plant. Seal landings in this area are accounted for mainly by the large-vessel offshore hunt.
c. Area O covers Labrador.

Table 17.1 indicates the importance of sealing to the various fishery management areas in Newfoundland/Labrador. (See Figure 15.1, Appendix 15.3, Chapter 15.) As shown in Table 17.2, the major sealing areas, that is, those designated A, B, M, N and O, account for 35% of the total fishery production of the province. Dependence on the basic cod fishery varies from about 45% in Area A to 80% in Area O and averages 60% for the five areas (or sub-areas) as a whole. Some 55% of shellfish (lobster, crab, shrimp and scallop) production in the province is accounted for by these fishery areas. They produce only 15% of the production of "other" groundfish species (also including flounders and redfish), for which large-scale equipment, for example, trawlers, is required.

Small-scale fishing techniques, for example, trap skiffs, longliners and the like, imply vulnerability to the vagaries of fish stocks and to the hazards of the marine environment. Diversified enterprise, embracing a variety of complementary fishing activities, represents an adaptation to such circumstances. Consequently, a shift in weight from season to season among accessible species' stocks is typical of the fisheries in the areas under consideration. The pattern of production exhibited in Table 17.2, therefore, may change substantially from one year to another.

The past 30 years have been difficult for the Newfoundland fishing industry. The trends in fishery production between 1955 and 1983 are summarized in Table 17.3 and depicted in Figure 17.1. During the early 1970s, prices rose as a result of steady demand and declining supply. This rise in unit values forestalled the serious problems posed by rapidly rising harvesting costs during the mid-1970s and by over-capitalization.

In 1983, the same year that the seal hunt collapsed, the value of fish landings declined by 3.8% as compared with 1982 landings. The decline in total volume and value of fish landings is attributed to a reduced harvesting effort, by both the offshore and inshore fleets. This reduced harvesting effort was, in large measure, a reaction to market conditions of high inventories and low prices for groundfish species. There was an improvement, however, in the value of shellfish landings because of higher prices. The pelagic and estuarial harvest declined for the fourth year in a row because prices for capelin were down and because of a reduced harvesting quota for herring. Reduced catches of these pelagic species meant a serious loss of income for the inshore fishermen in the sealing areas. Thus the collapse of the seal hunt could hardly have come at a worse time from the fishermen's point of view.

Table 17.2
Commercial Fishery Production by Area, Newfoundland, 1983[a]

Area	$ million Major Species												
	Cod	Flounders	Turbot	Redfish	Capelin	Herring	Mackerel	Lobster	Crab	Shrimp	Scallop	Other	Total
A	6.0	0.1	1.5	⊘	0.1	⊘	0.6	⊘	2.3	2.5	–	0.6	13.7
B	10.6	–	1.4	⊘	0.6	0.1	0.2	2.6	2.4	–	–	0.8	18.7
C	4.3	⊘	0.5	0.1	0.5	⊘	0.1	0.8	1.4	–	–	0.6	8.3
D	11.1	3.3	1.2	⊘	1.8	⊘	0.6	0.1	0.2	–	⊘	0.7	19.0
E	4.0	0.2	⊘	–	2.2	⊘	0.1	0.2	1.5	–	–	0.2	8.4
F	7.8	0.2	0.5	1.0	⊘	–	⊘	⊘	2.3	–	⊘	0.1	11.9
G	4.4	2.2	⊘	⊘	0.1	⊘	⊘	0.1	0.4	–	–	0.2	7.4
H	12.9	4.3	⊘	0.2	⊘	⊘	⊘	1.4	–	–	0.1	0.4	19.2
I	6.0	1.4	⊘	0.6	–	⊘	⊘	1.4	⊘	–	⊘	0.2	9.6
J	12.6	1.4	0.1	1.3	–	⊘	⊘	0.4	–	–	–	0.8	16.6
K	1.1	0.1	–	⊘	–	0.2	⊘	0.8	–	–	⊘	0.2	2.2
L	1.1	0.1	–	⊘	0.3	1.0	0.1	1.1	–	–	0.2	0.1	4.0
M	3.1	0.2	⊘	⊘	⊘	0.2	⊘	1.6	–	1.2	–	0.2	6.5
N	8.9	⊘	⊘	⊘	–	0.5	⊘	1.2	–	1.1	0.3	0.2	12.2
O	6.4	–	⊘	–	⊘	⊘	–	–	–	–	0.2	1.2	7.8
All	100.3	14.0	5.3	3.4	5.6	2.0	1.8	11.9	10.4	4.8	0.9	5.3	165.7

Source: Department of Fisheries and Oceans, St. John's.

a. Because of the rounding of individual items the vertical columns do not add exactly. The sign ⊘ signifies a production amounting to less than $50,000 in value.

Table 17.3
Primary Fishery Production, Newfoundland/Labrador, 1955–1983
(Current Dollars)

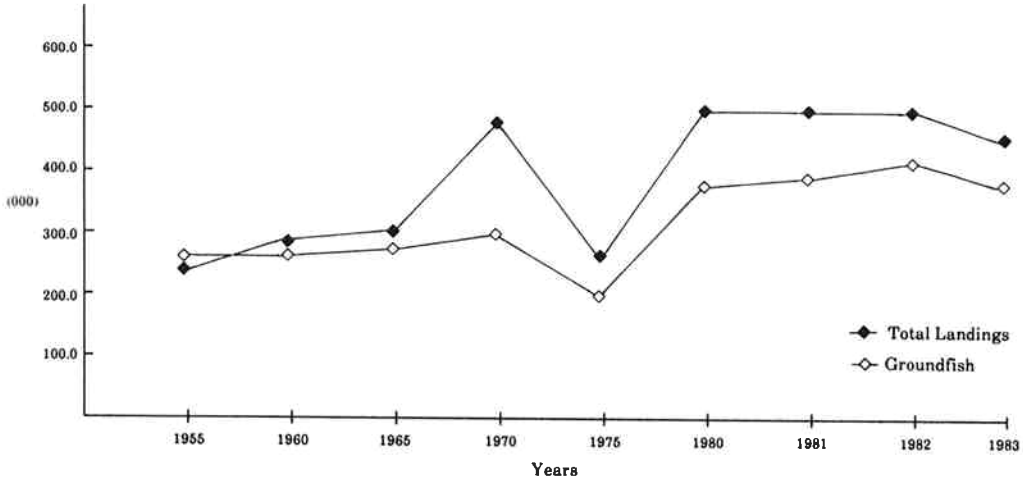
	Quantity (000 t)		Value/tonne ($)		Value ($000,000)	
Year	Ground-fish spp.	Other Species	Ground-fish spp.	Other Species	Ground-fish spp.	Other Species
1955	251	40	43.0	80.0	10.8	3.2
1960	265	21	47.9	142.9	12.7	3.0
1965	275	29	68.7	148.3	18.9	4.3
1970[a]	307	168	84.4	53.0	25.9	8.9
1975	194	63	165.0	190.5	32.0	12.0
1980	380	118	294.2	385.6	111.8	45.5
1981	392	103	302.6	475.7	118.6	49.0
1982	426	78	311.0	510.3	132.5	39.8
1983	387	68	317.8	627.9	123.0	42.7

Source: Department of Fisheries and Oceans, St. John's.

a. The apparently anomalous value per tonne for "other species" reflects weighting by unusually large herring catches in the late 1960s and early 1970s. These were used largely for reduction (meal and oil production) and hence fetched a relatively low price. During the same period, landings of shellfish (high-priced species) were comparatively low.

There are 25,000–30,000 registered fishermen in Newfoundland and Labrador (1984), about equally divided between full-time and part-time participants. The number of both groups has grown somewhat in recent years, following a steady decline during the depressed years of the late 1960s and early to mid-1970s. In terms of person-years of employment, the fisheries account for just over 6,000, a radically contracted number that reflects the highly seasonal character of the sector. The offshore trawler fleet provides year-round employment for about 1,500 persons, with the balance being engaged in the seasonal inshore fisheries, that is, those in which small and intermediate-sized craft are employed. The geographic distribution of registered fishermen is roughly as shown in Table 17.4.

Figure 17.1
Quantity of Fish Landings in Newfoundland and Labrador, 1955–1983 (tonnes)



Source: Department of Fisheries and Oceans, Ottawa.

Table 17.4
Areal Distribution of Fishermen, Province of Newfoundland, 1984

Coastal Area[a]	Registered Fishermen					
	Full-time		Part-time		Total	
	(no.)	(%)	(no.)	(%)	(no.)	(%)
Northeast coast (A–B)	3,745	27.8	4,859	34.3	8,604	31.2
East coast (C–G)	3,692	27.4	3,874	27.4	7,566	27.4
South coast (H–J)	2,664	19.8	2,013	14.2	4,677	16.9
West coast (K–N)	2,223	16.5	2,593	18.3	4,816	17.4
Labrador (O)	1,131	8.5	822	5.8	1,953	7.1
All areas	13,455	100.0	14,161	100.0	27,616	100.0

Source: Department of Fisheries and Oceans, St. John's.

a. The northeast coast of the Island of Newfoundland extends from Cape Norman to Cape Freels, the east coast from Cape Freels to Cape St. Mary's (thus including most of the Avalon peninsula), the south coast from Cape St. Mary's to Cape Ray and the west coast from Cape Ray to Cape Norman. The capital letters represent the sub-areas listed in Tables 17.1 and 17.2.

The northeast coast, the St. Barbe (northern) part of the west coast and Labrador (the areas where sealing activity is mainly concentrated) account for approximately half of the registered fishermen in Newfoundland. The inshore small-boat character of the fishing fleets in these areas is evident from the data presented in Table 17.5.

Table 17.5
Fleet Composition by Length of Vessel and Coastal Division, Newfoundland, 1984

	Number of Vessels in Each Registered Length Category				
Coastal Area[a]	0′-34′	35′-64′	65′-99′	100′+	Total
Northeast coast (A–B)	4,814	393	3	2	5,212
East coast (C–G)	3,777	432	6	49	4,264
South coast (H–J)	2,528	255	2	38	2,823
West coast (K–N)	2,356	196	6	1	2,559
Labrador (O)	1,288	88	1	–	1,377
All areas	14,763	1,364	18	90	16,235

Source: Department of Fisheries and Oceans, special tabulation.

a. Areas are defined as in Table 17.4.

The Newfoundland fish-processing sector has provided employment for about 19,000 people, although employment is highly seasonal. In the early 1980s, this sector generated close to 10,000 person-years of employment annually, of which the 12 integrated (trawler-serviced) plants accounted for just over one-third.

The difficulties facing the Atlantic coast fishery are not new. Since the early 1950s, segments of the industry have faced severe hardship every six or seven years. These periodic crises have been precipitated by price declines on international markets. In 1974, the collapse of a number of important fishing interests in Newfoundland and Nova Scotia was averted only through massive financial transfers from the federal government. The industry has continued to rely on periodic financial assistance from government to maintain income and employment levels.

The financial crisis faced by the industry in the 1980s appears to have been even more severe than that experienced during the mid-1970s. The recent situation resulted in the closure of several plants in the province in 1983. Although preliminary efforts have been made to restructure the industry, some major negative factors impeding the industry's performance persist. Overcapacity (both in the harvesting and processing sectors), coupled with low productivity and the cyclical downturn in world-wide demand, continued to affect overall performance at least until 1986 when early indications showed some improvement. Adjustment problems have been compounded by the decline of sealing, which had acted as a supplementary source of income to many fishermen.

Northern Labrador

Much of the momentum of Newfoundland's development since the Second World War has been associated with the hydro-power and iron-ore projects in the Labrador interior, together with an infusion of federal support for basic infrastructure systems. Coastal Labrador has, however, been bypassed by such developments, and the coastal communities have eked out marginal livings, bolstered by piecemeal social support programs.

The communities of northern Labrador shown in Figure 14.3 (Chapter 14) encompass both sub-arctic and near-arctic climates. The sea is frozen for seven months of the year, and in some years, such as 1983 and 1984, adverse winds hold the arctic pack ice against the land until August, limiting opportunities to harvest economic resources from the sea to a period of four or five months. There are no roads to these communities; they are served by small aircraft and by coastal vessels. For residents of the region, there is little employment mobility short of leaving altogether.

The economy of northern Labrador is a mixed one, depending upon a combination of wage employment, transfer payments, the sale of commodities from local resources and the subsistence use of local resources. The total economy in 1979 was estimated to be $7.25 million, of which income in cash and kind from local resources amounted to nearly $3 million, or slightly less than half the total. Most recent available estimates suggest that the total economy of northern Labrador for 1984 was about $10 million, of which income from local resources was down to $2.5 million (Williamson, 1986). Wage employment has apparently increased in the intervening five years, while income from resource harvesting has decreased.

The main labour-force characteristics for northern Labrador are summarized in Tables 17.6 to 17.10. The data in these tables must be viewed with care, since the average figures reflect the inclusion of fully employed, short-term community residents such as teachers, nurses and RCMP personnel. (Furthermore, because of the small populations and labour force involved, the "random rounding to zero or five" procedure followed by Statistics Canada means that, in some cases, the data do not sum to the total shown and significant percentage differences may occur.)

Table 17.6
Population and Labour Force, Inuit/Settler Communities[a]

	Nain	Hopedale	Postville	Makkovik	Rigolet
Total population	938	425	223	347	271
Labour force activity					
Population > 15 yr. old	560	280	135	235	165
In the labour force	380	175	90	170	145
Employed	295	140	30	55	125
Unemployed	85	20	55	110	15
Participation rate[b] (%)	67.4	61.9	65.9	72.1	87.9
Unemployment rate (%)	21.9	9.5	54.2	63.6	10.2

Source: 1981 Census of Canada.

a. The Statistics Canada *Labour Force Survey* (LFS), published monthly, is an alternative source for population and labour-force data. This study chose to use census labour-force data; the 1981 figures for the labour-force participation rate and the unemployment rate from the LFS are statiscally close to census figures.

b. Aside from seasonal variation, there is good reason to believe that the official labour-force participation rate and unemployment-rate statistics understate the true situation by a significant margin. The implication is that economic conditions in the sealing areas are actually worse than the official statistics portray.

The labour-force participation rates vary from a low of about 62% in Hopedale to a high of almost 88% in Rigolet. This suggests that working for wages is an activity in which most people engage during at least part of the year. The variation in unemployment rates between communities exceeds that of the participation rate. In part, this may be because of the small absolute numbers on which the calculations are based. Furthermore, the census data apply to only a single point in time: 1 June 1981. Since peak economic activity occurs in this area sometime between July and December, the measured unemployment rate is likely to fall during those months.

As Table 17.7 shows, the majority of people in these communities have less than grade-nine education. This is not surprising, considering that the dropout rate is approximately 90% by grade 11. A small number of adults have specialized skills such as diesel mechanics, small-engine maintenance, secretarial skills and carpentry. A growing number are receiving on-the-job training, job-readiness training, or courses, formal or informal, in broadcasting, journalism, community and public health, office management, store clerking and other service occupations. Nevertheless, the majority of the labour force lack special skills and have little or no job mobility. This is an acute problem for the large number of adults between the ages of 16 and 25. Most residents appear to be unwilling to leave their communities, despite the poor income and employment prospects.

Tables 17.8 and 17.9 show the heavy reliance on the fishery, both primary sector and manufacturing/processing, as a source of employment. Community business, including teaching, medical and health services, social services and general services to business and persons, is another important source of employment. Seasonal construction work and clerical work also provide a significant share of employment.

Such census data provide only a partial view of the Labrador economy. The statistics do not show, for example, that most members of the adult population have important life skills, necessary in a harsh and isolated environment where people are close to the land. Hunting skills, small boat handling, minor engine repairs, outdoor survival skills, and the sewing of skin clothing are skills generally acquired by adults. With the exception of carpenters or carpenters' helpers, most of these skills are not readily translatable into wage-employment opportunities, although they are critical to successful resource harvesting.

Other important details of the Labrador economy are similarly hidden by the summary statistics. Full-time employment in northern Labrador accounts for between 15% and 20% of the total economy. It has increased

Table 17.7
Educational Attainment, Inuit/Settler Communities

	Nain	Hopedale	Postville	Makkovik	Rigolet
Population > 15 yr. old	560	280	135	230	160
Level of schooling					
Less than grade 9	310	160	80	125	90
Some high school	128	55	35	45	45
High school graduate	30	15	5	15	10
Some university	18	5	5	15	5
University graduate	30	15	0	10	5
Other post-secondary education	50	30	15	20	5

Source: 1981 Census of Canada.

slightly in the past five years because of the growth of aboriginal organizations and their staffs as land claims negotiations got under way. Almost all of the full-time employment is in the service sector. The private sector includes small retail stores, restaurants, and distributors of fuel and heating oil. Most employers in the private sector are settlers or Newfoundlanders who have moved to northern Labrador in recent years in response to a limited number of investment opportunities.

Casual wage employment, primarily during the summer or "open water" months, is related predominantly to the construction of housing, fishing facilities, water and sewage systems, airstrips and local roads. There are very few opportunities for casual labour during the winter months from December to June. Depending on the amount of construction, casual and seasonal wage employment can absorb 30% to 40% of the labour force.

Fish-processing employment can absorb up to 35% of the labour force during the fishing season, normally the months of July to November. The

Table 17.8
Labour Force by Industry Division, Inuit/Settler Communities

Industry Divisions	Nain	Hopedale	Postville	Makkovik	Rigolet
All industries	370	170	80	155	140
Primary	65	35	25	40	35
Manufacturing	65	20	5	50	20
Construction	25	0	10	5	5
Transport and communication	20	5	10	15	10
Trade	45	25	5	10	15
Finance, insurance and realty	10	5	0	0	5
Community business[a]	110	60	15	25	40
Public admin. and defence	30	20	5	10	10
Not applicable[b]	5	5	5	15	0

Source: 1981 Census of Canada.

a. The Community business division includes the following sub-industries: education and related services, health and welfare services, personal services, and accommodation and food services.

b. This refers to unemployed persons, 15 years of age or older, who have never worked or who worked only prior to 1 January 1980.

fish plants operate at a loss, partly because they are overstaffed. If the provincial government turned these plants over to the private sector, the number of jobs would decrease. Because the inshore species which these plants process are now harvested at nearly maximum sustainable levels, job opportunities in this sector are limited.

The inshore fishery, which recruits 35% of the labour force, operates between late June and September, depending on ice conditions at the beginning of the season and weather and sea conditions at the end of the season.

Table 17.9
Labour Force by Major Groups, Inuit/Settler Communities

Major Occupational Groups	Nain	Hopedale	Postville	Makkovik	Rigolet
All occupations	375	175	80	160	140
Managerial and administrative	20	0	5	5	10
Teaching	20	15	0	15	5
Medicine and health	15	5	0	10	5
Technical, social, religious	20	5	0	5	10
Clerical	30	10	10	10	15
Sales	15	5	5	10	10
Services	55	15	5	5	15
Primary occupations	70	40	25	35	35
Processing	60	20	0	45	15
Machining	5	5	0	0	0
Construction	30	10	10	5	5
Transport occupations	5	0	5	5	5
Other	25	20	10	15	25
Not applicable	10	0	5	15	5

Source: 1981 Census of Canada.

The fishery in the Nain area, which extends north to the fjords of the Torngat Mountains, is especially limited by ice and weather, which may prevent the fishery from getting under way until August, severely limiting harvests and drastically decreasing fishermen's unemployment-insurance payments in the off season.

Fishermen use small open boats and fixed gear in shallow water: gill nets, handlines, and some baited trawls or longlines. Only a few fishermen

Table 17.10
Estimated Participation by Economic Sector, Northern Labrador, 1979[a]

	Labour Force Participation Rate (%)	Proportion of Households Receiving Income (%)
Full-time wage employment	15	25
Casual wage employment	30	50
Fish-plant employment	35	60
Unemployment insurance	40	70
Statutory payments	n.a.	100
Social assistance	n.a.	60
Fish sales	35	80
Fur sales	20	50
Domestic meat and fish	50	100
Domestic wood and other	30	60

Source: Usher (1982).

a. The percentages shown are not additive. They refer to the proportion of labour-force participants and households working in and/or receiving income from a particular activity.

own longliners, which are used for setting gill nets or longlines in deeper waters. The seasonal nature of the fishery and the high capital costs of vessels put longliners beyond the reach of most fishermen. Arctic char and salmon are harvested at near-maximum levels. The cod fishery could expand, but more advanced and expensive technology would be required for the deeper waters where the cod are harvested. There appears to be some potential for species such as scallop and turbot. Nevertheless, the inshore fishery will not absorb the labour force generated in northern Labrador by the highest population growth rate in Canada: 4% a year.

Table 17.11 shows a total cash income from animal furs of $236,000 in 1979. Of this amount, $107,000 was derived from the sale of sealskins. Income from seals increased to a maximum of $175,000 in 1982, after which

the market collapsed to such an extent that purchases by the local Labrador Services Division (LSD) stores all but ceased. Several bad ice years and the collapse of the sealskin market have substantially reduced income generated from fish and seal commodities in northern Labrador. In a mixed seasonal economy both situations have had serious and synergistically negative consequences for the economic welfare of northern Labrador residents.

Table 17.11
Gross Income from Major Sources, Northern Labrador Communities, 1979

	$ 000					
Source	Nain	Hopedale	Postville	Makkovik	Rigolet	Total
Full-time employment	580	330	140	220	140	1,410
Casual employment	180	100	75	100	65	520
Fish-plant employment	150	15	10	270	–	445
Wage-employment sub-total	910	445	225	590	205	2,375
Unemployment insurance	170	100	110	190	110	680
Statutory payments	360	160	60	115	100	795
Social assistance	265	85	15	40	85	490
Transfer payments sub-total	795	345	185	345	295	1,965
Fish	278	91	85	161	80	695
Fur	94	52	14	34	42	236
Handicrafts, etc.	20	5	–	25	5	55
Commodities sub-total	392	148	99	220	127	986
Total cash income	2,097	938	509	1,155	627	5,326
Meat and fish	801	327	157	294	177	1,756
Wood and other	20	35	48	25	60	188
Total domestic income	821	362	205	319	237	1,944
Total income	2,918	1,300	714	1,474	864	7,270

Source: Usher (1982).

Despite the collapse of the sealskin market, subsistence seal hunting continues. In northern Labrador, seal meat is still a favourite and highly nutritious food, surpassed only by caribou meat in importance. Fifty percent of the labour force continue to hunt seals in spring, summer and fall. Capital expenditures per hunter required for hunting exceed $8,000, with annual replacement expenditure running as much as $3,000. Fuel costs for snowmobiles and boats are substantial. Income from the sale of sealskins has been critical in maintaining hunting operations.

Southern Labrador

For the present purpose, southern Labrador is defined as the coastal area between L'Anse au Clair and Cartwright. (See Figure 14.3, Chapter 14) As in the other sealing areas of the province, the people of this area rely on primary industries such as fishing and hunting to sustain them. The economies of these communities are not well diversified, and the residents routinely face high seasonal unemployment and fluctuations in their economy.

The population and labour-force activity for this region of Labrador are shown in Table 17.12. Only 50% of the population over 15 years of age were participants in the labour force when the 1981 census was taken, a figure considerably lower than the national average (64%) and the participation rate in other sealing areas. This may have been a result of the frustration which workers in this area have experienced from previously unsuccessful job searches. Hill (1983) found that local people are very well informed on what work is available and may enter the labour force only when they believe that employment opportunities exist. The high unemployment rate of 39% may be related to the fact that the local fishery was not yet fully operative when the census was carried out.

The population is characterized by low levels of formal education, as shown in Table 17.13. Almost 78% have not completed high school, and just over 51% have not finished grade nine. This indicates a high drop-out rate from school and very limited labour mobility.

Tables 17.14 and 17.15 illustrate labour-force composition by industry division and by major occupational group respectively. Dependence on the fishing industry shows up strongly. The data presented in the first table indicate that approximately 44% of the total labour force is attached to the fishing and manufacturing industries. The latter is primarily fish processing, which is the only manufacturing activity in the area except for two small craft-making firms. This dependence on the fishery is confirmed by

Table 17.12
Population and Labour Force, Southern Labrador

	Number
Total population	3,813
Labour force activity	
Population > 15 yr. old	2,570
In the labour force	1,285
Employed	795
Unemployed	505
Participation rate (%)	50.0
Unemployment rate (%)	39.3

Source: 1981 Census of Canada.

Table 17.13
Education Levels, Southern Labrador

	Number	%
Population > 15 yr. old	2,570	100.0
Level of schooling		
Less than grade 9	1,320	51.4
Some high school	680	26.5
High school graduate	185	7.2
Some university	85	3.3
University graduate	80	3.1
Other post-secondary education	200	7.8

Source: 1981 Census of Canada.

Table 17.15, where primary occupations and processing account for 44% of employment. The provision of services such as education, health, social services and general services account for almost 28% of the labour force. These concentrations are similar to those in other sealing areas.

Table 17.14
Labour Force by Industry Divisions, Southern Labrador

Industry Divisions	Number	%
All industries	1,260	100.0
Primary	395	31.4
Manufacturing	155	12.3
Construction	50	4.0
Transport and communication	70	5.6
Trade	140	11.1
Finance, insurance and realty	5	0.4
Community business	350	27.8
Public admin. and defence	85	6.8
Not applicable	35	–

Source: 1981 Census of Canada.

Local resources harvested for subsistence are important in southern Labrador. Consumption of country food, including seals, is a significant nutritional element in the area. Cutting fire wood and hunting birds and other animals also figure in the local subsistence economy.

The economy of the Labrador sealing areas is highly seasonal because of its heavy dependence on the inshore fishery and fish processing. Seasonal construction work and other local resource-related activities are also important. The service sector, including education, health and police supplied by government, as well as retail trade activities supported, in part, by unemployment-insurance benefits and other income-maintenance programs, provides a steady core of employment. In general, however, the

Table 17.15
Labour Force by Major Occupations, Southern Labrador

Major Occupational Groups	Number	%
All occupations	1,260	100.0
Managerial and administrative	75	5.8
Teaching	85	6.6
Medicine and health	30	2.3
Technical, social, religious	30	2.3
Clerical	45	3.5
Sales	85	6.6
Services	130	10.1
Primary occupations	420	32.6
Processing	135	10.5
Machining	25	1.9
Construction	70	5.4
Transport occupations	25	1.9
Other	100	7.8
Not applicable	35	–

Source: 1981 Census of Canada.

sealing-area economy is closely tied to the availability and utilization of local resources.

Island of Newfoundland

The data used to describe the basic economy in the sealing areas of Newfoundland are set up by two sub-areas. The data for the northeast coast apply to the area between Cape Freels and the head of White Bay (Census Division 8); the data for the great northern peninsula cover the area from the head of White Bay around the coast to Cape St. Gregory (Census Division 9).

The economy of these areas is dominated by the seasonal fishery. The fishing season normally extends from May until November. During the winter months, because of ice and weather conditions, there is no fishing activity, and all fish plants are closed. Because of their geographic location, sparse population and lack of diverse resources, these areas are likely to remain dependent on the seasonal fishery as their main economic base.

As of 1 June, 1981, the population along the northeast coast stood at 54,542. The main labour-force characteristics are shown in Table 17.16. Of the population 15 years of age and older, over 18,000 are active in the labour force, for a labour-force participation rate of 49.2%. Compared with the national average of 64%, this rate is low; this is explained by a very low female participation rate of 30%. Moreover, it should be noted that the census is conducted in June, a period when preparation for the fishery would be under way. Labour-force participation can be expected to be relatively higher and unemployment relatively lower than during the winter months. The population on the northern peninsula was approximately 26,000 in 1981, just under half that along the northeast coast. The labour-force participation rate (62.6%) was closer to the national average (64%).

Table 17.16
Population and Labour Force, Northern Newfoundland

	Northern Peninsula	Northeast Coast
Total population	25,738	54,542
Labour force activity		
Population > 15 yr. old	17,435	36,615
In the labour force	10,990	18,205
Employed	8,550	14,400
Unemployed	2,445	3,800
Participation rate (%)	62.6	49.2
Unemployment rate (%)	22.7	21.4

Source: 1981 census of Canada.

Education levels in the two areas, set out in Table 17.17, show that relatively low levels prevail. In both areas, less than 30% of the population has completed high school, and less than 20% has received any education or training courses beyond the high-school level. For the province as a whole, these statistics are 28.9% and 28.4%, respectively.

Table 17.17
Education Levels, Northern Newfoundland

	Northern Peninsula		Northeast Coast	
	(no.)	(%)	(no.)	(%)
Population > 15 yr. old	17,435	100.0	36,615	100.0
Level of schooling				
Less than grade 9	7,665	44.0	15,705	42.9
Some high school	4,685	26.9	10,550	28.8
High school graduate	1,755	10.0	3,680	10.1
Some university	790	4.5	1,420	3.9
University graduate	575	3.3	900	2.5
Other post-secondary education	1,965	11.2	4,360	11.9

Source: 1981 Census of Canada.

The dependence of the area's economy on the fishery is apparent from Tables 17.18 and 17.19. The majority of the primary industry jobs are fish harvesting, and the manufacturing jobs are mainly fish processing. The concentration in fishing and fish processing is confirmed by the occupation breakdown shown in Table 17.19.

The region's dependence on the fishery is further illustrated in Tables 17.20 and 17.21, where employment by manufacturing industry is set out. The employment figures represent maximum employment in the firms and are not strictly comparable to the census labour-force data. They are included to give an alternative perspective on the sealing areas. On the

Table 17.18
Labour Force by Industry Division, Northern Newfoundland

Industry Divisions	Northeast Coast		Northern Peninsula	
	(no.)	(%)	(no.)	(%)
All industries	17,675	100.0	10,640	100.0
Primary	4,450	25.2	2,265	21.3
Manufacturing	2,875	16.3	2,780	26.1
Construction	1,345	7.6	620	5.8
Transport and communication	1,105	6.3	620	5.8
Trade	2,795	15.8	1,305	12.3
Finance, insurance and realty	245	1.4	115	1.1
Community business[a]	4,095	23.2	2,375	22.3
Public admin. and defence	775	4.4	550	5.2
Not applicable[b]	525	–	355	–

Source: 1981 Census of Canada.

a. Community business includes education and related services, health and welfare services, personal services and accommodation and food services.

b. This refers to unemployed persons, 15 years of age or older, who have never worked, or who worked only prior to 1 January 1980.

northern peninsula, over 95% of the manufacturing jobs are related to fish processing. No other manufacturing activity provides significant employment in this area. Along the northeast coast, 65% of the manufacturing jobs relate directly to fish processing. Non-metal mines and sawmills are other employers which each account for approximately 10% of total manufacturing jobs.

Table 17.21 provides the comparable data for Bonavista and central Newfoundland, areas adjacent to the northeast coast and the northern peninsula respectively. (See Figure 14.2, Chapter 14.). They are included to show possible employment alternatives in nearby areas. In the central area,

Table 17.19
Labour Force by Major Group, Northern Newfoundland

Major Occupational Groups	Northest Coast		Great Northern Peninsula	
	(no.)	(%)	(no.)	(%)
All occupations	17,680	100.0	10,640	100.0
Managerial and administrative	655	3.7	410	3.9
Teaching	985	5.6	615	5.8
Medicine and health	420	2.4	330	3.1
Technical, social, religious	530	3.0	185	1.7
Clerical	1,605	9.1	920	8.6
Sales	1,300	7.4	620	5.8
Services	1,660	9.4	945	8.9
Primary occupations	4,155	23.5	2,330	21.9
Processing	1,930	10.9	2,235	21.0
Machining	880	5.0	310	2.9
Construction	1,590	9.0	790	7.4
Transport occupations	1,060	6.0	320	3.0
Other	915	5.2	640	6.0
Not Applicable	525	–	355	–

Source: 1981 Census of Canada.

1,200 of more than 1,400 manufacturing jobs are associated with a pulp and paper mill, and in the Bonavista region, 1,622 of about 1,900 jobs are in the fish-processing industry. The strong concentration of employment alternatives in two sectors is therefore evident. In this sense, the adjacent areas are similar to the sealing areas.

The main components of the economic base in the sealing areas of Newfoundland are the harvesting and processing of fish. In the past few years, the fishery has been plagued by declining fish stocks, low prices and higher operating costs. These difficulties have created financial hardships

Table 17.20
Manufacturing Establishments, Northern Newfoundland

SIC[a] Industry	Northern Peninsula		Northeast Coast	
	Firms	Employees[b]	Firms	Employees[b]
062-Non-metal mines	0	0	1	100
102-Fish products	12	694+	7	603+
104-Dairy products	0	0	1	8
107-Bakery products	0	0	1	6
199-Handicrafts	1	1+	0	0
251-Sawmills, etc.	11	21+	37	91+
261-Office & household furniture	0	0	1	4
281-Commercial printing	0	0	1	3
284-Printing, publishing	1	4	1	1
304-Stamped, pressed & coated metal products	0	0	1	3
306-Hardware, tool & cutlery	0	0	1	4
324-Truck & bus body & trailer	0	0	1	2
328-Boatbuilding & repair	2	8+	5	79
354-Concrete products	0	0	1	3
355-Ready-mix concrete	0	0	1	5
359-Other non-metallic mineral products	0	0	3	13
376-Soap & cleaning compounds	0	0	1	3
Total	27	728+	64	928+

Sources: Gardner Pinfold Consulting Economists Ltd. (1986); Newfoundland and Labrador (1984).

a. SIC = Standard Industrial Classification.

b. The + sign indicates that some information is unavailable; actual figure may be higher.

Table 17.21
Manufacturing Establishment by District, East-Central Newfoundland

SIC[a] Industry	Central		Bonavista	
	Firms	Employees[b]	Firms	Employees[b]
062-Non-metal mines	1	45	0	0
102-Fish products	0	0	12	1,622
104-Dairy products	0	0	0	0
107-Bakery products	2	31	1	6
108-Sugar & sugar confectionary	1	50+	0	0
169-Other rubber products	1	10	0	0
199-Handicrafts	0	0	0	0
251-Sawmills, etc.	5	5	34	65+
261-Office & household furniture	1	7	1	1
271-Pulp & paper & allied products	1	1,200	0	0
273-Paper box & bag	1	3	0	0
281-Commercial printing	2	7	1	8
284-Printing, publishing	0	0	0	0
297-Copper & alloy rolling, casting & extruding	0	0	1	2
304-Stamped, pressed & coated metal products	5	38	0	0
309-Other metal fabricating	1	1	2	7
328-Boatbuilding & repair	0	0	7	125
351-Clay products	0	0	1	26
355-Ready-mix concrete	1	6	1	10
369-Other petroleum & coal products	1	18	0	0
371-Industrial chemicals	1	5+	0	0
391-Scientific & professional equipment	0	0	1	4
393-Sporting goods & toys	0	0	1	6
399-Other manufactured products	0	0	2	2
994-Other repair services	1	5	1	4
Total	25	1,431+	66	1,888+

Sources: Gardner Pinfold Consulting Economists Ltd. (1986), Newfoundland and Labrador (1984).

a. SIC = Standard Industrial Classification.
b. The + sign indicates some information unavailable; actual figure may be higher.

for many aspects of the fishery in this region and in the regional economies in general. Other sources of employment in the area, such as are associated with mining or pulp and paper, do not look at all promising. Indeed, the reverse is true. They, too, are in decline.

The decline of the seal hunt has resulted in the closure of the processing plant at Dildo. In terms of the area and its limited employment opportunities, the job loss represents a significant hardship. It is worthwhile, therefore, to take a closer look at Dildo and its neighbouring communities.

Dildo is a small village located on the southeast coast of Trinity Bay. Data on the census subdivision in which it is situated will give an indication of the situation in the area. The total population of the subdivision in 1981 was 3,296 persons, of whom 2,280 were 15 years of age or older. The labour force consisted of about 1,300 persons, representing a participation rate of 57%. This rate is considerably lower than the national average (64%) because of the relatively low female participation rate (40%). In 1981, the measured unemployment rate was about 21%, but this figure probably understates the true rate of unemployment, since it does not take into account the effect of discouraged workers who have dropped out of the labour force because it is so difficult to find a job.

On average, the area exhibits about the same level of education as the Newfoundland sealing areas: roughly 70% of the population 15 years of age and over have not completed high school. As for labour-force attachment by industry, slightly more than 13% (170 persons) are involved in primary industry, which consists mainly of the fisheries. Manufacturing accounts for another 33%, representing 430 persons, 390 of whom are employed in fish processing and the remainder in metal work and mechanical activities. The rest of the labour force is spread across construction work and the various service-sector activities. Community business activities like education, health, personal and business services account for about 17% of the labour force, a somewhat lower proportion than the 22%–23% for the same category in the sealing areas of Newfoundland.

In the immediate vicinity of Dildo, according to the *Directory of Manufacturers, 1983*, (Newfoundland, 1984) the largest employer is Arctic Seafoods Limited, which employs up to 150 people in its fish-processing plant in South Dildo. Woodman's Fisheries and Higdon Sea Foods together employ up to another 240 persons in nearby New Harbour. The Dildo Boatyard Limited employs four people, and another four work in a welding shop . Clearly,

the immediate Dildo area is highly dependent on the fisheries and associated processing and support activities.

Generally, then, the economy of the area in which Dildo is located is very similar to that of other rural areas of Newfoundland. One possible difference is that Dildo is located about 100 km from the St. John's area, a distance which puts it near the limit of the work-home commuting distance for most people. To the extent that St. John's offers better employment prospects and that people are willing to commute, the Dildo workers may have better employment opportunities than people in similar circumstances living farther from the province's main urban centre. However, this advantage is probably more apparent than real. The education and labour-force experience of the Dildo plant workers is limited and offers little advantage in competing for jobs in the St. John's area. Furthermore, the opinions expressed by the plant workers indicated a strong preference for jobs in their own immediate area. Still, with appropriate retraining, commuting to jobs in St. John's is a possibility for some of the processing-plant workers.

Given the limited education, training and work experience of the Dildo plant workers, and the sparse local opportunities for alternative employment, replacing the seal-processing jobs appears to depend on renewal of seal-pelt markets or the introduction of a new employer to the area.

Lower North Shore, Quebec

Like the other sealing areas, the communities of Quebec's lower north shore rely on primary industries (that is, fishing and hunting) to sustain them. The local economies are not diversified, and there is high seasonal unemployment. The location of these communities and the modest value of their natural resources suggest that fishing will likely remain their main economic base. Like some of the other sealing areas, the major drawbacks to tourism are the isolated location and a lack of facilities to serve tourists. The sealing area of the lower north shore is illustrated in Figure 14.6 (Chapter 14). Sealing has been concentrated mainly in the Harrington–La Tabatière district.

The population and labour-force activity for the lower north shore area are shown in Table 17.22. A little over 52% of the population over 15 years old is active in the labour force. This figure is low compared with the national average (64%) and even with the northern peninsula of Newfoundland (63%) and the Magdalen Islands (63.5%). This is explained by the low female participation rate in the area (41%). The unemployment rate

(28.3%) for the area is high, considering that the spring fishery would be well under way by the beginning of June, when the census was taken.

Table 17.22
Population and Labour Force, Quebec North Shore

	Number
Total population	5,176
Labour force activity	
Population > 15 yr. old	3,440
In the labour force	1,825
Employed	1,325
Unemployed	495
Participation rate (%)	52.3
Unemployment rate (%)	28.3

Source: 1981 Census of Canada.

Education levels are low for the population over 15 years of age. As Table 17.23 shows, only 13% of the adult population have any formal post-secondary education.

Breakdowns of the labour-force composition by industry division (Table 17.24) and by major occupation group (Table 17.25) show that the main employment activities along the north shore are fishing and fish processing. The two activities provide employment for close to 40% of the labour force. The fishing in this area is seasonal, lasting four or five months each year. There are several small processing facilities along the north shore, but the plant in La Tabatière is the only one which handles a diversified range of products. While cod is the main species caught and processed along the Quebec north shore, crab landings have been expanding rapidly, and further expansion of this fishery may be possible. Aside from fish processing, there is little or no manufacturing activity. Most of the non-primary sector employment is provided by the community business division, which accounts for 32.5% of the labour force.

Table 17.23
Education Levels, Quebec North Shore

	Number	%
Population > 15 yr. old	3,440	100.0
Level of schooling		
Less than grade 9	1,880	54.6
Some high school	1,010	29.4
High school graduate	95	2.8
Some university	50	1.5
University graduate	125	3.6
Other post-secondary education	280	8.1

Source: 1981 Census of Canada.

Table 17.24
Labour Force by Industry Division, Quebec North Shore

Industry Divisions	Number	%
All industries	1,710	100.0
Primary	480	28.1
Manufacturing	200	11.7
Construction	70	4.1
Transport and communication	120	7.0
Trade	175	10.2
Finance, insurance and realty	15	0.9
Community business	555	32.5
Public admin. and defence	95	5.6
Not applicable	110	–

Source: 1981 Census of Canada.

Table 17.25
Labour Force by Major Group, Quebec North Shore

Major Occupational Groups	Number	%
All occupations	1,710	100.0
Managerial and administrative	80	4.7
Teaching	135	7.9
Medicine and health	75	4.4
Technical, social, religious	60	3.5
Clerical	140	8.2
Sales	85	5.0
Services	195	11.4
Primary occupations	490	28.7
Processing	165	9.6
Machining	35	2.0
Construction	160	9.4
Transport occupations	30	1.8
Other	55	3.2
Not applicable	110	–

Source: 1981 Census of Canada.

Even so, subsistence activities like hunting animals and birds, cutting firewood and general maintenance work around the home are important during much of the year in the towns and villages of the north shore. This generalization applies to the sealing towns of Mutton Bay, La Tabatière and Harrington, whose populations range from approximately 150–1,000 people. Supplies are brought in by ship during the late spring, summer and fall. During the rest of the year, there is considerable isolation and dependence upon local resources for self-employment and the necessities of daily life.

The economy of the north shore is centred on the inshore fishery. Some processing is carried out locally, but this activity is not a strong source of employment in itself. The government's provision of teaching, health and

other social services and unemployment-insurance benefits appears to be a significant factor in the local economy, as is participation in the subsistence activities mentioned.

The Magdalen Islands

The Magdalen Islands have a small and vulnerable economy, heavily dependent on the outside world for most goods and services, as well as much of the capital needed to develop resources. The economy also is highly seasonal. The main components of the economic base are the harvesting and processing activities in fisheries, salt mining and tourism. The fisheries operate for five to six months a year, commencing in May. Tourism is confined to the period from June to the end of August. The relatively high unemployment rate, as high as 60% in the winter, indicates that unemployment-insurance benefits play a major sustaining role in the Magdalens' economy.

In June 1981, the population of the Magdalen Islands was 14,130. The main labour-force characteristics are shown in Table 17.26. Of the population 15 years of age and older, slightly more than 6,700 are active in the labour force, producing a labour-force participation rate of about 63.5%, slightly less than the national average of 64%. The female participation rate (55%) was relatively high. The census is conducted during early June, however, a period when the fishery is sometimes active and the participation rate may be much higher than for most of the year.

The Magdalen Islands' labour force appears to be somewhat better educated than the labour force in other sealing areas, according to the data shown in Table 17.27. Relatively fewer people have less than grade-nine education in the Magdalen Islands than in Newfoundland, the north shore of Quebec or the sealing area in Cape Breton, while relatively more people have either attended or completed university. A much larger percentage of the total population older than 15 years has taken other post-secondary technical training. Interviews with eight sealers showed that all had some technical training, most of it related to the fishing industry, for example, instrumentation and navigation.

Fishing and fish processing show up strongly in data on the industry and occupational composition of the labour force. Distribution by industry division, shown in Table 17.28, indicates that over 35% of the labour force is attached to the primary and manufacturing industries. In the Magdalens these industries are composed mainly of fishing and fish processing. The breakdown of the labour force by major group, shown in Table 17.29,

Table 17.26
Population and Labour Force, Magdalen Islands

	Number
Total population	14,130
Labour force activity	
Population > 15 yr. old	10,565
In the labour force	6,735
Employed	5,415
Unemployed	1,310
Participation rate (%)	63.5
Unemployment rate (%)	20.0

Source: 1981 Census of Canada.

Table 17.27
Education Levels, Magdalen Islands

	Number	%
Total population > 15 yr. old	10,565	100.0
Level of schooling		
Less than grade 9	3,710	35.1
Some high school	2,400	22.7
High school graduate	1,340	12.7
Some university	460	4.4
University graduate	415	3.9
Other post-secondary	2,230	21.2

Source: 1981 Census of Canada.

provides an alternative, but essentially similar, view. Primary and processing occupations, mainly fishing and fish processing, account for almost 30% of all occupations. Service-sector activities included under the community business division account for almost 30% of employment.

Table 17.28
Labour Force by Industry Division, Magdalen Islands

Industry Divisions	Number	%
All industries	6,380	100.0
Primary	415	6.5
Manufacturing	1,850	28.9
Construction	475	7.5
Transport and communication	440	6.9
Trade	790	12.4
Finance, insurance and realty	105	1.6
Community business	1,895	29.7
Public admin. and defence	405	6.4
Not applicable	356	–

Source: 1981 Census of Canada.

Among other primary-sector activities, salt mining provides direct employment for about 200 people. Agriculture is very limited. Between 40 and 50 farmers raise beef for local consumption. Hydroponics are used to grow grass and hay to feed some of the cattle population. Some islanders are experimenting with aquaculture techniques to fatten lobsters for market and to raise blue mussels.

The Chamber of Commerce brief (1985) estimates that tourism provides about 200 seasonal jobs and injects about $5 million into the Magdalen economy every year. The short season and high transportation costs are major constraints on the expansion of this industry. Nevertheless, there is strong local interest in finding ways to diversify and expand the tourist trade.

Table 17.29
Labour Force by Major Group, Magdalen Islands

Major Occupational Groups	Number	%
All occupations	6,380	100.0
Managerial and administrative	325	5.1
Teaching	450	7.1
Medicine and health	240	3.8
Technical, social, religious	295	4.6
Clerical	735	11.5
Sales	385	6.0
Services	800	12.5
Primary occupations	1,085	17.0
Processing	785	12.3
Machining	345	5.4
Construction	520	8.2
Transport occupations	210	3.3
Other	200	3.1
Not applicable	355	-

Source: 1981 Census of Canada.

The local arts and crafts community appears to be active and, while it is not a large employment generator, it does have a part to play in relation to the tourist trade. Magdalen's artisans are developing ways to use the abundant sand to create high quality lamps and lampshades and to fashion unique craft items from local alabaster. Although such activities are small in scale, they create some diversity in the Magdalens' economy.

As for the rest of the economy, the bulk of the labour force is employed in service occupations in support of the fisheries or in the provision of general social, personal, business and infrastructural services. The degree of service-sector activity is explained partly by the commitment of the Quebec government to supply high levels of service in such areas as education and

health care. The stabilizing effect of unemployment-insurance income, the consumer demand that it sustains, and the relative isolation of the Magdalens' economy also help to elicit supply of services from the private sector.

Cape Breton Island

The sealers of Nova Scotia are located from Dingwall to Meat Cove on the northern tip of Cape Breton Island. Like the other sealing areas, these communities rely on primary industries (that is, fishing and hunting) to maintain their existence. Because of their location and the modest extent of local natural resources, it is likely that fishing will remain their main economic base. There is some tourism, but the facilities are very limited.

The Cape Breton sealing area is located in subdivision A of Census Division 18 in Nova Scotia. In June 1981, the total population of subdivision A was 3,707. The main labour-force characteristics are shown in Table 17.30. Since subdivision A includes some larger communities, the statistics do not reflect accurately the characteristics of the sealing area. The labour-

Table 17.30
Population and Labour Force, Northern Cape Breton

	Number
Total population	3,707
Labour force activity	
Population > 15 yr. old	2,715
In the labour force	1,565
Employed	1,025
Unemployed	470
Participation rate (%)	57
Unemployment rate (%)	33

Source: 1981 Census of Canada.

force participation rate is considerably less than the national average. The unemployment rate (33% in early June) increases sharply during winter, when the fishery is closed.

The labour force has a relatively low level of formal education, as is evident from Table 17.31. The proportion of people who have not completed high school is greater than in the Magdalen Islands, but less than on the north shore of Quebec. The incidence of university or other post-secondary courses is greater than that in other areas, with the exception of the Magdalen Islands.

Table 17.31
Education Levels, Northern Cape Breton

	Number	%
Population > 15 yr. old	2,715	100.0
Level of schooling		
Less than grade 9	890	32.8
Some high school	1,045	38.5
High school graduate	120	4.4
Some university	130	4.8
University graduate	165	6.2
Other post-secondary	365	13.4

Source: 1981 Census of Canada.

The dependence of the economy of northern Cape Breton on fishing stands out in the data on the industry and occupational composition of the labour force (Tables 17.32 and 17.33). In the sealing area, this dependence on the fisheries is considerably higher.

The basis for the economy of the sealing region of Cape Breton is fishing. The processing of fish is very limited and most fish are transported by truck to plants elsewhere on the island. Most of the non-primary sector employment is provided by the service sector, some of it in tourism and

Table 17.32
Labour Force by Industry Division, Northern Cape Breton

Industry Divisions	Number	%
All industries	1,520	100.0
Primary	355	23.4
Manufacturing	35	2.3
Construction	105	6.9
Transport and communication	140	9.2
Trade	180	11.8
Finance, insurance and realty	20	1.3
Community business	540	35.5
Public admin. and defence	150	9.9
Not applicable	45	–

Source: 1981 Census of Canada.

Table 17.33
Labour Force by Major Group, Northern Cape Breton

Major Occupational groups	Number	%
All occupations	1,520	100.0
Managerial and administrative	45	3.0
Teaching	85	5.6
Medicine and health	45	3.0
Technical, social, religious	65	4.3
Clerical	110	7.2
Sales	95	6.2
Services	315	20.7
Primary occupations	375	24.7
Processing	30	2.0
Machining	45	3.0
Construction	155	10.2
Transport occupations	60	3.9
Other	100	6.6
Not applicable	45	–

Source: 1981 Census of Canada.

concentrated in the southern (non-sealing) part of the area. The economy is not widely diversified, and the opportunities for employment outside the primary sector are limited.

Employment Options

It has been concluded that many sealers will not easily be able to replace the cash income lost from the demise of sealing, given the time of year when sealing is pursued and the isolation of the regions affected. There are indications from all of the Atlantic sealing areas that the most likely outcome, in the short term at least, is increased unemployment and more reliance on unemployment-insurance and welfare programs. This is a costly predicament in social terms for those whose self-respect is tied to their ability to pursue gainful employment.

Many questions about sealing are, in fact, questions about local control over marine resource management and the maintenance of traditional life-styles and cultures. Because fishing, sealing or hunting income is rarely stable or secure, coastal people are adept at finding alternative ways to generate income. One strategy to maximize income opportunities is economic pluralism, which is practised by many people in sealing areas. The fact that particular activities also provide subsistence or supplementary food and clothing supplies is an added incentive to participate. Removing one component of the annual activity cycle places additional pressure on other components, an occupational risk that is thoroughly understood by primary producers. When components of the cycle are removed by external forces and no substitutes exist to replace them, the viability of individual households and occasionally of entire communities may be in jeopardy:

> *Sealing by itself is a small industry, but it is an absolutely integral part of our commercial fishery and subsistence living. In all of this there are occupations and responsibilities which create a healthy, vibrant and stable community. Take one element out, begin to erode the lifestyle of our people and you will see economic and social collapse. Already I see it in my own community. The ice is now off our coast. Hundreds of thousands of seals are out there. The boats are tied to the wharf. We have to stand on the shore and look out to the sea.*

> *This time of year there should be lots of activity. Instead of the joy of returning to work again in the fishery there is a quiet despair and desperation which hangs over our community. We are saddened. We are angry. We are fearful that this very important part of our way of life could be lost to us forever if we don't stand up and make our voices heard (Canadian Sealers Association, 1985).*

In the preceding chapter, the prospects for a continued but reorganized (adult) seal-based industry were examined. It was concluded that an export-based industry is not feasible at this time, but that there is some promise in a reduced, Canadian-based activity. Domestic demand for products such as sealskin clothing, leather, and handicraft products would now absorb between 15,000 and 20,000 sealskins a year, a figure that could go higher if certain product and market-development activities prove to be successful. The extended use of seal meat for human consumption, the extraction of seal oil and a (possibly subsidized) culling operation could further serve to shore up the economic underpinnings of a reduced and modified seal industry. If seal products are to continue to be processed, it would likely be in new and smaller facilities than those that currently exist; proposals for two such plants, to be located in northern Newfoundland and the Magdalen Islands, are currently being advanced.

A second line of inquiry involves examining the likelihood of alternative employment in adjacent industries. Of these, the most important is the commercial fisheries, but it is difficult to be conclusive in view of the uncertainty surrounding the industry and the general perception that there are already too many fishermen and processing plants. Within this context, there are some positive prospects relating to cod, crab, shrimp and squid. All areas could benefit from measures to reduce the cost of fishing operations and to improve the quality of fish landed.

With respect to other industries, seal-based tourism can be further developed in Prince Edward Island and the Magdalen Islands, and it is to be encouraged, but such ventures are not likely to benefit sealers directly or substantially. Aquaculture may have some potential for sealing communities adjacent to the Gulf of St. Lawrence, but cold water and ice conditions are discouraging factors for the northern areas of Newfoundland and Labrador. There is little prospect for employment growth in forestry or land-based mining; in fact, these industries are reducing their labour forces. Offshore oil developments may lead to more employment in the future, but a

plentiful labour supply already exists outside the sealing communities and closer to the areas on which the industry is most likely to depend.

The idea of a synthetic fur industry, suggested by the Franz Weber Foundation, has apparently been dropped by its sponsors and would, in any case, face difficult economic circumstances. Public service employment may expand in certain areas and it may also be possible for residents of sealing communities gradually to take over from outsiders a larger proportion of existing positions such as those in teaching, health and public administration.

The promotion of mobility out of sealing communities is not likely to be successful because of strong community attachments. Moreover, high unemployment in other parts of Canada discourage this option. Training for jobs in the community, which may involve leaving the community for a period of time, is likely to be far more positively regarded.

These very summary observations are drawn from a number of reviews for the Royal Commission of various employment options. The analysis is limited to those options that pertain most closely to the region and labour-force characteristics of the residents and which, therefore, have the best chance of being viable over the long term. The premise is that even a reorganized sealing industry would engage far fewer people than did the traditional industry in the past, and that the prospects for other income-generating activities need to be carefully assessed.

The Commercial Fisheries

Fishing is by far the most important industry in all sealing areas. The existing attachment of many sealers to the fisheries makes the latter a logical choice to consider as replacement for lost sealing income. Such income would have to be earned either at a time when fishing is not taking place (which was a characteristic of the seal harvest) or as a result of a net addition to the value earned from fishing during the regular season.

The prospects are not all negative, and some sample possibilities are identified. The fact that the fishing industry as a whole is undergoing substantial restructuring should not be allowed to undercut modest changes for the better in the more isolated communities. These communities do require every break that they can get to permit their very survival.

Rarely has there been as much uncertainty about the prospects and direction of the fishing industry in sealing areas, in relation both to the supply of fishery resources and to their harvesting, processing and marketing. Many believe that there are too many people engaged in fish harvesting and processing, and that the numbers need to be reduced. The Task Force on Atlantic Fisheries (Canada, Task Force, 1983) made recommendations pertaining to all aspects of the groundfish industry in the Atlantic region and proposed a development strategy for the industry. Many of those recommendations have been overshadowed by the financial problems of the large, integrated processing companies of Newfoundland and Nova Scotia.

Aside from any prospects of landing larger quantities of fish or of adding new species, net incomes from the fisheries can also be improved by reducing costs and/or by improving prices. To help achieve cost reductions, the federal government has recently implemented an energy-audit program which provides a complete examination of equipment and operating procedures of all participating vessels. Fuel costs can run as high as $30,000 a year for a longliner. Energy-audit officials estimate that relatively low-cost modifications could produce savings as high as 40%. Such potential savings are significant, and all owners of longliners should be encouraged to participate in this program.

Landing better-quality fish is another possible means to increase fishermen's incomes. Improved product quality has been the focus of several programs and policy initiatives by the Department of Fisheries and Oceans (DFO) in the last few years. These include:

- the Inshore Fish Handling Program: installation of a jib-hoist/net-bag unloading system in Newfoundland and Labrador communities;
- mandatory on-board bleeding and gutting of groundfish: an on-board handling-systems program was implemented to support this measure;
- mandatory on-board icing of fish: in support of this regulation, a $5-million program has been implemented to provide ice-making and storage equipment in fishing communities;
- the use of pitchforks for unloading of fish from vessels has been banned.

Although such measures will improve fish quality, they do not guarantee higher incomes. One missing element is a dockside grading program on the basis of which higher prices might be paid for a better-quality fish. Such a

scheme would provide incentives for fishermen to participate in the programs noted above. Although such a dockside grading program has been designed, its implementation has been delayed for budgetary reasons.

Newfoundland and Labrador

The fishery in Newfoundland, particularly along the northeast coast, has been experiencing setbacks, and many fishing enterprises are jeopardized. The sharp reduction in the seal hunt simply worsens that situation. The herring catch, for example, has virtually disappeared. While Canadian stocks show signs of recovery, stocks are also rebuilding in the North Sea. The simultaneous recovery of both herring fisheries depresses prices. For a time, supplies of squid were plentiful, but by 1982 no landings were reported. Fisheries officials consider that squid stocks are rebuilding and that catch levels may start to pick up again: demand for squid as food – in Japan, for example – and for bait is quite strong. The prospects for mackerel, on the other hand, remain poor.

The picture with regard to northern cod is somewhat more promising. Cod is the single most important groundfish species for all of Newfoundland's sealing areas. Since the late 1970s, cod stocks have been rebuilding in the northern area, that is, the grounds from the Grand Bank north to Hamilton Bank. In 1982, the Task Force on Atlantic Fisheries projected that the Canadian quota of northern cod would grow from 215,000 tonnes in that year to as much as 380,000 tonnes by 1987. It stated that rebuilt northern cod stocks "represent the best remaining opportunity to achieve better incomes for fishermen and greater utilization of processing capacity." While the stocks have not yet increased as much as predicted (the current Canadian allocation is 270,000 tonnes), cod are clearly an important resource for fishermen located in a number of sealing communities.

The further exploitation of northern cod stocks will require careful management. A significant constraint is the short fishing season, which places a glut of fish on the market for a short period of time each year. The Task Force on Atlantic Fisheries recommended that plants with freezing capacity receive preferential allocations of fish from the northern stocks so that processing can take place outside the peak fishing season. The cost implications of this arrangement, however, appear not to have been fully worked out. Expansion of markets for cod and other groundfish products was constrained in the early 1980s by the relative strength of the Canadian dollar as compared, for example, with Scandinavian currencies.

The crab fishery along the northeast coast and the eastern side of the northern peninsula has been lucrative for a few fishermen over the last several years. Fisheries officials and fishermen believe that the crab resource in the broad area of 3K could sustain a larger fishing effort. An increase in the number of crab-fishing licences could benefit owners of longliners in the area, including those who used to depend on sealing, but it is not yet clear how many would benefit and to what extent. Any substantial increase in the number of crab fishermen would have to be counterbalanced by restrictions on the size of the catch for each. Additional constraints include present plant processing capacity, market competition from a synthetic crab-like product (surimi) from Japan, and competition from other crab-producing areas such as Alaska. The crab fishery promises to be no panacea.

A summary of opportunities and constraints for the northern fisheries is provided in Table 17.34.

To sum up, the potential for fishery expansion in the northern areas of Newfoundland is not strong in relation to herring and mackerel. A return of the squid resource would offer some potential for improved incomes, but this is an uncertain prospect. A limited expansion of the crab fishery would be attractive because it would benefit the longliner fleet, which is particularly disadvantaged by the loss of sealing and the decline in herring since 1980. Finally, restoration of the cod stocks provides a promising resource base for the northern fishery adjacent to the sealing areas, especially if a number of problems facing the northern fishery can be overcome as part of a co-ordinated approach. To this end, the Task Force on Atlantic Fisheries has recommended the establishment of a Northern Fisheries Development Corporation to promote economic development in the northern region. This concept is still under review.

The North Shore of Quebec

Cod is the main species caught and processed along the lower north shore of Quebec, and landings have increased over the last few years. While there are not many processing operations, those that exist produce wet-salt cod and sell it to the Canadian Salt Fish Corporation which, in turn, ships the semi-finished product by boat or plane to plants in Newfoundland for further processing.

A study has been undertaken for DFO to assess the potential for processing and marketing fish products from the area. First, the processing of

Table 17.34
Constraints and Opportunities[a] for Northern Fisheries, Newfoundland and Labrador

Area	Constraints	Opportunities
East coast northern peninsula	peak-time problems at fish plants; lack of freezing capacity at plants to take advantage of increased cod landings	potential crab fishery; "salt bulk" cod may provide additional processing opportunity; rebuilding of northern cod stock
West coast northern peninsula	limited fish harvesting opportunities; peak-time problems at fish plants	shrimp resource in Esquiman Channel; establishment of salt-fish drying plant warrants feasibility study; underutilized pickling and smoking plant may provide opportunities and warrants feasibility study
Labrador Straits	without access to cod stock in sub-areas 2J, 3KL[b], few opportunities in harvesting exist; fisheries infrastructure needs improvement	modification of existing fish plants could improve efficiency; dry salt fish rather than shipping fish out of region; further processing of locally caught salmon and scallops warrants study

Table 17.34 (cont'd)

Area	Constraints	Opportunities
Southeastern Labrador	increase of near shore vessels from other areas has placed extra burden on existing harbour facilities; infrastructure generally needs improvement; processing opportunities limited because of shortage of available labour, local residents prefer traditional life-style to working as wage earners; transportation system	opportunity for improving transportation system for "salt bulk" cod increased cod stock offers promise for future if proper infrastructure put in place
Northern Labrador	fisheries infrastructure; transportation system; fishing equipement, i.e. vessels; market outlets; limited labour force	development of cod fishery; limited processing capacity at present

Source: Canada, DFO (1983).

a. The opportunities identified relate to each specific area, and their development potential should be considered in terms of overall constraints such as soft markets and poor prices for particular species/products.

b. See Figure 26.2, Chapter 26, for the identification of NAFO sub-areas and divisions.

crab on the lower north shore will be investigated to determine the feasibility of exporting live crab as compared to semi-processed or fully-processed products. Secondly, the study will look at the feasibility of shifting part of the salt-cod production toward frozen or fresh products. A third issue to be considered relates to the harvesting of the relatively abundant herring stocks along the lower north shore. Specific recommendations for the fisheries of the area may emerge from this study, but in the meantime additional employment in processing in some communities looks more promising than do expanded harvesting activities. The catch of shellfish species in the area is already considered to be at an optimal level (CAFSAC, 1985).

The Magdalen Islands

The fisheries of the Magdalen Islands depend on pelagic species such as herring and mackerel, as well as on lobster and cod. In 1982, lobster accounted for 42% of landed value, while cod added another 23%. In the view of DFO officials (Boudreau, 1985), limited fish resources are a major constraint on any expansion of the fisheries sector in the Magdalens. The resource limitations, combined with volatile markets, make expansion in the processing sector generally unattractive. There are now four crab-processing plants, three for lobster and a plant which fillets redfish and cans mackerel.

In spite of a generally limited outlook for the Magdalens' fisheries, two species (crab and shrimp) do hold some promise. The crab fishery in the Magdalens provides significant revenue for the few fishermen who hold a licence and are able to outfit their boats. As in Newfoundland, it may be possible to spread the value of the crab resource among a larger number of fishermen by increasing the number of licences. Whether an increase in the total catch of crab is sustainable by the resource and in the market-place still requires further investigation.

DFO officials have also indicated that some potential may exist for developing a Magdalens' shrimp fishery. This would be a new species for the area, and details are sketchy concerning its promise. In the context of developing employment and income-generating activities for sealers and fishermen, further attention to the shrimp fishery is recommended. No major impact, however, is anticipated.

Tourism

This section focuses on the technical and economic feasibility of seal-linked tourism in the areas under consideration. A proponent of seal-based tourism is Atlantic Marine Wildlife Tours Limited, whose president, J.E. Lewis (1985b), has helpfully provided the Royal Commission with extensive information on seal tourism and its prospects.

The operation that Lewis has developed employs helicopters to take groups of tourists from a variety of countries to the ice pans where the seals whelp. The attraction is to see the seal herd close up, especially the "baby" seals. This type of tourism is promoted in the belief that there is a sizable market for such exotic cold-weather adventure. According to Lewis, in considering seal-based tourism as a source of employment, it is important to understand that:

> *. . . seal tourism does not directly benefit those whose livelihood has been affected by the recent decline in seal hunting. This brief does not wish to imply that seal tourism is an alternative to seal hunting for these individuals. Seal tourism is simply another method of generating revenue from a natural resource (Lewis, 1985b).*

In 1985 Atlantic Marine Wildlife Tours employed 12 people for about three weeks in March. In 1985, 58 people travelled to Prince Edward Island to see the seals, 50 of whom came from outside Canada. Thirty-seven islanders also visited the seals. In total, 95 people made 120 trips to see the seals, with an overall average expenditure per tourist of $950. These data do not include money spent by tourists in Charlottetown. Lewis claims that when this money is included, a conservative estimate of average revenue generated by each visitor exceeds $1,000, ". . . but if the visitor travelled to Canada, this amount increased to $1,350" (Lewis, 1985b).

For the 1985 tourist season, Atlantic Marine Wildlife Tours mailed 207,000 cards to individuals known to be interested in wildlife. Then 10,000 colour brochures were distributed to the 1,600 people who responded and to others, with the result that there were 45 paid-up tourists by 1 March 1985. Lewis projected that an annual subscription of 2,000 visitors can be realized for Prince Edward Island, and that revenues could range from $2 million to $2.5 million. That estimate is based on the knowledge that 1,800 people

visit Churchill annually to see polar bears, in spite of limited facilities and considerably greater isolation.

Seal watching

The nature of seal-based tourism, as presently conceived, virtually precludes significant sealer involvement. It is clear from Table 17.35 that the employment benefits from seal tourism will not accrue to former sealers, nor will they have a major effect on those areas where traditional seal hunts have taken place. The potential for seal-based tourism appears to be greatest in Prince Edward Island. A number of problems prevent similar developments in Newfoundland, the Magdalen Islands and other sealing areas.

Table 17.35
Distribution of Seal-Tour Expenditures

Object	Percentage	Beneficiary
Helicopter charters	34.2	Trans-maritime Helicopters
Air fares	31.8	Air Canada, etc.
Hotel rooms	7.1	P.E.I. Sheraton
Printing	5.4	Various
Wages	4.5	Various
Advertising	3.6	Sparrow Communications, P.E.I.
VHF radio	3.6	Dept. of Communications
Meals	2.5	P.E.I. Sheraton, etc.
Vehicles	2.3	Various
Telephone	1.4	Island Telephone, N.B. Telephone
Mailing	1.3	Canada Post
Other	2.3	Various

Source: Lewis (1985).

The key to the success of seal tourism lies in being able to assure potential clients that visits are comfortable and free of personal risk. Prince Edward Island provides:

> *. . . (the) three essential ingredients to conducting successful seal observations:*
>
> *(1) Seals have been observed north of P.E.I. and south of the Magdalen Islands for three consecutive years;*
>
> *(2) Substantial experience has been gained in the mechanisms for delivering tourists to the seals for seven seasons; and*
>
> *(3) A significant infrastructure is available on P.E.I. for accommodating tourists in March, including*

> *700 hotel rooms, the Confederation Centre, and many persons from the tourism industry experiencing seasonal unemployment (Lewis, 1985b).*

Newfoundland has geographical and environmental obstacles to the development of seal tours along the lines of Lewis's venture. Newfoundland's major drawbacks are that:

> *(1) The very large Front herd cannot be located as reliably or repetitively as the Gulf herd. The seals can range from St. John's to Labrador, anywhere up to 200 miles offshore.*
>
> *(2) The ice can be badly broken by the open Atlantic swell and the pans can be small. Ice conditions are more dangerous than in the Gulf and weather off the Front frequently is poor (Lewis, 1985b).*

The extra cost of flying to St. John's and on to St. Anthony, where the tours would be based, is also a factor. Given these costs, uncertainties and safety considerations, it is unlikely that tours to the Front could be made competitive with Gulf tours from Prince Edward Island or the Magdalen Islands.

The Magdalen Islands are ideally situated with respect to a large harp seal herd, but are not suitable for large-scale tourism to the sealing grounds. The drawbacks of the Magdalen Islands as a focal point for seal tourism are:

- lack of suitable accommodation;
- insufficient diversification of the tourism industry to entertain tourists for a five-day period in March;
- "... the logistics of moving large numbers of people in uncertain weather to the Islands" (Lewis, 1985b, p. 13);
- "... a more serious impediment (in) the attitude of the local population regarding visitors to the seals" (Lewis, 1985b, p. 13).

Despite the fourth problem, Lewis claims that "Atlantic Marine Wildlife Tours will be locating a helicopter at Cap aux Meules in March, 1986 for conducting day trips for the local population", and that "as attitudes improve, it is hoped that costs can be reduced by employing shorter helicopter flights from Cap aux Meules" (Lewis, 1985b, p. 14).

The north shore of Quebec is not feasible as a base for seal tourism because it is too far from the usual whelping grounds. Similar reasoning negates the usefulness of setting up operations in New Brunswick and Cape Breton.

Based on the experience of Atlantic Marine Wildlife Tours, it appears technically and economically feasible to expand the fledgling seal-based tourist industry. The industry is currently based on Prince Edward Island, to take advantage of accommodation for tourists and access to the seal areas in the Gulf. Given an expansion in tourist facilities and a more positive outlook, there is some potential for the Magdalen Islands to benefit from this activity too. The successful development of seal-based tourism will require professionalism. The existing operator has proceeded with caution on a step-by-step basis. One major accident and the whole concept could be in jeopardy. The delays affecting the operations of such a service in a region of poor weather conditions should not be treated lightly.

Aquaculture

Twenty-five per cent of the total population of the Atlantic provinces live in more than 1,300 small fishing villages where alternative employment is limited and the economy is plagued by high seasonal unemployment (Aiken, 1984). On the one hand, aquaculture is an industry which blends extremely well with the existing social organization of Atlantic rural communities, which can employ local talent and provide a source of alternative employment that can be relied on all year. On the other hand, there are both physical and socio-economic obstacles to the development of aquaculture in the region.

Atlantic Canada currently has the greatest diversity of aquacultural products of any region in Canada. Commercial aquacultural operations focus on seven species: Atlantic salmon, rainbow trout, brook trout, bluefin tuna, American lobster, American oyster and blue mussel. In addition, quahog, pink salmon, scallop, European oysters, eel and Irish moss are considered to have potential. Despite the rapid growth of the industry in the region, the production of which in 1982 reached 1,200 tonnes for all marine

and freshwater species, the Atlantic aquaculture industry is still insignificant in comparison with the traditional fisheries.

Natural limitations which must be considered are the availability of suitable open water, ice conditions, climate and geology. All of these vary considerably throughout Atlantic Canada, and for that reason, so do the opportunities for aquaculture.

The areas of New Brunswick and Nova Scotia which lie on the Bay of Fundy provide open water all year, "tidal amplitudes in excess of eight metres, strong currents and water temperatures that vary from around 0° C in February to approximately 13° C in late summer" (Aiken, 1984). These conditions are suitable for culturing salmon. Problems with paralytic shellfish poisoning make conditions unsuitable for the culture of mussels in this area. The Atlantic coast of Nova Scotia does not normally suffer the "red tide" problem, a micro-organism which renders shellfish toxic to humans. There is winter ice in protected areas, however, and a moderate tidal flux. This coastline "is suitable for [the] culture of mussel and European oyster and for some forms of lobster and salmonid husbandry" (Aiken, 1984).

Mussel, sea scallop and salmonids could be cultured along the south coast of Newfoundland, but because of the increase in latitude and corresponding decline in water temperature, the east and west coasts of the island do not provide favourable conditions for aquaculture. This cold water is in contrast with the warm waters of the southern Gulf of St. Lawrence, which provide excellent conditions for the culture of the American oyster.

Cold water and moving ice likely rule out the development of aquacultural projects in northern Newfoundland and along the Labrador coast. There is some potential, however, in areas adjacent to sealing locations. The Upper Trinity South Regional Development Association in Newfoundland, for example, started a trout farm in 1975 in Hopeall, which is very close to Dildo, the site where the closure of the Carino seal-processing plant has recently left plant workers unemployed. Although unforeseen difficulties created a need for extended project funding, the farm maintains a brood stock year-round. Cultures based on this stock yielded 50,000 pounds of fish for market in 1982. The farm employs two persons in full-time positions, seven in part-time or seasonal positions, and about two dozen on a short-term basis.

There are other aquacultural projects on the south coast of Newfoundland, as well as on the south western side. It is unlikely that sealers from northern areas could take advantage of aquacultural opportunities in the south. While training relocation (to Saint Andrews, New Brunswick) can be envisaged, it is difficult to imagine sealers moving to southcoast communities and obtaining employment where there is already high unemployment. In his review of aquacultural developments in Norway, Osberg (1986) has pointed to the success of the Norwegian government in controlling the growth of the industry by limiting the number of operations, specifying their size, and directing their location to the more disadvantaged areas of Norway. (See Chapter 19.) He argues that it is hard to imagine Canadian governments exercising a similar degree of control on the development of the Canadian aquacultural industry.

There is some aquacultural potential in the sealing areas of Quebec and the Magdalens, although apparently there have been no site-specific and systematic studies to examine the economic feasibility of aquaculture in these areas. Experiments in mussel culture have led to a budding commercial activity in the Magdalen Islands and a lobster-fattening pound operates there. Furthermore, fisheries officials believe that there is considerable potential for lobster aquaculture in the Magdalens, and for the culture of shrimp, crab and scallop along the north shore of Quebec (Caron, 1985).

Aquaculture will require care and incentives to develop to its full potential. The magnitude of this problem is summed up by Saxby (1984):

> *It is difficult to attract investment into the industry because of the high-risk to low-leveraged growth characteristics in aquaculture, compared to other developing advanced technology industries. Government assistance programs are generally not suited to aquaculture, because the major requirements of the aquaculturist relate primarily to working capital "inside the farm gate," whereas the existing programs relate primarily to capital loans.*

He goes on to state that:

> *Government incentive programs, such as research and development tax incentives, accelerated depreciation, small business deductions, etc., although available, gen-*

> *erally do not directly address the difficulties in aquaculture. Aquaculture is a "different breed of cat," and needs its own programs.*
>
> *A rigorously developed long-run strategy has to be evolved for each candidate species. To accomplish this, extensive cooperation must be developed among industry, governments, and research institutions. Adequate programs will have to be instituted to fund the planning, research and commercialization. The bridge to be crossed is too long and expensive for an individual entrepreneur, and left to government and consultants alone, the Aquaculture Monetary Black Hole will continue to consume taxpayers' dollars with little results.*

In its current state, serious constraints prevent the aquacultural industry in Atlantic Canada from reaching its full potential, namely:

- a high degree of risk and uncertainty;
- front-ended investment and returns that begin only after a lag of several years, often leaving the investor with a shortage of capital and operating funds in the early years – high interest rates jeopardize the feasibility of projects with such characteristics;
- a small market size relative to those of other high-tech industries, although the potential of the Canadian market is promising;
- legal problems in defining definite ownership rights to aquacultural facilities;
- current government assistance programs that do not cover the need for working capital assistance in aquacultural projects.

Although the list of constraints is formidable and the investment potential appears bleak and unattractive, Saxby believes that these constraints only reflect the fledgling nature of the industry in Canada. Even though many of the concerns can be alleviated, progress may be slow because investors often do not proceed past first impressions. To get the ball rolling, generous incentives are required, as the industry must be assisted to mature from its infancy stage. Because of the infant nature of the industry, other development initiatives by government, such as establishing a lead agency,

selecting the most promising species and preparing development plans, conducting species-specific pilot projects, and undertaking market-development work are also required (Saxby, 1984). In other words, the potential for an aquacultural industry in eastern Canada exists, but developing it soon will not be easy. This point is echoed by the Science Council of Canada (1985) in its recent statement on aquaculture.

Aquaculture is not a labour-intensive industry. Typically, the average salmon farm in the Atlantic region entails an 18-month rearing operation and employs three permanent staff and perhaps six seasonal workers (Carey, 1985). Ridler (1984) describes the situation in Norway where total aquacultural output in 1985 was estimated at 15,000 tonnes, with an associated employment of just 200 direct jobs, plus jobs in processing and in input sources. Aquaculture is not likely to generate much employment unless wide-scale development occurs.

The technical and management skills required to develop and run an aquacultural project are a possible barrier to entry. According to Carey (1985), the skills necessary to run a salmon farm can be taught in nine months (with a prerequisite of a grade-10 education). These skills must be available on a day-to-day, or even hour-to-hour, basis. Technical knowledge and training is species specific. For mussels this training is not complicated; culturing lobsters, however, requires substantial training.

There is some promise that aquacultural developments could employ ex-sealers in certain areas. An indirect link may be forged if it proves possible to use seal meat as food for aquacultural stocks. However, the capital-intensive nature of aquaculture, its expensive and lengthy development phase, and the distance from many of the sealing communities of eastern Canada limit its potential as any substantial solution to the employment problems of Canada's sealing communities.

Forestry and Mining

There appears to be little prospect that sealers can gain employment in the forestry or land-based mining sectors. The recent history has been one of increasingly scarce raw material resources, the closing of mills and mines, and a replacement of labour by capital-intensive equipment. Vardy (1985) estimated that some 3,000 mining jobs had been lost in Newfoundland in the preceding three years as a result of mechanization.

There are virgin forests in Labrador, but only in the southern area and not in the north, where most of the sealing activity was concentrated. Whether exploited as sawn lumber, pulp or paper, problems of transportation and competitive markets will affect development of these resources.

The exhaustion of finite ore bodies and a low rate of discovery of new sources discourage mining initiatives. There has been a gold discovery in the southwest corner of the island of Newfoundland, and development is in the construction phase, but labour needs are met locally. In Labrador, the Labrador Inuit Association plans to resume mining labradorite, a semi-precious stone, and to convert it into craftwork products.

Finally, in relation to offshore drilling and extraction activities for petroleum and natural gas products, there may well be some opportunities in the future, although, again, there is a sufficient labour force already in place or waiting to fill short-term demand. Sealers with experience on large vessels might fill positions as engineers, captains, first mates and roustabouts. The development of offshore platform building would provide several hundred short-term construction positions. None of these possible opportunities are comparable with sealing as a means of extending the fisheries by a few weeks, although some could provide entirely new employment options.

Synthetic Fur Products

The idea of producing synthetic fur artefacts appears to have originated with the Franz Weber Foundation of Switzerland in 1977. The proposal was to locate in Newfoundland a manufacturing plant to employ persons whose livelihoods would be disrupted by the closing of the seal hunt. Original plans called for a plant to manufacture synthetic fur, but they were abandoned because of pollution problems associated with the production process. Attention was then directed at the possibility of producing toys and clothing from synthetic fibre. The idea behind the plant was to link its products to the international anti-sealing campaign. Persons wishing to support the campaign would be encouraged to purchase the synthetic-material products as a means of providing employment alternatives for seal hunters. The protest link was regarded as critical, since the products were likely to be costly. Financial viability would depend on consumer willingness to pay a premium price. It was believed that the supporters of the anti-sealing campaign could be such consumers. It was predicted that the project would employ about 450 people (Weber, 1985).

At this point in time, however, the project is not viable. The proposal is no longer being pursued by its original proponents. To reactivate it would be difficult because, with the collapse of the market for seal pelts, the anti-sealing campaign has phased down significantly. The sale of synthetic products as an adjunct to stopping the seal hunt is now an out-dated marketing concept. To establish an industry on such a basis, therefore, would be precarious, to say the least.

Public-Service Employment

An examination of the occupation and industry structure of sealing communities shows that many positions are sustained directly or indirectly by public funds. Additions to public-sector employment can be suggested, but the present climate of government deficits and restraint policies does not favour acceptance. An expansion of wildlife services to protect sea-bird colonies has been suggested for the north shore of Quebec, for example, as have the ideas of more public parks, increased planting of trees for forestry renewal, and an expanded fisheries service, in part to cull seals.

A specific project that has received more serious attention, however, is the expansion of jet-fighter training facilities at Goose Bay, Labrador, for NATO-member countries. NATO is considering such a proposal, with Turkey as another site option. Approval of the project could create as much as $1 billion in investment. The expanded base could be in operation by the early 1990s. Such a project could generate large numbers of jobs during the construction phase and subsequently an equal number in service-sector activities and for maintenance. Some of these jobs could no doubt be open to former sealers and their families, but generally they would not have the required skills, nor would they necessarily wish to uproot themselves and move to Goose Bay or Happy Valley. Aboriginal peoples in Labrador have voiced their concern about the project, however, especially the environmental effects of low-flying aircraft.

A longer-term project important to the Inuit is the gradual take-over locally of education, health, administration, communications and like services. With appropriate training, Labrador's Inuit would replace outsiders in public-service positions. Expanded employment through the development of new services can also be realized. Both strategies have been used successfully by aboriginal populations in other parts of the country, to increase and to upgrade employment in their communities. This approach may have some application, also, to other sealing communities, to the extent that local public-service positions now are filled by persons from outside the area.

Conclusions

The most likely and immediate prospects for employment or income-generating opportunities are in the fisheries. Were some very modified form of sealing industry to continue, it could also provide employment and income opportunities. Tourism and aquaculture hold some longer-term prospects, but generally not for those who have been sealers. Public-sector projects, including a possible NATO facility at Goose Bay, might also provide longer-range possibilities involving relocation and training.

Policy and Program Implications

Existing Institutional Arrangements

Some people connected with the seal hunt suffered a significant drop in income when the hunt declined. In 1980, the average income of sealers from all sources was reported to be about $10,000, and although few landsmen lost much, sealers on longliners and large vessels lost between $1,300 and $2,650, after expenses (King, 1981, Table 8). As learned from interviews with former Carino employees, the average process worker was hit harder, losing rather more than $4,000 per year.

Some relief accrues automatically to those affected. If they previously paid income tax, their tax is reduced, and they have ceased to pay Canada or Quebec Pension Plan contributions and unemployment-insurance contributions. These, however, are minor considerations. The major government intervention to reduce the adverse financial effects was through unemployment-insurance payments, welfare payments and direct subsidy to sealers and sealing vessels.

Fishermen are treated differently from other contributors to the federal unemployment scheme. As long as they have made sufficient contributions, they are eligible for benefits for the period from November to 15 May. If they work for a whole week at a stretch (as sealers on large vessels are likely to do), they receive no benefits during that week, however small their earnings; and they may have to make unemployment contributions. Reduction or temporary interruption of benefits does not extend the period of entitlement, which ends on 15 May at the latest, in any event.

The effect of the reduction in sealing activity by fishermen may thus, in some cases, have resulted in higher unemployment-insurance benefit payments. Since many sealers do not hunt for complete weeks at a time, however, and do not earn enough during the days when they do go sealing to reduce their benefit levels, few have received extra benefits to compensate fully for the income that they lost because of the reduction in the hunt.

If process-plant workers, transport workers and others indirectly involved in the hunt had managed to make enough contributions during earlier periods of employment, they would have received benefits during the period of unemployment resulting from the reduction of the hunt. This result would have led to their using up their benefit period sooner, however, and lack of work might have prevented their qualifying for a further period of benefit, although, of course, it saved their making contributions. The unemployment-insurance scheme, therefore, does not seem to have done much to help the sealers and others involved in the sealing industry to regain incomes they lost because of the reduction in sealing.

Entitlement to welfare is on a means-test basis, and only if reduction of the seal hunt pushes sealers and their families below a level deemed by the authorities to be insufficient to support an acceptable standard of living are welfare payments made. In Nova Scotia the situation is particularly difficult, since employable persons, unlike those in other provinces, must rely on municipalities, which generally enforce relatively tight conditions on the receipt of welfare payments.

A reduction in income of the magnitude described above, when the person concerned was receiving much less income than the national average, must have pushed some families below the qualifying line for welfare assistance and made existing welfare recipients eligible for more assistance. Welfare schemes attempt to do no more than maintain a minimum tolerable standard of living, however, and thus would have no effect unless the sealer or other affected workers and their families were already close to the poverty line.

In 1984, the federal government paid a subsidy to sealers and vessel owners for the loss of income they had suffered in the 1983 hunt. That subsidy was based on the skins sold and varied up to $18 per skin according to quality; the object was to provide the same revenue per skin as would have been received for similar skins taken in the previous year. A similar subsidy is being paid in respect of the 1984 hunt.

While this scheme may have restored sealer and vessel owners to their 1982 position in respect to gross revenue per pelt, it did not bring their 1983 incomes up to the 1982 level since, on average, they took only about 40% as many pelts in 1983. Payments from the scheme totalled $726,000, while the revenue from sales of pelts and blubber fell from $3,689,000 in 1982 to $857,000 in 1983, a drop of $2.8 million. Although the scheme was no doubt welcome to sealers and vessel owners, it went only a small part of the way to restoring their situation; and it did nothing for process workers and others who lost income because of the decline of the hunt. Thus, while automatic adjustments and actions of governments specifically directed at those affected have in some measure reduced the financial hardship created by the reduction in the seal hunt, they have stopped far short of maintaining the incomes of those involved at the 1982 levels.

New Possibilities

There is little doubt that a commitment to living in small dispersed communities along the coastlines of Atlantic Canada remains strong, as do memories of some of the disappointments over the Smallwood government's attempt at community resettlement and centralization. Whole families and many individuals, however, have moved from the coastal communities in search of opportunities in the larger towns, such as St. John's, as well as in other parts of Canada. But high levels of unemployment, not only in the region but also in almost all other areas of Canada, now make migration a precarious option, especially for those with few "urban oriented" skills.

Although the improvement of educational levels and training in skilled trades and professions is a longer-term undertaking for those in sealing communities, it should be encouraged even if it involves, as it usually does, migration from the community for a period of time. This initiative will particularly benefit younger persons and those who already have a reasonable level of education; older residents may not find this initiative as practical. The establishment of an economic training and development fund, as described later, would facilitate the upgrading of education and skill levels.

Some changes in the institutional environment and its organization could obviously broaden the opportunities available to those formerly engaged in the sealing industry. In Newfoundland's recent past, for example, the formation of the Newfoundland Fish and Allied Workers Union has had an important impact on the fishing industry in the province. If aboriginal

peoples are successful in pursuing their land claims in Labrador, their success will alter their economic development prospects.

Rural development associations, established in 1967 and later, represent a Newfoundland innovation in community planning and development. Partially funded through a federal-provincial Rural Development Subsidiary Agreement, the associations are specifically concerned with the revitalization and strengthening of the rural sector of the province. In each area, a small staff, operating under the guidance of an elected board, undertakes projects intended to strengthen the economic development of the area.

Fuchs (1985) has provided a recent assessment of the work of the rural development associations. He gives them high marks for their work in performing a bridging function between federal and provincial job-creation programs and the meeting of local needs, particularly in the area of providing fisheries infrastructure. He indicates that the associations would like to go beyond short-term job creation to engage in longer-term economic development, but are restricted by a lack of capital funding and by pressures to respond to short-term needs. Recently, the possibility of a mutually beneficial alliance between the province's co-operative and credit union organizations, and the rural development associations has been explored.

In Newfoundland and Labrador, therefore, it appears that at least one mechanism, staffed by an experienced cadre of development planners, already exists for stimulating small-scale development projects at the community level. Discussions with officials suggest that the associations are patchy in performance, however, and that their staffs could often benefit from appropriate training.

In the Magdalen Islands, recent development efforts are remarkably similar to those in Newfoundland and Labrador. The four-year federal-provincial Magdalen Islands Economic Development Agreement came to an end in 1985. Its programs included the construction of harbour infrastructure related to fisheries; the construction of a new runway and a depot for transport carriers; an industrial incentives program; and various economic development studies. ADELIM (Agence de Développement économique local des Îles-de-la-Madeleine), the local economic development association of the Magdalen Islands, supports diversification of the fishing industry and the expansion of tourism by means of infrastructure development. Various other small-scale activities, including handicraft development, also fall within its scope. ADELIM appears to perform a function on the islands some-

what analogous to the rural development associations in Newfoundland. Once again, training programs for its staff may be in order.

Another approach to regional development is that of a more focused intervention than a decentralized development fund, that is, a Northern Fisheries Development Corporation. This idea was first raised by the Task Force on Atlantic Fisheries (Canada, Task Force on the Atlantic Fisheries, 1983). As the Task Force saw it, the fisheries need special policy measures to deal with chronic underdevelopment and the instability of the fisheries economy. More specifically, the disadvantaged areas were viewed as suffering from:

- low capital investment;
- an untrained work force;
- unstable local economies;
- the transport out of the area of raw and semi-processed fish;
- high transportation costs;
- inadequate basic infrastructure (e.g., three-phase power is not available in coastal Labrador);
- chronic dependence on government subsidies.

> *[The Task Force concluded that] the key to economic development in the area is to ensure that the fishery is organized for the benefit of local participants, and that cross-subsidization takes place internal to the local area. Thus, for example, profits from shrimp allocations might be used to cross-subsidize losses on groundfish plants, or revenues from possible over-the-side sales could be channelled into investments in shore processing facilities and infrastructure (Canada, Task Force on the Atlantic Fisheries, 1983).*

Since the Task Force report was released, negotiations between federal and provincial governments have considered the area, mandate and funding of a Northern Fisheries Development Corporation. The proposed corporation, as it appears now to be defined, would not encompass all

Newfoundland's sealing communities nor any of those in other provinces. At the time of reporting, it appears that this proposal is likely to be shelved.

In a submission (1985) to the Royal Commission, William Watson of McGill University concluded that the seal hunt should be shut down and sealers should be awarded once-only compensation in the order of $10,000–$20,000 each. Watson took the position that since, from a national perspective, the costs of sealing outweigh its benefits, and since the costs of closing down the industry are borne disproportionately by those who have been engaged in it, compensation is justified.

Another view is that government has a role to play in facilitating the economic adjustment of communities or populations negatively affected by technological change, by the closure of one-industry towns or by the sudden collapse of a market – the more so if there are significant additional costs in not intervening in a constructive manner. There are numerous examples of government having done this: for example, at the time of the closure of the Bell Island iron-ore mine.

In June of 1984, a paper prepared for the Department of Fisheries and Oceans discussed four approaches to community economic self-help: co-operatives, community-development corporations, employee ownership and worker co-operatives. The paper underlined that in the northern fishery areas, a good basis for community-based initiatives exists in the rural development associations, the emerging link with credit unions, co-operatives such as the Torngat Fish Producers Coop, and community or public ownership of some processing facilities (Jackson, 1984).

Not all people in sealing communities necessarily would welcome new corporations with broad authority. The Inuit in Labrador, for example, are likely to be suspicious of an encompassing organization that could impose inappropriate regulations or development patterns on them. They have learned to distrust simplistic "solutions from afar" to their problems.

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Chapter 18

Findings and Conclusions: Atlantic Region

The Economy of the Atlantic Seal Hunt

The commercial viability of sealing in Atlantic Canada has always depended on the export of seal products, especially to Western Europe. The international trade in sealing products has been based on the exploitation of five seal species: three hair seals – harp, ringed and hooded; and two fur seals – Cape and northern. Over the past decade or so, the volume of trade has averaged some 400,000 sealskins annually, as well as the oil, meat and other products derived from the seals taken. By species, the total is distributed as follow:

Species	Share (%)
Harp	50.0
Ringed	17.5
Hooded	7.5
Fur species	25.0
Total	100.0

The trade had the following sources of supply.

Source	Harp	Ringed	Hooded	Fur
Canada				
Atlantic coast	*		*	
Arctic	*	*		
Greenland	*	*	*	
Norway				
West Ice	*		*	
East Ice	*			
South Africa				*
U.S.A. (Pribilofs)				*

Approximately 55% of the harp seals and 70% of the hooded seals were taken as young pups, that is, as "whitecoats" and "bluebacks" respectively.[1]

Canadian production accounted for about half of the total supply of seals entering world trade; about 85% of Canada's commercial production originated in the seal hunt of the Atlantic region. This hunt, in one form or another, has been carried on for more than two centuries. It has been based mainly on the migratory stock of harp seals that assembled in early spring on the ice floes at the "Front" (northeast of Newfoundland) and in the Gulf of St. Lawrence.

In recent years, about half of the Canadian seal harvest in the Atlantic region was taken by up to 10 large vessels, employing some 200 sealers, the catches of which were restricted primarily to seal pups. The remainder was divided more or less equally between a fleet of longliners (fishing craft measuring 10–20 metres in length), employing 600 men or more, and some 6,000 "landsmen" operating in small boats, with snowmobiles or on foot. The longliners have taken older seals, while the landsmen have taken a substantial number of pups, depending on the area. Depending on location, weather conditions and the movement of the ice floes, the operating season for most sealers might last from a day or two up to six weeks. The industry also provided employment, on a full- or part-time basis, for 50–120 persons engaged in sealskin and seal-meat processing.

At the beginning of the present decade, the annual value at the primary stage of seal pelts landed from the commercial hunt exceeded $4,000,000. The last year of the hunt on a full scale, that is, 1982, can be taken as fairly typical of the more recent years preceding. Production at the primary level in that year was valued as follows:

Product	Value as Landed ($)
Pelts	3,700,000
Blubber	350,000
Meat	770,000
Total	4,820,000

1. Whitecoats and bluebacks are defined in terms of their coats, not their exact age. While the harp seal pup sheds its first coat at the age of one to three weeks, the hooded seal pup does so at any time between eight and 14 months.

For the same year (1982), the value added in processing (which is the estimated selling price of the product less the cost of the raw material) was:

Product	Value Added ($)
Skins	1,600,000
Oil	600,000
Meat	160,000
Total	2,360,000

The gross value of production is thus estimated to have been about $7,000,000 per year just prior to the collapse of the hunt.

Although sealers have been located in several areas of Newfoundland, Quebec and Nova Scotia, the districts dependent on sealing for a significant part of earned income are quite restricted. Most of the large vessels have been based in St. John's, but the sealers aboard came from the outports of eastern Newfoundland. Northern and northeastern parts of Newfoundland are the major centres for longliners and their crews. Landsmen are more widely distributed. Centres of landsmen activities include, in addition to northern Newfoundland, the Magdalen Islands and the Quebec north shore off the Gulf. Along the north shore the main catches are older seals, but pups are taken when the ice brings the breeding herds within range of the Magdalens.

Benefits of the Seal Hunt

Material Benefits

Three-quarters of the cash income from sealing came from the sale of pelts, nearly all of which were purchased for primary processing at Dildo, Newfoundland, or at Blandford, Nova Scotia, and then shipped to Europe to be dressed and marketed. The other major economic benefit came from seal meat, which was consumed locally (for the most part, in Newfoundland) or distributed commercially in fresh, frozen and canned form.

Most sealers (nearly 70% in Newfoundland/Labrador) are fishermen; for them, earnings from sealing formed an important addition to fishing income. Such earnings varied widely, depending on the extent of participation in the hunt, the type of operation and the degree of "fisherman's luck". For what such data are worth, the average income per head seems to have ranged between $250 and $500 for landsmen, between $1,000 and $2,500 for sealers on longliners, and between $3,000 and $5,000 for sealers on large vessels. These sums represent returns for a few days' to a few weeks' work. Another measure of the significance of sealing to individuals or to vessel owners is the proportion of total annual earned income obtained from sealing. This can be substantial; for example, in one area of northern Newfoundland, over 25% of annual returns to the local longliner fleet in two of the four years examined came from sealing.

Seals are a source of highly nutritious fresh meat. Whitecoats, apart from their flippers, have little meat on them but virtually all the meat on older seals, other than that sold to processing plants, is eaten by sealers and their families. Normally, very little is wasted – and certainly none deliberately. This form of income in kind has been included in the assessment of benefits from the hunt. The likelihood that those deprived of seal meat will substitute a comparably nutritious alternative food is questionable. In Newfoundland and Labrador, seal meat is a dietary staple in many isolated communities, particularly for the Inuit. In Quebec and Nova Scotia, it is regarded as a specialty food item.

The economic costs of sealing and seal-product processing include the personal costs of landsmen (for equipment, and other necessities), the costs of vessel enterprises (shared in part by the sealers aboard), the earnings forgone by sealers (assumed to be zero), agency and transportation costs and the costs incurred in processing plants. The costs are computed on a marginal basis to measure the costs that actually would have been saved by those involved if there had been no seal hunt. If indirect (multiplier) effects are excluded, and on the assumption that sealers and workers in seal-processing plants and other activities connected with the hunt would otherwise have been unemployed, the net economic benefits of the seal hunt in the Atlantic region for the "typical" year of 1982 are computed to have been no more than $3,250,000. If this estimate is in error, it would be on the conservative side.

The net economic benefits for Canada as a whole are those for the Atlantic region less the costs incurred by the federal government to supervise the seal hunt, conduct relevant research and counter the anti-sealing campaign. These costs are estimated (by the Department of Fisheries and

Oceans) at close to $750,000 for the year in question, thus reducing national net economic benefits to some $2,500,000.

Intangible Benefits

Sealing and the activities linked to it are far more important to the people involved than can be shown adequately by economic measurement. Moreover, these people now suffer from a deep sense of frustration and alienation. They find it impossible to distinguish between killing a seal to support themselves and slaughtering cattle for food or clothing materials as people do in other parts of Canada and in the United States and Europe.

Concentrated in the more remote and environmentally harsh parts of the Atlantic region, sealing has been an integral component of a complex marine economy for generations past. Because of the migratory character of the various fish stocks, and the seasonal ice cycle, it is possible for local people to harvest a given fish or wildlife species only for a few months or weeks of each year. The majority of fishermen, dependent on small-scale enterprise, are forced to engage in diverse fishing operations, one after another in accordance with the seasons. Each fishery becomes an insurance against losses in preceding or subsequent fisheries. Sealing generally takes place when other sources of earnings are scarce or non-existent. In many areas, sealing marks the beginning of the annual fishery cycle after long winter months of inactivity. Returns from the seal hunt usually are re-invested in fishing craft and gear to permit participation in spring and summer fisheries. Without sealing the economic viability of the whole cycle is threatened.

Sealing requires skills which include a thorough understanding of ice, winds, currents and seal behaviour. Individuals learn to become sealers through first-hand experience and years of practice. Some skills acquired for fishing, such as weather forecasting, can be transferred to sealing; many others are unique to sealing because ice environments are different from open-water environments. Sealing is largely a co-operative and community activity. In contrast, fishing tends to be competitive and individualistic. Sealers share information about seals and ice conditions whereas fishermen are reticent in divulging details about fishing operations. Sealers rely on one another for assistance because working on or in ice is physically dangerous and exhausting.

Sealers see themselves as professionals and conduct themselves accordingly. A sealer observes an unwritten code of ethics which involves

taking responsibility for his own life and for the lives of others. Responsibilities include physical conditioning to withstand the rigours of working on ice in cold and often stormy weather, developing agility and wit to cope with sudden and unexpected problems, and maintaining proper clothing and equipment to survive changeable winter conditions and to hunt efficiently and humanely.

Sealers express contempt for unskilled hunters and abhor incidents of uncontrolled killing. They take no joy in killing for killing's sake. They are respected by their peers and rewarded by the market for their skilfulness and their ability to return from the hunt with high-quality pelts. Earnings are constrained by a limited-opportunity situation: sealers rarely know whether the season will last a day or extend over several weeks.

Fishermen and sealers (often the same people) know that their livelihoods depend on their knowledge of fish and mammal behaviour, gained by careful observation, analysis of changing conditions and experimentation and innovation. They cannot afford to be ignorant of atmospheric, oceanographic and biological conditions and processes. Many hunters and fishermen, therefore, understand the dynamics of the ecological system as well as, or better than, formally educated persons who lack direct field experience. Fishermen/sealers/hunters express concern about human-induced environmental changes like pollution and intensive exploitation, because they realize that such changes can threaten the resources on which they depend.

Seals and sealing activities are subjects of intense community interest prior to the seals' arrival, during the harvest and after the seals have moved on. They are a source of inspiration for story-tellers, song-writers, graphic artists and craftspeople. They provide the motifs and symbols of community life, representing tradition and a link between the generations. Men are proud to say that their fathers and grandfathers were sealers and that as boys they too went to the ice and learned sealing from their elders. Wearing a sealer's badge (licence) is a symbolic act of community support, even if the wearer does not participate in the hunt during a particular year. In response to the protest campaigns, many communities have revived traditional sealing ceremonies or have devised other ways to demonstrate support for the sealers.

The Market Collapse

The conditions of sealing in Atlantic Canada changed abruptly in 1982/83 with the collapse of the market. Although some seals were killed in 1984 and 1985 the prices received for the skins were a fraction of their earlier value. Virtually all the economic benefits identified for the period prior to 1983 have disappeared. In national, regional and even broad provincial terms, the economic loss is minuscule. The situation in Labrador, northern Newfoundland and parts of Quebec is very different. Most communities in these areas were already poor, and the direct loss of a substantial part of the annual income of many individuals and enterprises was bound to have a serious impact. The indirect effects may be even more serious, since the loss of sealing income early in the year can threaten the ability of those affected to prepare adequately for the summer fishing season.

Future Prospects for Seal Products

International Demand

The world market for seal products depends on the demand for sealskins, centred in Western Europe, which consumed about 80% of the supply. The EC market, which had absorbed nearly 300,000 skins annually, has now vanished. The main cause of its sudden collapse was the anti-sealing movement. This movement focused on seal pups but the publicity it generated brought about consumer resistance to all seal products. As the movement grew in strength, many retail organizations on both sides of the Atlantic stopped carrying sealskin garments. The ban on imports of pup sealskin products by the European Community, effective October 1983, was imposed under pressure of public opinion; by that time, however, the market for skins was virtually dead. Signs of declining demand were visible as early as 1981 and, in response to the drop in prices, supply had been progressively curtailed. The reduction in supply, however, has not yet arrested the decline in open-market prices.

Some traders assume that the seal-pup issue has been settled and hope to see, in the medium term, a modest recovery in the Western European market for skins from older seals. Others, less dependent on sealskins and, consequently, perhaps more detached, are much less optimistic. The infrastructure of processors and manufacturers in Europe has been seriously

damaged. Some companies no longer handle sealskins and others have gone bankrupt. There appears to be no possibility of this market recovering to anything like its previous level in the foreseeable future.

The markets in the Far East are extremely small at present and, although these regions have not been affected by the anti-sealing movement, there is little to suggest that they could become a major market for seal products in the near future.

The species of seals available from Canada are also harvested by the sealing industries in Greenland and Norway.[2] These industries now supply the world market with about 60,000 sealskins a year. Taking into account the large inventories of skins (amounting to some 400,000) still held by the fur trade, the supply on hand should be sufficient to meet world demand for the next several years. Stocks in inventory are often disposed of at extremely low prices.

The Greenland and Norwegian industries are heavily subsidized, and both are likely to continue sealing on the existing scale regardless of the demand for sealskins and the prices that can be obtained for them. Both industries have established marketing channels to the European and world markets and both have ready access to processing facilities.

The Canadian sealing industry, in contrast, suffers several disadvantages. The withdrawal of the Carino Company from the Canadian scene has deprived the Atlantic coast of the primary processing facilities and has broken a distribution link for Canadian sealskins to the secondary processing facilities and end-user markets in Europe and elsewhere. The Arctic sealing industry retains a capacity for primary processing by traditional methods and a channel to world markets via the Hudson's Bay Company.

Depressed world demand, subsidized competition from rival suppliers, the presence of large sealskin stocks and the weak structural situation of the sealing industry in Canada point to the conclusion that there can be no real opportunities for Canadian sealskins on the world market in the immediate future. Longer-term prospects depend on an international demand that cannot be forecast with confidence. For similar reasons, there are few prospects abroad for selling manufactured items such as garments and footwear. There is probably a continuing demand for seal oil, if it can be produced.

2. Canadian sealskins also face competition, even if it is less direct, from skins of fur seals.

Domestic Demand

The market for skins of older seals in Canada at present requires not more than 20,000 skins a year, mostly in the footwear industry but also in garment and souvenir manufacturing. There is no market for fashion garments made from the skins of hair seals. There is an estimated commercial market in the Atlantic region for the meat of at least 40,000 seals annually. Existing secondary processing and manufacturing facilities (especially for footwear) are capable of meeting a substantially greater demand.

Given an adequate marketing effort, the market for adult seal products in Canada might be expanded considerably, especially in the Atlantic provinces, where the protest movement has least influence. This market would be for practical, rather than luxury, items of clothing and footwear, for seal meat and possibly for seal oil. The ability to exploit domestic market opportunities, however, would depend on the existence of the necessary primary-processing facilities on the Atlantic coast, as well as on a cost structure that would make the final prices attractive.

Alternatives to Sealing

The market survey shows that there is little economic prospect of a complete restoration of the pre-1982 Atlantic sealing industry, even if all aspects of the industry were acceptable to the public. Before examining what form of sealing might be economic, the Royal Commission examined possible alternatives to sealing. These alternatives, if they are to solve the problems of the most seriously affected communities, should be located at or near those communities and, if possible, they should have a strong seasonal element, peaking in early spring.

The majority of the people affected by the dramatic collapse of the market for seal products were found to have limited formal education and few readily transferable skills. The kinds of skills they do have are, understandably, appropriate to survival in the harsh physical environments in which their communities tend to be located.

Despite a careful review of employment options within the areas of these sealing communities, the Royal Commission's consultants did not identify any major new opportunities that the people or their governments had been somehow overlooking. High levels of unemployment and low

participation rates are endemic in the areas that have depended on income (in cash or kind) from sealing.

Some opportunities linked to the commercial fisheries were suggested to the Royal Commission, but that sector, in general, verges on a state of crisis and seems unlikely to be able to sustain present employment levels, let alone generate additional jobs. Moreover, sealing was an adjunct to the fisheries for most of those involved: it served to extend the overall season in which income could be earned and, in turn, to make the seasonal fishery marginally more viable.

Cottage-industry and tourism opportunities were also identified and examined. Once again, they amounted to very little in any overall sense, although every job counts and all opportunities must be explored. A seal-linked tourism project undertaken off Prince Edward Island (and being tested off the Magdalens) shows promise as a relatively small-scale venture. The traditional sealing communities, however, are not on Prince Edward Island: they are distant from sizeable markets of any kind and most appear to be limited to one main resource, marine fish stocks.

Aquaculture was examined as a possibility but, while it certainly should not be written off at this relatively early stage in its development, it does not promise any "miracle" solution for the areas under consideration.

Discussions are under way concerning a NATO base at Goose Bay and a decision appears to be about one year away. For some of the people on the Labrador coast, that development might generate future employment opportunities, although it would necessitate movement from their coastal communities. The project, however, is opposed by aboriginal groups apprehensive of its environmental impact, and its future is in dispute. Even if it proceeds, it cannot be viewed as a panacea for the employment prospects for the people concerned.

Much the same can be said of offshore energy projects. Before the recent collapse of world oil prices, there had been a resurgence of optimism about Newfoundland's offshore energy resources but these are not close to the main sealing communities. While some job opportunities could open up for people from sealing communities if offshore energy projects proceed, the jobs would necessitate leaving those communities and would often require some educational or skill upgrading. Moreover, the benefits are likely to bypass most communities altogether.

A Restructured Sealing Industry

While a few of the alternatives discussed here do offer some possibilities, they are not particularly promising in aggregate. Many are in the "wrong place" or at the "wrong season". In such a context, and on narrow economic grounds, a restructured and modest sealing industry cannot be disregarded.

There are severe political and economic constraints on any revitalized sealing industry. As discussed in Chapter 12, killing whitecoats is widely held to be unacceptable and the Royal Commission is recommending that it should be prohibited. The potential demand for seal products appears to be limited largely to the internal Canadian market. This market currently can absorb some 20,000 skins and the meat from some 40,000 older seals, provided the prices are competitive and the meat of good quality. Both estimates potentially could be increased by an adequate marketing effort. It should be noted, however, that there is a substantial supply of unsold seal pelts that has been stockpiled.

An end to the whitecoat hunt would mean the end of the large-vessel hunt. Some landsmen, including most of those in the Magdalen Islands, would also be affected. Older hooded seals are taken mainly in the breeding patches and, if the killing of whitecoats and bluebacks is banned, it would probably mean that few, if any, hooded seals would be killed. The hunt for older harp seals would be less affected. Between 1979 and 1982, landings of older harp seals in Atlantic Canada varied between 40,000 and 65,000 animals. These included virtually all the catches by longliners, and catches by landsmen along the north shore of the Gulf, as well as a proportion of the landsmen's catches in northern Newfoundland.

Such a quantity of sealskins might be absorbed within Canada, although it would compete in this market with the products of Arctic sealing. The pros-pects for Inuit products outside Canada, however, are better than those for the products of commercial sealing, and most of the Arctic skins may be disposed of abroad. If the sealers in the Atlantic region received prices for their skins comparable with those received a few years ago, the current economic problems in Labrador, northern Newfoundland and the north shore would be somewhat eased. For the next few years, however, it is likely that the large existing inventory will depress prices for raw skins, even if the market for the final products improves.

On economic grounds, a revival of hunting for older seals appears to have a modest possibility of alleviating current problems, but, if it is to do so, the following conditions need to be satisfied:

(a) Primary processing facilities for around 50,000 seals annually will have to be available.

(b) The Canadian market for footwear and practical articles of clothing will need to be expanded.

(c) Price support for skins would almost certainly be needed for some years, at least until existing inventory has been absorbed, and probably much longer.

The price-support condition (c) can be argued for on other grounds. Any kill of harp seals will modify the adverse impact of harp seals on fisheries due to competition, damage to gear and transmission of parasites. The expected net benefit to fisheries from killing harp seals is discussed in Chapter 29. In that chapter it is suggested that if there would be benefits from reducing the harp seal population, financial support to the sealing industry may be cheaper than a culling operation.

Recommendations

The Royal Commission concludes that there are many persons formerly involved in the sealing industry who have been victimized through no fault of their own, and that all Canadians should combine to help them.

Periodically, product markets collapse or suffer sharp reductions. Governments sometimes intervene and seek to support the industry and people affected – on occasion, at enormous cost to the public. Sometimes they remain aloof. The reasons for intervention have varied. In the present case, the Royal Commission considers that the Government of Canada should intervene to help those who are the victims of the most unusual circumstances that have resulted in the demise of commercial sealing. The Royal Commission does not consider that the industry itself should be propped up in any sustained way, nor does it see the proposed action either as tied to past approaches or as setting new precedents. Sealing has had a unique history. A unique response is in order.

Given the economic plight of those who have been dependent on sealing income for part of their livelihood, and the probability that there will not be a restoration of appreciable revenues from sealing in the future, the Royal Commission recommends two courses of action: training and development, and compensation.

A Training and Development Fund

The identification of viable industrial opportunities in rural areas fairly remote from markets and often with a variety of economic impediments to development is a difficult process at the best of times. Much has already been attempted in Atlantic Canada to accelerate the pace of economic development and to find viable economic options for rural communities, including many that have relied in part on sealing revenues. The Royal Commission is under no illusions about the results.

There are a number of existing instruments (such as Rural Development Associations), designed to foster revitalization of rural communities in the Province of Newfoundland. There are also a number of federal-provincial agreements, such as the Economic and Regional Development Agreements (ERDA), that enable the two levels of government to devise a variety of developmental programs for particular sectors and areas. Various public agencies, such as the Canadian Saltfish Corporation, also exist for specific sectoral purposes and their mandates are periodically broadened in the hope of accomplishing more for the less prosperous areas.

The Royal Commission is not in a position to determine which organization should be primarily concerned with the promotion of viable development for the people of the communities affected by the cessation of commercial sealing, as long as effective work is done. However, the Royal Commission recommends:

1. that a new fund on the order of $50,000,000 be allocated to a sealing community development and retraining program;

2. that sub-agreements be devised to implement this program through the framework of ERDA, thereby bringing the Newfoundland, Nova Scotian and Quebec governments into the planning process from the outset;

3. that people of the communities themselves be given a clear role in the detailed shaping and monitoring of the proposed fund;

4. that the development opportunities not be tied to the fisheries exclusively, but be identifiable in any sector of the economy;

5. that designated communities be clearly identified on a map and the detailed criteria of selection specified;

6. that a proportion of the fund be clearly earmarked for development purposes and a proportion for training and that neither be less than 40% of the total;

7. that the sub-agreements be for no less than a four-year and no more than a seven-year period;

8. that an evaluation be undertaken, and the findings made public, after the initial three years of operation of the proposed program or when 50% of the fund has been committed, whichever comes sooner.

The Royal Commission does not think it appropriate at this stage to make specific recommendations with respect to the activities that should be supported by the proposed fund. It believes, however, that a portion of the fund could be used to support the reactivation of sealing-industry activities that are based in the most seriously affected communities and that do not provoke serious public opposition, for example, a hunt for older seals on a small scale by landsmen and longliner sealers. Such support might well include market development for pelts and meat within Canada, assistance for the establishment of small-scale primary processing facilities and, possibly, when warranted, short-term financial support for hunting operations.

A Sealing Compensation Fund

To place a monetary value on the social and cultural benefits of the seal hunt, both to individuals and to communities, is impossible: those benefits are not marketable commodities. The Commissioners conclude, however, that the people who suddenly have lost part of their livelihood as a result of the orchestrated destruction of seal-product markets are aggrieved in two senses. One is measurable in dollars and cents and can be identified as "economic". The other is "social and cultural" and, while it cannot be

measured in monetary terms, it can be recognized through the mechanism of financial compensation and assistance for adjustment.

Financial compensation is viewed as a token of recognition that heavy social and cultural losses have been sustained. In the Commissioners' view, mere money is inadequate compensation for the victims of such losses. Those losses were externally imposed, without consultation with the sealers, by the groups which destroyed their traditional markets and income sources. This is taken into account, therefore, in the Royal Commission's recommendations both for compensation and also for training and development funds. The amounts recommended are quite considerably larger than would be warranted by an estimate of economic losses only.

The Royal Commission recommends that a Sealing Compensation Fund be established, administered by committees along the lines of those established, under the Manpower Assessment Incentive Agreement, in response to the Atlantic coast whaling ban.

The purpose of this Fund, it is recommended, would be compensation for lost earnings and for difficulties associated directly and exclusively with the demise of seal-product markets. The amount, it is suggested, should total a figure in the vicinity of $50,000,000. If the level of net economic benefits to Atlantic Canada that were realized from the seal hunt in 1982 were to be spread over 15 years, the capitalized present value (at a 10% discount rate) would be some $25,000,000. The amount thus calculated is doubled in order to capture some of the non-cash benefits that have also been lost. It is further recommended that, in all cases of compensation, the grants be made on a single-payment basis.

PART IV

Economic, Social and Cultural Issues

PART IV c

Sealing Issues in Other Countries

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Chapter 19

Sealing in Norway and Greenland

A number of countries besides Canada have sealing industries. Because of historic ties between Canada and Norway in relation to sealing, a review of Norwegian policies is particularly relevant to the Report of the Royal Commission. Greenland's policies and practices, too, have a direct bearing on the Canadian sealing industry. This chapter, then, presents an analysis of the sealing industry in both Norway and Greenland, although more emphasis is given to the Norwegian experience.

The chapter is based on a report prepared for the Royal Commission (Osberg, 1986), abbreviated where appropriate to reduce its length. The international aspects of managing seal populations are discussed later in Chapter 28.

Norway

Salient Features of Norway

Geography and Climate

Norway is a northern country of approximately 4.12 million people and 307,000 square kilometres of land area. The population is well educated and highly homogeneous. The major urban areas of Oslo (population 643,000), Bergen (population 181,000), Trondheim (population 128,000) and Stavanger (population 91,000) form a quadrilateral in southern Norway, within which the vast bulk of the Norwegian population live. The area north of Trondheim is very sparsely populated. The indigenous people of this area, the Same, currently number about 20,000 (Norway, 1974, p. 31). Norway is unique among European countries by virtue of its low population density (an average of 13.4 persons per square kilometre). Some 11% of Norwegians live in settlements of less than 2,000 people and a further 30% in rural areas (see Norway, 1983, Tables 1, 2, 7, 8, 14, 372, 450).

Although a visitor from Canada to Norway will find obvious parallels in the vegetation and climate of the two countries, there are also significant differences. Canada is much larger and less homogeneous. The level of urbanization is considerably higher in Canada, and the climate on the whole is considerably harsher. Although Norway lies at a much more northerly latitude than most of the populated areas of Canada, the Gulf Stream causes its weather to be both milder and less variable than Canada's. Although the Canadian pattern of "urban development" is an east/west strip along the American border, while the Norwegian pattern of development is north/south, the effects of the Gulf Stream ensure that even the most northerly areas of Norway have winter weather that is relatively mild by Canadian standards.

The physical and social geography of Norway has the following implications for the sealing industry:

- The influence of the Gulf Stream and the relatively mild winter climate of Norway mean that the Norwegian coast is free of ice throughout the year. Therefore, although fishermen may chance to catch seals in nets, there is no "landsmen's" hunt for seals as it is known in Canada. There is no pack ice on which congregating species of seal, such as the harp or hooded seal, can gather to whelp, and there is no ice which landsmen can use in order to gain access to the seals. The Norwegian seal hunt is, and always has been, exclusively a large-vessel activity, in which Norwegians travel considerable distances from their homes (to the Barents Sea, Jan Mayen Island and Newfoundland).

- The importance of fishing to the Norwegian economy and the rural orientation of Norwegian society mean that many Norwegians are personally familiar with activities such as fishing and seal hunting. The environmental ethic is that such activities should be conducted responsibly (i.e., they should not pose a long-term threat to species survival) and should not be wasteful. There is little disagreement that such activities are both necessary and desirable.

- The political response to declining industries and to regional disparities is undoubtedly accentuated by the greater sense of community that is possible within a small and homogeneous population.

Most Norwegians consider the region of north Norway a marginal area of their country. Unemployment rates, at 10% in the winter months, are high by Norwegian norms. The average assessed income of taxpayers in north Norway is some 8% below the Norwegian average. For many years

subsidy programs have attempted to mitigate regional disparities between north and south Norway, but a trend to depopulation continues in the north (Hansen, 1985).

The parallels between north Norway and Atlantic Canada seem particularly strong when one recognizes that both areas comprise approximately the same percentage (about 10%) of the total national population. North Norway is composed of three distinct counties: Nordland has a population of 245,000 and a land area of 36,300 square kilometres, Tromsø has a population of 448,000 and a land area of 25,100 square kilometres, while Finnmark has a population of 77,000 and a land area of 46,500 square kilometres. The settlement pattern in these northern counties is dispersed, and the counties share many similarities, but just as Halifax and mainland Nova Scotia present a very different series of development problems from those faced by north Newfoundland and Labrador, similarly one cannot assume that the development problems faced by communities in Tromsø and Nordland are identical with those faced in Finnmark. Indeed, in many ways, it is the municipalities of Finnmark which may be most relevantly compared with the communities of northern Newfoundland and Labrador.

Economic History, pre-1945

One of the central facts about Norwegian economic development is its rapidity. Norwegian industrial development did not really commence until after 1890; before that date Norway was a relatively backward and extremely poor country. As Libeerman (1970, p. 34) comments, "Nineteenth century Norway with over half of its gainfully employed men engaged in farming, fishing and forestry activities conducted largely on the basis of non-mechanized, labour-intensive primitive techniques, belonged indeed to the pre-industrial agricultural era."

Although the exact pattern of land tenure and social custom varied from valley to valley, communal landholding and co-operative labour survived in Norway into the late 1800s, in contrast to its disappearance from the English scene well over a century earlier. As Libeerman (1970, p. 57) notes, "behind a land tenure system where common ownership plays a large role, there always exists a strong tradition of extended mutual help between farmers and of group work between the various members of the particular rural community." Perhaps equally important for the social institutions of modern-day Norway was the departure, in 1814, of the hereditary aristocracy with the other trappings of Danish rule. There is no tradition in

Norway of a class of aristocratic or absentee landlords – agricultural land, by law, can be inherited only by someone who intends to farm it productively.

In 19th century Norway the major social problem was not the depopulation of rural areas but their overpopulation. With a short, cool growing season, largely inhospitable terrain and primitive agricultural methods, Norway experienced throughout the 19th century an expanding population base and limited agricultural resources. By the late 1800s emigration was the only realistic option for many Norwegians. In the period 1856–1873, 111,000 Norwegians emigrated to North America; a further wave of 250,000 emigrated between 1879 and 1893, and a final wave of over 200,000 emigrated between 1900 and 1910 (Libeerman, 1970, p. 44; Norway, 1983, p. 6).

The high rate of natural increase ensured that Norway's total population continued to grow, but the social effects of mass emigration were pervasive. Economic historian Libeerman argues that both the poorest of Norwegian society, the so-called "husmaend", and the more enterprising and younger Norwegians were represented in the flow of migration, largely to the United States and, subsequently, to Canada. Return migrants, the so-called "Americans", also had pervasive effects on Norwegian rural society, returning as they did with money, new ideas and an impatience with traditional methods of production. Additionally, migration between Norway and North America was an important factor in the establishment of a Norwegian merchant marine.

Norwegian industrial expansion really began in the early 1900s, with the development of hydro-electric power and associated industrial complexes in the period 1900–1910. The combination of rapid urbanization, industrialization and absentee ownership, plus a substantial deflation induced by the central bank (see Hodne, 1983, p. 33–39) gave rise, by the late 1920s, to very severe labour conflicts. The economic and social crisis of the time produced, however, both a series of constraints on the operation of foreign captial and a historic agreement between the labour organization and the Norwegian Employers' Federation. In 1935, "the two antagonists in effect formally recognized each others' legitimate interests and powers, and agreed on a code of behaviour that henceforth became binding for both" (Hodne, 1983, p. 96). Since that time, the class politics and industrial conflict of the 1920s have been largely replaced by a combination of regulation, interest-group bargaining and social welfare legislation within a broad "social democratic" consensus. In some respects, Norway and Sweden have similiar industrial-relations institutions, but in Norway, the German occu-

pation of 1940–1945 has had an important additional influence in increasing national sentiment and social cohesion.

The pre-1945 experience has implanted some features in Norwegian society that help to explain its policy response to the problems of the sealing industry:

- The social conservatism and "community orientation" of Norwegian society has very deep historical roots. The desire to maintain existing communities, where at all possible, represents a widely shared value that gives development assistance to marginal communities an extremely strong political base.

- Within a homogeneous, egalitarian population, consensus on policy goals is relatively easy to achieve. Given such policy consensus, the Norwegian use of the market mechanism can be described in the words, "The market is a good servant but a poor master." While domestic market prices act as incentive mechanisms and international market prices act as checks on domestic efficiency, Norwegian society does not endorse the view that profit and loss should be the deciding factor in the regional and social organization of Norway. An unprofitable industry such as the inshore fishery or uplands agriculture or, indeed, sealing may be maintained for an indefinite period for social reasons.

Economic History, post-1945

Throughout the post-war period, Norwegian governments have followed the classic programs of pragmatic social democracy, marked by an increasing share of government and public service in gross domestic product. Norwegian economic institutions demonstrate a high degree of centralized collective bargaining and negotiation. Agreements between the central labour organization and the Norwegian Employers' Federation set the basic rate of increase of money wages; negotiations between the fishermen's union and associations of the fish processors set fish prices so as to ensure an income approximately equivalent to average industrial earnings; and farmers bargain collectively with the Ministry of Agriculture over the subsidy scheme, with the same norm in mind.

As a member of the Organisation for Economic Co-operation and Development, (OECD) and the European Free Trade Association (EFTA), Norway has followed a relatively liberal policy with respect to foreign trade. However, there has been little tendency in Norwegian society to "trust the

market" completely as an allocative device for economic activity. In part distrust may stem from the fact that a "market solution" for the Norwegian economy would all too obviously eliminate the marginal farms and isolated villages from which so many Norwegians come. "The dualism between the modern and the traditional culture runs deeper and stronger in Norway and neighbouring states in Europe" (Hodne, 1983, p. 227). A continued emphasis on regional balance is perhaps the major way in which Norway differs from other Western nations in its policy goals.

In common with other developed economies, Norway has witnessed a shift in employment from primary to tertiary industries. Of particular relevance to the decline of Norway's sealing industry has been the country's extremely low rate of unemployment. Between 1960 and 1973, for example, the average annual registered unemployment rate was 0.96% (Norway, 1974, p. 90). More recently, unemployment rates have risen somewhat: over the period 1979–1983 they ranged from 2% to 3% (Norway, 1983, p. 38). In the specific occupational categories "fishermen, whalers and sealers", there were 123 registered unemployed persons in 1970, representing some 0.35% of the 34,600 employed in those industries in 1970 (Norway, 1974, p. 48, 97).

In addition, if we consider employment in sealing as competing largely with employment in the merchant marine or in the fishing industry, the predominant tendency in post-war Norway has been toward a reduction and upgrading of employment. Total employment in ocean and coastal transportation in Norway shrank by more than 30,000 man-years of employment over the period 1960–1983.

The decline in employment over the decade of the 1970s as a whole can be attributed to the decreased manning requirements of modern ocean vessels. Almost all the employment loss in the Norwegian merchant fleet has been in the category of basic seamen who make up engine and deck crews. The great majority of those Norwegians who continue to be employed in the merchant fleet are now in the "managerial" category.

In the fishing industry a similar trend towards more specialization has been evident. Over the period 1948–1980, as Table 19.1 demonstrates, the number of full-time fishermen in Norway has increased by only some 2,700, but as a proportion of total employment in the fisheries, it has increased from 19.5% to 55.8%. The most dramatic change in the Norwegian fisheries has been the almost complete elimination of "occupation pluralism". The proportion of those who depend largely on the fishing industry, but maintain an alternative occupation such as agriculture, has shrunk from 60.5% of Norwegian fishermen to 16%. This trend is encouraged by the

structure of government subsidization of the Norwegian fisheries. Again, the picture is one of an increasingly "professional" work force, in an economy marked by a general shortage of labour. In this context one would not expect the loss of a few hundred semi-skilled jobs to arouse a great deal of concern.

Table 19.1
Trend in Dependence on the Fisheries, 1948–1980

Year	Sole Occupation		Main Occupation		Secondary Occupation		Total	
	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)
1948	16,700	19.5	51,700	60.5	17,100	20.0	85,500	100
1960	21,400	35.1	23,800	39.1	15,700	25.8	60,900	100
1971	20,726	50.1	10,093	24.4	10,562	25.5	41,381	100
1975	18,342	52.0	7,045	20.0	9,874	28.0	35,261	100
1980	19,425	55.8	5,715	16.4	9,649	27.8	34,789	100

Source: Norges Fiskerlag (1984).

Sealing and "Marginal" Communities in Norway

Direct Employment Impact

In general, it can be said that personal contacts, reputation and tradition are essential aspects of Norwegian society. Particularly in the sealing industry, long tradition has dictated that sealing vessels originate in either Tromsø or Ålesund, and the crews typically are drawn from particular villages in these areas. As the Interdepartmental Committee on Norwegian Sealing (IDCNS) reported in 1981:

> *Sealing has a certain importance for the local communities where the sealers come from. Vessels that are equipped in Tromsø get most of their crews from Balsfjord and Karlsøy. People in these areas have participated in sealing for generations, and the income from sealing has enabled small farmers to acquire equipment*

making it possible to operate the farm profitably. The sealing season coincides with a slack period in the operation of a farm.

The part of the crew coming from Karlsøy are chiefly fishermen the rest of the year. Otherwise, men with various occupations take the opportunity to hire on as crew members.

In the county of Sunnmøre, the municipalities of Ørsta, Hareid and Sande are most involved. Most of the crew members are full-time fishermen, but also there are a number of small farmers that utilize the sealing industry to pick up some extra cash income.

By all accounts, the success of the captain in getting crew for his sealing venture depended on his reputation for finding seals and ensuring good incomes and reasonable working conditions for his crew. Recruitment into the industry was by personal contacts, and most crew members were repeat sailors well known to their captains. Any new recruits were "recommended" by existing crews.

Of eight currently licensed sealing vessels, four are from Tromsø, three from Ålesund, and one other is from the Lofoten Islands (Kjonnoy, 1985). Tromsø is the centre of regional government for north Norway and employment there has benefited from the general increase in public services and public sector employment in Norway. Overall, the economy of the Ålesund region is rather diversified in employment opportunities, with viable shipyards, local shipping, and shipping equipment and furniture manufacturers. In addition, Ålesund is the fishing centre for northwest Norway, with a heavy concentration of the long-distance fishing fleet. Some 60% of large purse-seiners over 90 feet in length are from Tromsø and Ålesund (Kjonnoy, 1985).

Since there have never been any "landsmen" in Norway, the direct employment impact of seal harvesting on marginal communities has been solely the employment created by sealing vessels. As Table 19.2 shows, the crews engaged by these vessels numbered 1,213 in 1964, but only 155 in 1982. However, since the sealing season is so short, the decline in employment looks much less serious when expressed in terms of man-years (i.e., from about 150 man-years to about 20, a loss of 130 man-years of employment).

Table 19.2
Norwegian Sealing, 1962–1983

Year	Expeditions (no.)	Crew (no.)	Seal Harvest: Harps (no.)	Seal Harvest: Total (no.)	Seal Harvest: Value (Nkr '000)	Returns per Participant[a] (Nkr)	Returns per Participant[a] (Cdn.$)
1962	64	1,116	191,677	238,830	16,749	15,008	–
1963	63	1,163	166,361	196,566	23,557	20,255	–
1964	73	1,213	209,221	253,537	37,476	30,895	12,252
1965	61	1,120	97,765	140,118	22,923	20,467	7,783
1966	51	975	188,952	248,744	32,363	33,193	12,246
1967	45	919	220,122	275,404	26,320	28,640	10,113
1968	40	635	124,700	140,645	10,397	16,373	5,594
1969	41	760	135,038	175,438	16,760	22,052	7,300
1970	39	689	146,258	188,960	21,701	31,496	9,417
1971	34	531	119,086	163,289	21,736	40,934	11,542
1972	43	525	81,292	114,955	16,300	31,047	8,164
1973	35	468	82,466	115,931	16,700	35,683	8,719
1974	30	409	77,664	113,932	18,981	46,400	10,364
1975	28	384	75,930	112,274	17,738	46,193	9,246
1976	26	352	69,644	85,090	12,247	34,793	6,378
1977	22	295	56,682	78,154	11,740	39,797	6,692
1978	19	253	35,537	57,906	9,528	37,660	5,895
1979	18	247	46,599	75,088	14,272	57,781	8,570
1980	15	204	45,289	60,746	11,796	57,823	7,733
1981	14	170	51,629	68,745	13,604	80,023	8,419
1982	12	155	59,836	68,211	13,527	87,270	9,226
1983	6	72	21,407	21,493	3,144	43,666	4,263

Source: Norway (1968–1984).

a. Return per crew member calculated at 45% of catch value, inflated to 1983 equivalent with reference to Consumer Price Index and converted to Cdn.$ at 1985 exchange rate, i.e., 7 Nkr = Cdn.$1.

Sealing, like long-distance fishing or ocean shipping, is a way of using local labour on a distant work site, a way in which jobs can be "imported" into isolated and remote communities. Historically, many Norwegians have earned their living as seamen, returning to their local communities after their voyages. This "export of labour/import of jobs" has undoubtedly helped to maintain many isolated and marginal communities. Relative to employment declines in the fishing industry or the merchant marine, the decline in sealing has been rather trivial, amounting to about 0.05% of the employment decline in the merchant marine. The employment losses in these other industries were easily absorbed by an economy with 1%–2% aggregate unemployment and a rapidly growing service sector. Perhaps it is because the direct employment losses resulting from the decline in seal harvesting were so small, both absolutely and relative to those in other sectors, that so few Norwegians are aware of them.

Indirect Impact

It is the indirect impact of sealing on "marginal" communities through its effect on fish catches that may be most important. North Norway consists of the regions of Nordland, Tromsø and Finnmark, which together contain 11.6% of Norway's population, or roughly the same percentage share of Canada's population accounted for by Atlantic Canada. As noted earlier, the Tromsø region cannot be considered a "marginal" area, just as much of Nova Scotia does not consist of "marginal" communities. The closest parallels to the north shore of Newfoundland and the sealing communities of the Gulf of St. Lawrence and Labrador are to be found in the region of Finnmark. This region, with a total population of 77,394 persons in 1982, has an economic base which is overwhelmingly dependent on the commercial fisheries. Unemployment (at 10% in winter months) is high by Norwegian norms. Settlement is scattered along the coast in small communities where the employment opportunities, exclusive of government services and retail employment, are almost entirely related to the fisheries.

Since 1978, the fisheries in the eastern part of this region have been greatly affected by seals. To quote Øritsland (1985a, p. 16):

> *Contrary to their usual migration patterns, large numbers of harp seals have followed the capelin spawning migration all the way into the fiords of Finnmark county in Northern Norway in each of the years from 1978 to 1984. Immature seals and pregnant females have*

appeared in February, the females disappearing again in early March, while immatures have stayed on the coast to be joined by adult males in mid- and late-March. From mid-April to mid-May adult females have again dominated.

At the same season (February–May) an immigration of cod feeding on capelin forms the basis for an annual gill-net fishery in eastern Finnmark. This is the most important fishery through the year for local fishermen in the area. There is evidence that more than ten thousand harp seals drowned in gill nets in Finnmark in each of the seasons 1979, 1980 and 1981. The cost of gear damage was estimated to be between half a million and one million Nkr and the value of lost catches assessed at about half a million Nkr in 1979 and 1980. Since then the Norwegian government has paid damage to the fishermen by a compensation for each seal landed. However, no compensation can be paid for changes in the behaviour of the cod which has made the fish less accessible to the fishermen.

The stomach contents found in harp seals drowned in gill-nets in Finnmark consist mainly of capelin. After spawning, the seals also feed on capelin spawn. Cod, shrimp and herring also have been identified in the stomachs of these seals. However, these and other recorded findings do not represent the food selection of harp seals in the Barents Sea through the year. Until further data are available the diet of harp seals in the area can only be guessed at.

The presence of seals and the simultaneous absence of fish, plus the knowledge that seals eat fish, have led many Norwegians to conclude that it is the seals which have destroyed the fishery in question.

It is apparently impossible to say with scientific certainty that it is an increase in the population of harp seals that has caused the "seal invasion" in Finnmark and thereby depressed fish catches. An alternative hypothesis is that both the presence of seals and the absence of fish may have another, common cause. Hanneson (1985) stated that there was a similar seal invasion during the period 1901–1903, and that water temperatures in

the area may have changed. But the subtleties of such ecological explanations do not impress many Norwegians. Norwegian estimates are that the current herd of approximately one million harp seals would eat approximately 2.5 million tonnes of fish per annum (Øritsland, 1985a, p. 17). In addition to eating fish, seal populations can be observed directly to cause extensive damage to fishing gear and can be presumed to diminish fish catches by scaring fish away from their normal habitats. It is, therefore, accepted "common sense" in Norway that the decline of the Finnmark cod fishery can be traced to the expanding population of harp seals, in turn a result of declining sealing activity.

To summarize, the direct employment impact of sealing on "marginal" communities in Norway is, and has been for many years, minimal. However, the perceived indirect impact of sealing on marginal communities is quite considerable, since it is widely believed that the expanding seal population has damaged the fishing industry with severe consequences for fishermen in marginal communities. As Norway, Ministry of Fisheries (1982) stated, "Even if the actual impact of seals on exploited stocks of fish cannot be accurately assessed, it seems evident that [seals] are competitors to man in his endeavours to harvest the resources of the sea."

For marginal communities in Finnmark, the following points sum up the Norwegian approach:

- consensus on the social necessity of maintaining the economic base of isolated communities in Finnmark;
- common recognition of the importance of the fisheries to Finnmark;
- consensus that the decline of the Finnmark fisheries since 1978 is the result of the expanding harp seal population.

Socio-Economic Aspects of the Sealing Industry

The Norwegian Experience

In the 20-year period 1964–1983, employment in the Norwegian sealing industry fell from 1,213 to 72. (See Table 19.2.) The decline in the industry during the 1970s can perhaps be explained partly with reference to the introduction of quotas on seal catches in 1971, and the declaration by Canada of a 200-mile exclusive economic zone in 1977, with the consequent

diminution of Norwegian catch quotas in Canadian waters. The decline in employment in Norwegian sealing, however, has been rather steady; even in the 1960s the industry shrank considerably, by over 50% between 1964 and 1971. The steadiness of this decline, prior to the emergence of constraints on the total catch or on the marketing of seal products, represents a bit of a puzzle.

As Table 19.2 shows, the returns to labour in Norwegian sealing have been highly variable, although even the worst years have not provided bad earnings for six to eight weeks' work – certainly considerably better returns than those received by Newfoundland sealers. Information provided to the Royal Commission (based primarily on interviews with C. Rieber, 1985, and T. Øritsland, 1985b) by those familiar with the industry indicates that a variety of factors are responsible for the greater returns to Norwegian sealers. Norwegian vessels have used a different strategy from that of Newfoundland ships for the seal hunt itself: smaller vessels with more powerful engines that can penetrate more deeply into the ice, closer to the main herds. Norwegian vessels carried much smaller crews, on average, than those from Newfoundland, thus allowing for a greater catch per man (see Wright, 1984, p. 48). The crew on Norwegian vessels received higher shares of the value of the catch. More extensive training of sealers and a higher percentage of experienced sealers aboard Norwegian vessels meant that quality control in skinning and initial processing of seal pelts was probably superior to that aboard Newfoundland vessels.

The result was that crews aboard Norwegian vessels received, in 1983 terms, an average of 57,532 Nkr per man over the 1972–1982 period. At exchange rates prevailing in 1985, this is equivalent to Cdn. $8,218. From 1964 to 1971, prior to the introduction of catch limits, average returns per man were higher: some 66,719 Nkr at 1983 values, which is about Cdn. $9,531 at 1985 exchange rates. In addition, if one can judge from the descriptions of hunt participants, working conditions aboard Norwegian vessels were substantially superior to those aboard Newfoundland vessels. For example, Norwegian boats are said to have bunked their crews one or two per cabin while the Newfoundland norm was four (Wright, 1984). It is said by those close to the Norwegian sealing industry that there was never a problem in locating labour for sealing expeditions. The combination of high pay (relative to Newfoundland), good working conditions and tradition perhaps explains why.

In large measure, employment in Norwegian sealing contracted simply because the size of the sealing fleet shrank. The IDCNS (1981) described the Norwegian sealing fleet as follows:

The fleet can be divided into 3 groups, the largest steel vessels of 400–600 gross tons with licenses for the Newfoundland ground; the medium-sized mostly wooden vessels of 100–300 gross tons for the West Ice; and vessels under 100 gr. tons for the East Ice. The total number of vessels in 1980 is estimated to be 20 divided according to licenses:

	Steel Vessel	*Wooden Vessel*
Newfoundland	*11*	*0*
West Ice	*3*	*6*
East Ice	*0*	*0*

With respect to the age and condition of the vessels, it could be said that the Newfoundland fleet is still in reasonably good condition and there has been a certain renewal with 5–6 vessels in the last 10–12 years. There have been relatively few shipwrecks among these vessels and the average age is estimated to be 15–20 years. The West Ice and East Ice vessels have been more vulnerable with many lost. Also in recent years some vessels have been condemned and renewal has not occurred in many years, except for one new vessel delivered in 1979. There has been a gradual decline in the numbers from 58 in 1957 to 10 today.

A sealing expedition lasts 1–2 months and that means that the vessel must either have alternative opportunities the rest of the year or tie up. Some of the vessels have additional licenses for purse seine or trawl, some have occasionally had charters as expedition vessels to polar areas and others again are in coast- guard service. Data from 1975 show that on the average sealing comprises 46.2% of the gross income. Due to the relatively low costs for sealing equipment the share of the net income from sealing is somewhat higher than for fishing. On the other hand, there are relatively large expenses for repairs after each sealing trip since it is expensive to repair the ice damage often incurred.

Since 1969 there has been a considerable decline in the number of vessels through shipwrecks, transfers and sales. The decline has been smallest among the vessels for the Newfoundland ground, which are all steel vessels. The largest decline has been among the older wooden vessels, either by shipwreck or through retirement because of high maintenance costs. Some vessels have received scrapping grants.

The non-replacement of sealing vessels can be easily explained in economic terms. To quote IDCNS again (1981):

> *At Newfoundland the average catch per vessel has declined from 8,000–13,000 seals per vessel in the 1960's to 5000–9000 since 1971. This is associated with the establishment of quotas, but also [indicates] that participation has been somewhat excessive. Vessel owners contacted by the committee say that a catch of 10,000 animals will give a reasonable return, but even with a participation at Newfoundland of three vessels, all of them cannot achieve this number with present quotas.*
>
> *In the West Ice the average catch per vessel has had the opposite movement with 1000–3000 animals until 1970 and 2000–3300 in the 1970's. The owners assume that 3000–3500 seals per vessel will give a reasonable result and this estimate seems to be reasonable considering the number of vessels expected to participate and the quotas presently in effect.*
>
> *The Norwegian quotas are divided equally between participating vessels both in Newfoundland and in the West Ice. In the East Ice where the vessels have been small and of various sizes, the Ministry of Fisheries has found it convenient to divide the quota according to vessel tonnage. In general, it can be said that* in consideration of market prices and the cost level at the present time, it is dubious that the results of the hunt will give basis for amortizing new investments in vessels and the interest for new investments has therefore been minimal. *(Emphasis added.)*

In addition, there has been a general increase in productivity in the industry as smaller and more efficient vessels have sailed with fewer crew members. Table 19.2 shows, for example, that during the years 1981–1983, the average crew size of Norwegian sealing expeditions was 12.4 men, while during the period 1962–1964, the average crew size per expedition was 17.5 men.

Regulatory constraints have played a role in reducing profitability. In 1964–1965, no sealing was permitted in the Barents Sea, and in 1967 female seals were protected on the West Ice. After 1971, quotas on the Newfoundland hunt began to be an increasingly important factor for Norwegian sealers. Prior to 1971, however, the major factor in the decline of Norwegian sealing was undoubtedly the relative unprofitability, given the high wages of Norwegian sealers, of investing in new sealing vessels to replace the older wooden vessels removed from the industry as a result of shipwreck and condemnation.

Norway and Canada Compared

The Canadian seal hunt can be divided into four distinct social categories: the aboriginal hunt carried out by the Inuit of the Arctic; the landsmen hunt of northern Newfoundland, the Magdalen Islands and the north shore of Quebec; the longliner hunt at the Front and in the Gulf; and the large-vessel commercial hunt at the Front and in the Gulf. These hunts vary in commercial orientation and social significance to the participants. Wenzel (1985) has described the social significance of the seal hunt to Inuit communities, while Kimber (1985) and Sergeant (undated) have described the effects of the hunt on the landsmen of Newfoundland and the Quebec north shore. The aboriginal and landsmen hunts of Canada have nothing in common, however, with Norwegian sealing, save the problem of depressed international market prices for sealskins. The only points of comparison of social and economic effects refer to the large-vessel hunt of Newfoundland.

In terms of social significance, Wright (1984) has ably documented the "rite of passage" and "adventure" which the large-vessel hunt of Newfoundland has offered to its participants. In Norway, sealing apparently performed, in the past, similar social functions (Jentoft, 1985), but their significance has died a natural death as employment in the industry has shrunk.

The major point of comparison, therefore, is the economic impact of sealing. If, during the 1960s and 1970s, Norway had had unemployment

rates even remotely comparable with those in Newfoundland today, one might say that the loss of 1,100 jobs – even if this figure amounted to only about 115 man-years of employment – would have had serious social and economic consequences. But, as already indicated, unemployment in Norway, until recent years, has not been a national problem. In addition, the local labour markets primarily affected by sealing, namely Tromsø and Ålesund, have been reasonably buoyant. The town of Tromsø has grown quite rapidly, primarily because of the general expansion of public sector employment in Norway in the last two decades and also because of its status as a regional centre for north Norway. From 1960 to 1980, its population increased from 21,091 to 36,268. The town of Ålesund experienced less rapid population growth over this period, its population rising from 23,436 to 25,085 persons, but the labour market in the surrounding areas has been quite diversified and has offered a range of employment opportunities. It would be rash, therefore, to infer that the decline of the Norwegian sealing industry was directly responsible either for creating or for exacerbating unemployment. Given the availability of alternative employment, the socio-economic effects of sealing in Norway, in terms of direct employment creation, appear to be approximately nil.

In 1983, Norwegian exports of fish and fish products totaled some 7.4 billion Nkr. and comprised some 13% of all goods exported, apart from ships, crude oil and natural gas. About 50,000 people were employed in the fishing and fish-processing industries, amounting to approximately 3% of all those in regular employment. In north Norway the importance of the fishing industry is considerably greater, totalling approximately 15% of all paid employment directly connected with this industry. In addition, there is a large, but unquantified, employment multiplier deriving from the production of gear and other inputs for the fishing industry, shipbuilding and ship repair, and the transport and marketing of fish products. The fishing industry is of great social and economic consequence to Norway, and the possibility that it will be adversely affected by an expansion of the harp seal population is taken very seriously.

Similarly, the fishing industry of Atlantic Canada is extremely important to the economy of that region. Hence, although the employment circumstances of Norway and Canada are very different, with consequent differences in the importance of the decline of the sealing industry as that industry affects employment, the potential economic impact on the fishing industry is directly comparable.

Not enough is known about the impacts of seals on fisheries, in either Canada or Norway. (See Chapters 24, 25, 26, 29.) The Norwegian

decision to maintain a sealing industry is basically a "judgment call" that recognizes the social consensus to preserve the livelihood of communities in Finnmark.

Policy Responses to the Decline of the Sealing Industry in Norway

The Seal Hunt

The most important Norwegian policy response to the decline in the Norwegian sealing industry has been to ensure, by subsidy, the continued existence of the industry. During the 1960s and 1970s, the Norwegian sealing fleet shrank dramatically. However, nine vessels retain licences for sealing (eight full licences, one partial licence). The Norwegian authorities are not prepared to see the sealing fleet disappear entirely. A subsidy program, therefore, has been initiated, and 5 million Nkr per year are paid to compensate the owners of sealing vessels which do not participate in the annual seal hunt and to subsidize the returns of the five or six vessels that still participate in that activity (Øritsland, 1985b).

In past years, a subsidy was paid on the seal blubber, but this payment has recently been discontinued. Currently (Davies, 1985), the budget (4.8 million Nkr in 1985) for subsidizing the sealing industry is set after discussions between the Sealing Board and the Ministry of Fisheries. (Sealing subsidies of 4.8 million Nkr are a relatively insignificant proportion of total Norwegian subsidies to the fishing industry, which amounted to some 1.4 billion Nkr in 1985.) The subsidy includes a grant for scientific research (500,000 Nkr for tagging on the West Ice) and a budgeted outlay of 4.2 million Nkr on the harvest of pelts on the East Ice (plus an additional 150,000 Nkr for laid-up vessels). The subsidy for pelts is paid to each vessel on a pro-rata basis, that is, on the percentage of the quota of skins which each ship takes. Since quotas are not transferable between vessels, and some vessels do not fill their quota, the budgeted subsidy is never entirely spent. However, a sum of 4.2 million Nkr and a quota of 19,000 skins implies, in effect, a subsidy of 221 Nkr (roughly Cdn. $31) per skin (Market and Industry Analysts, 1986, p. 26–29).

The subsidy scheme for sealing is institutionally very similar to other subsidy schemes. The decision to maintain the industry is implemented by means of a subsidy, the aggregate size of which is set by collective negotiations between the producer association and the government. The sub-

sidy is paid per unit of output so that producers who are technically more efficient receive higher profits and relatively inefficient producers leave the industry. As the size of the current subsidy per sealskin may indicate, however, it is not uncommon for an industry to depend almost entirely on subsidies, and such a situation can persist for many years.

At current levels of hunting effort, Norwegian sealing will have no significant effect on the harp seal population. If it becomes clear that an expanding population of harp seals is adversely affecting the fisheries, it may be seen as desirable to limit the numbers of harp seals. Subsidizing the remnants of the Norwegian sealing industry can be explained, at least in part, by a concern that complete cessation of the industry would be an irreversible event. Sealing in Norway draws its labour force from very specific communities which have a long tradition of participation in the seal hunt. If the hunt were to die out completely, this tradition of participation might also die, and recruitment of labour for sealing would become more difficult. The hunt itself involves the killing, skinning and initial preparation of the pelt. The conditions are severe and dangerous, and an entirely new labour force might be reluctant to engage in the harvest of harp seals. The skills involved in skinning and the preparation of pelts are becoming increasingly rare, and to re-establish the industry after a period of lapse could prove a problem.

The economics of the sealing industry also depend upon the continued existence of processing capacity, market channels and a final market for pelts. As one might expect, the grading, tanning, dyeing and sewing of seal pelts present somewhat different technical problems from those encountered in the processing of other animal species' pelts. Processing knowledge is highly specific to the industry, and in particular to the firm of G.C. Rieber and Company. Rieber has been able to pay a consistently superior price for seal pelts because it has been able to realize consistently superior returns in product markets (Øritsland, 1985b). This advantage in processing depends, in turn, on the accumulated expertise of a core group of employees. It would take some time to recreate this technological capacity if the industry were to cease operations entirely.

Subsidies to maintain a core capacity in the sealing industry, therefore, can be seen as an "insurance policy", which guards against the risk of loss of a major national asset, the fishing industry. If there is conclusive evidence, in future, of a significant impact of harp seals on fish catches, harvesting rather than culling would be a policy option. To cull the population of harp seals (that is, simply to kill harp seals for population control without making use either of their meat or their pelts) would create

problems of pollution, be wasteful and involve considerable expense without providing any offsetting revenue. Thus for ecological, economic and ethical reasons, the preferred method of controlling the harp seal population may be a harvest rather than a cull.

As circumstances now stand, there is a great range of opinion concerning the effect of the harp seal population on fish catches. Many Norwegians are firmly convinced, however, of the link between increased harp seal numbers and decreased fish catches. In conversations with "ordinary" Norwegians, one often has only to mention the sealing issue to hear the firm assertion that "the seals have eaten all the fish in Finnmark". Some Norwegian fisheries officials use such phrases as "an ecological catastrophe" to describe the consequences of allowing an unchecked expansion of the harp seal population (Osberg, 1986).

Official documents are much more guarded in their pronouncements. The IDCNS (1981) report states (p. 34), "We cannot give simple valid answers to these questions" (of the future impact of seals on north Atlantic fish stocks). The energy requirements of seals under wild conditions, the species of fish they feed on (and the interrelation of those species), the mortality of fish in addition to fish eaten by seals, the age and size distribution of fish killed by seals, and the percentage of remaining fish that would be caught by fishermen: all these important variables are extremely difficult to evaluate. (See Chapter 24.) In addition, changes in fishing techniques have altered in the past, and likely will alter in the future, the type of fish stocks for which humans and seals compete. There is, therefore, great hesitation on the part of seal experts to be as firm in their opinions about the impact of seals on fish catches as is the Norwegian "man in the street".

The best appreciation of the Norwegian policy stance may be gained by quoting directly from the summary and conclusions of IDCNS (1981).

> *The relationship between the seal stocks and utilizable fish resources has recently created increasing interest. When this relationship is to be more closely evaluated, two factors are especially important:*
>
> - *The seal stocks under discussion [harp and hooded seals] have been reduced considerably in numbers in relation to earlier stock levels.*

- *While the exploitation of the seal stocks has been under way, fish catches in the same ocean areas have increased. The trend towards overexploitation of some fish stocks is also noticeable. In future years the stocks can be faced with the following:*

  - *Increasing conflicts with fisheries interests with respect to competition for certain, in part overexploited, fish stocks.*

  - *Increasing problems with respect to rebuilding of the stocks towards earlier levels.*

The data base for evaluating these factors more closely is insufficient. This applies not the least to the actual role of the seal stocks as competitors for fish.

It is known that seals consume considerable quantities of fish and also that fish resources have been reduced considerably due to intensive fishing. The possibility that a depleted stock of seals can increase in numbers up to their historic highs is therefore assumed to be impossible under current ecological conditions. This should not be a goal in itself, according to the opinion of the majority; the goal must be that seal stocks are kept at a level corresponding to their nutritional base. The continuing migration of harp seals to the Finnmark coast seems to confirm that the White Sea stocks are increasing and that the food supply for the seals has become insufficient so that the seals in part break their normal migration pattern.

The majority agrees that one must know more about the real food consumption of the harp seal, but this will probably require research efforts over a long period, and it will not be responsible to wait for these research results before a stand is taken on the question of management. *(Emphasis added.)*

Marginal Communities

Norwegian policy towards "marginal" communities and, in particular, towards north Norway and the areas of east Finnmark affected by the

recent "seal invasion" is wide ranging and comprehensive. Such policies do not represent a response solely to a decline of the sealing industry. Rather, Norwegian regional policies reflect widespread consensus that the depopulation of north Norway is simply unthinkable. Part of the Norwegian social contract is a commitment to maintain, if at all possible, local communities. Norwegian regional policy is complex and only tangentially related to sealing.

Concern for the regional implications of changes in fisheries employment is often cited (Holm, 1985) as the underlying basis for the Norwegian policy of subsidizing fish catches, and for the policy of restricting fishing licences to owner-operators. Transportation subsidies in Norway are pervasive and are heavily slanted towards north Norway. For instance, informal estimates by the Ministry of Community and Labour Affairs indicated that somewhat over a quarter of transportation subsidies in total and roughly 40% of non-rail transport subsidies are directly targeted on north Norway (Jensen and Movald, 1985). The decentralization of government departments and educational institutions is extensive. Capital subsidies, grants and favourable credit terms are available for investment in north Norway, as are subsidies for municipal infrastructure.

While subsidies to maintain employment and population levels are common in north Norway, there is no explicit subsidy for wages. Employers in this area are eligible for a reduction in employer contributions to national insurance (from 15% to 8%), which amounts to a rather small and indirect subsidy to employment. More explicit wage subsidies, it is feared, would stigmatize subsidized wages as welfare, undermine the social solidarity of small and isolated communities, and create long-term problems of dependency on transfer payments (Solomon, 1985).

Transferability of Norwegian Policy to the Canadian Context

Policy for the Sealing Industry

To simplify somewhat, Canadian policy choices with respect to the sealing industry are abandonment, continuation of some level of sealing within the present industry structure, or a "Canadianized" industry with final processing located in Canada. The economic arguments for continuation of the seal hunt depend on the assessment made of the importance of sealing for the fishing industry, and the direct employment and income creation attributable to the hunt. There is probably no real replacement for

the sealing industry, since, although it creates relatively few man-years of employment in total, its employment effects are spread among a relatively large number of people over a relatively short period in which there are few potential alternative uses for workers' time. Furthermore, the comparative advantage of coastal communities in Labrador and northern Newfoundland (i.e., what such communities can produce more cheaply than others) appears to be restricted to "fish and seals". As a consequence, there is considerable discussion, particularly in Newfoundland, of the possibility of maintaining a scaled-down sealing industry with local processing of pelts. The Norwegian government has clearly decided that it should maintain at least the core of a processing industry for seal pelts, and the issue for this Report is whether such a policy is potentially transferable to a Canadian context.

The sealing industry is small enough in absolute size that minor indivisibilities in capital equipment become important parts of its cost structure. To process sealskins in Newfoundland, for example, a de-blubbering plant is required such as the one operated by Carino Company Ltd. at Dildo, Newfoundland. The capital investment in such a plant is not particularly large (less than $2 million) but its capacity (200,000 pelts per year) is substantially in excess of any reasonable estimate of pelt production required in the immediate future. When, as in 1984, the numbers of seal pelts processed is only 27,000, the fixed costs of such an operation become very significant. G.C. Rieber and Company, of Bergen in Norway, estimates the cost of de-blubbering 25,000 pelts at $12 per pelt, while the cost of de-blubbering and initial preparation of 80,000 pelts would be about $7 per pelt. On this basis, the fixed cost of a de-blubbering plant would be in the area of $180,000–$200,000 and the marginal cost per pelt in the vicinity of $4.75. (Figures from G.C. Rieber letter of June 1984, quoted by Osberg, 1986.)

No cost data are publicly available on the various stages of final processing currently performed in the Rieber firm's operation at Bergen. Those familiar with the industry, however, emphasize the role played by highly specific, technological expertise. The grading and tanning of seal pelts is not quite the same as the grading and tanning of the pelts of other animals, and a good deal of expertise has been accumulated by that firm. In addition, final processing must have close ties with the fashion industry, adapting quickly to the vagaries of that industry.

> *Due to the close contact [with customers], the Norwegian skin processing industry is heavily involved in developing models, and foreign buyers of skins have at any time an overview over the availability of the various types of*

> *skins. The Norwegian processing industry is very elastic and can on short notice change dressing and tanning methods so that they cover individual requirements of buyers. This is especially required with respect to dyed sealskins since fashions change rapidly. The sealskins used for trim must follow textile fashions (IDCNS, 1981.)*

Undoubtedly, one could in time duplicate this expertise independently, but it is likely that access could be obtained more economically by co-operation.

A necessary condition for the establishment of a Canadian seal-processing industry would be a considerable degree of government support. The process of developing new markets would be a slow one, and subsidies would be required in the development phase of the Canadian seal-processing industry. (See Chapter 18.)

Policies for Marginal Communities

Whether Norway's policies with respect to marginal communities lend themselves to the Canadian context is debatable. There are many differences between Canadian and Norwegian society, not least in the broad consensus by which subsidies to marginal communities and regions are supported in Norway. This commitment to maintain communities in north Norway and in the marginal farming regions of south Norway is integrally connected with the Norwegian way of life. In conversations with a large number of Norwegians in business, government and academic, for instance, Osberg (1986) found universal recognition that subsidies to north Norway amounted to a great deal of money. Only two people, neither of whom was a native Norwegian, were willing to argue that such subsidies were misplaced and ought to be reduced. In contrast with Canada, the geographic mobility of labour is *not* viewed as an inherently "good thing" in Norway.

Local preference is pervasive in Norway, and by "local" Norwegians usually mean municipalities, of which there are 454 in a nation of 4.4 million people. As a matter of course, Norwegians have for generations accepted the principle that the title to agricultural land can pass only to someone who intends to reside in the region and farm the land. Seaside properties in south Norway are worth far more as seasonal cottages for Oslo residents than as year-round homes for local inhabitants, but Norwegians accept the proposition that local residents should have legal preference in house sales (Aasberg, 1985). The pervasiveness of an ethic exalting local

preference and community maintenance creates a significant difference between the Canadian and Norwegian "way of doing business".

For example, a general commitment to local development and the maintenance of communities carries the corollary that individuals in those communities can plan on having the option of living where they grew up. The stability of the population in these communities implies that personal and familial relationships are of very long standing, and that little remains unobserved, especially in rural areas. Family and personal reputations are therefore extremely important in Norwegian society. In such a context, Norwegian commercial banks do not emphasize real security for loans; rather, Norwegian banks "bank the person". Given the detailed information that is available on loan applicants in a closely knit and cohesive community, and the social opprobrium that default on a bank loan would incur, Norwegian banks understandably operate with very low loan-loss ratios and with a high degree of decentralization of decision making. Each local branch of even the largest commercial banks has a "board of directors" composed of local community leaders, and one aspect of competition among the major commercial banks relates to whom they can attract, in each area, to their local board (Vollelv, 1985; Stubberud, 1985; Aasberg, 1985).

The specific policy tools of Norwegian regional policy, such as transport subsidies, small business loans, industrial parks and development officers, are not unique – indeed the list of their policy initiatives is very similar to that of Canada. But the implementation of a regional policy package depends crucially on the informal information flows, tacit co-ordination and implicit bargaining that are part of each policy initiative. There are substantial differences between Canada and Norway in these aspects. In addition, in Norway there is a clear normative ideal – that of the "owner-operator" – towards the maintenance of which much policy is aimed. An example of the possibilities, and of the differences in institutional structure which surround development initiatives is provided by the fish-farming issue.

Aquaculture

Norwegian success in the farming of trout and, especially, of salmon has become relatively well known. In 1984, the primary value of fish caught by the Norwegian fishing industry was 4.05 billion Nkr, while the primary value of fish cultivated by Norwegian fish farmers was approximately 1 billion Nkr. In 1984, some 26,000 tonnes of fish were produced by Norwegian fish farms, 85% (22,000 tonnes) of which were salmon and the remainder trout. The growth of this industry in recent years has been nothing short

of phenomenal, and there is keen demand for the limited number of licences that Norwegian authorities make available each year. Based on the predicted output of current licensees, production of Norwegian farmed salmon is anticipated to amount to between 50,000 and 55,000 tonnes in 1987 (Kjonnoy, 1985; see also Norway, 1968–1984, Table 177).

The profitability of fish farming has been well documented. Nonetheless, there has been a deliberate policy in Norway to issue licences for fish farms rather slowly, and to favour areas of north Norway where other employment opportunities are in relatively short supply. In addition, it has been deliberate policy to maintain an industrial structure of "small holders" in fish farming. Licences are issued only for a size of farm that can be run with an estimated two man-years of employment creation, plus occasional assistance at harvesting time. Only owner-operators receive licences for fish farming in Norway, although in a recent move the government has allowed up to 49% equity participation by outside capital interests.

Fish farming cannot be thought of as a panacea to "solve" the unemployment problems of marginal communities in north Norway or of those communities affected by the demise of the sealing industry. In the first place, fish farming is relatively capital intensive and creates few jobs. Fisheries officials estimate that the current Norwegian industry generates some 2,000 man-years of employment in fish farms and perhaps as much again in handling and transportation of the final product. Since, in order to obtain a maximum price per kilogram of fish, Norwegian farmed salmon is exported either fresh or with a minimum of processing, little processing employment is generated. The farming of fish creates stable, year-round employment for a relatively small number of workers. Sealing (by landsmen) entails a very short period of employment for a relatively large number of workers. Encouraging the growth of aquaculture could provide only a partial response to the employment problems created by the demise of the sealing industry in Canada. (See Chapter 17.)

At first glance it may appear odd that Norwegian authorities have attempted to push the aquaculture industry towards sites in north Norway that are far from potential markets for fresh fish. Transportation costs, even subsidized costs from the north of Norway, are considerable. Although regional balance was the motivation for the licensing policy, there may be another rationale to consider. Aquaculture is, in essence, a way of converting fish with a low market value to fish with a high market value. Since the costs of feed are said to represent approximately 50% of the operating costs of fish farms, the long-run economics of fish farming probably imply that aqua-

culture will be successful in locations where the opportunity costs of feed are low (Hannesson, 1985).

Since fish farming is a young industry, rather rapid innovation and productivity improvement can be expected in the next few years. Labour productivity, in particular, is likely to increase over time, and as the industry expands, specialized equipment is sure to be developed and produced at costs that are lower than those of today's custom-built installations. The biological efficiency of the conversion of feed to marketable fish product is also likely to improve (indeed, the Norwegians have already made some progress in salmon breeding), but this is inevitably a slow process. Productivity improvements in non-feed costs imply, however, that feed costs of fish farms will increasingly dominate the production costs of such farms. Clearly, the opportunity cost of the feed for fish farms is reduced if it originates as a by-product of other fish-processing activity. Alternatively, fishing regions whose distance from markets implies that the catching of low-value species is unremunerative may find a niche in the aquaculture industry of the future.

Feasible markets for the product of fish farms are an aspect only tenuously related to distance. Already the production of Norwegian fish farms is being flown over Newfoundland for sale in New York and other markets in the United States. Timeliness, regularity and speed of communication are far more important in maintaining a dependable supply of high-quality fresh product than is distance.

The example of aquaculture therefore illustrates the problems and potentials involved in transplanting development initiatives. The technology and its success in north Norway offer an exciting vision of prosperity – indeed, in the longer term one has to think seriously about the viability of the traditional "hunter-gatherer" type of fishery. However, success in Norway does not mean success in eastern Canada. Much colder water temperatures and winter ice, among other factors, weigh against aquaculture in Newfoundland. Chapter 17 presents a more detailed review of the prospects for aquaculture as a partial substitute for the Canadian sealing industry.

Greenland

With the gradual decline of the Norwegian sealing industry and the recent sudden collapse of the Canadian sealing industry, Greenland has become by far the largest single source of sealskins for international trade.

Although the Greenland authorities take some pains to distinguish the aboriginal hunt for adult seals in Greenland from the commercial hunt for seal pups in Canada, the international market for all varieties of seal products has been shattered by the recent anti-sealing campaigns (see Dixon, 1984, p. 65). The commercial sale of seal pelts from the Greenland seal hunt, therefore, continues to survive only as a result of massive subsidization (estimated to amount to 11 million Dkr in 1984).

Greenland is the largest island in the world, more than 2,000,000 square kilometres in area, but it has a total human population of only about 52,000. Most of Greenland's inhabitants reside in the southern and western regions, in settlements whose economic base is the coastal fishery for cod and deep sea shrimp. It is only in the northern and eastern regions that the original aboriginal hunt is the basis for human existence. Although hunting techniques obviously have changed with the introduction of rifles and, more recently, of outboard motors, seals remain the primary prey species.

In 1983, some 93,000 seals were killed in Greenland. Overwhelmingly, this is a subsistence-based hunt in which the seal meat is used for consumption both by humans and by their dogs, which are required to pull dog sleds. In the areas dependent on hunting, fur pelts are the only possible tradeable goods. Given the requirement to purchase hunting equipment, such as ammunition and fuel for outboard motors, it is evident that the sale of seal pelts is just as vital for continued human survival as the seal meat consumed directly by humans. As Table 19.3 indicates, only the northern and eastern regions of Greenland depend entirely on hunting activity. These regions have a total population of some 8,770 inhabitants. In the rest of Greenland hunting is a supplementary activity which, although important, is not the centre of continued existence:

> *Approximately 700 to 800 people are actively engaged in the traditional Greenland industries of sealing and other forms of hunting. It has been estimated that these activities provide a livelihood for approximately 2,500 people and represent the economic basis of about one quarter of the total population. Sealing and hunting are carried out all over Greenland but are of greatest importance to the people of eastern and northern Greenland (Denmark, 1983, p. 8).*

Table 19.3
The Sealing Industry in Greenland

District	Population 1 Jan. 1983	Economic Base	Average Seal Catch 1964–1966
Thule	795	hunting only	4,500
Scorebysund	509	hunting only	4,600
Ammassalik	2,754	mainly hunting	8,300
Upernavik & Uummannaq	4,713	mainly hunting	35,000
Central West Disko Bay area	11,869	fishing, hunting	21,600
South West Sisimiut[a] to Paamiut[b]	21,742	coastal fishery	3,500
South Narsaq, Qagortoq[c], Nanortalik	8,192	fishing, sheep farming	2,600
Nomads and others	1,329	–	–
Total	51,903		80,100

Source: Greenland (1983, Table 3, p. 134); Kapel and Petersen (1982).

a. Formerly Holsteinsborg.
b. Formerly Frederikshåb.
c. Formerly Julianehåb.

The actual catches of seals in Greenland have fluctuated considerably in recent years. Approximately one-third of the Greenland seal catch does not enter international commerce but the Royal Greenland Trading Company, in recent years, has bought about 60,000 skins annually from aboriginal hunters. In the current state of international markets, the economic value of sealskins in the Greenland economy is set entirely according to the willingness of Danish authorities to subsidize the acquisition and stockpiling of seal pelts. The estimated cost of subsidizing the purchase of

seal pelts, as already mentioned, is some 11 million Dkr, or 200 Dkr per skin. Relative to the cost of attempting to establish other industries in northern Greenland or the cost in social services to support Inuit communities dependent on the seal hunt, it can be argued that the subsidization of seal-pelt purchases makes considerable economic sense. (See Table 19.4.)

Table 19.4
Cash Returns to Greenland Sealers, 1976–1983

Year	Sales [a] (Dkr '000)				Percent Variation (in real terms)[d]
	Sealskins[b]	Meat & Blubber	Total		
			Current	Deflated[c]	
1976	9,550	379	9,929	5,739	
1977	7,913	478	8,391	4,537	–21
1978	8,342	560	8,902	4,385	–3
1979	10,051	621	10,672	4,587	+5
1980	9,276	1,061	10,337	4,219	–8
1981	7,797	1,206	9,033	3,238	–23
1982	8,723	773	9,496	2,986	–8
1983	8,454	1,022	9,476	2,654	–11
Average, 1976–1983	8,860	936	9,796	–	–
Cdn. $ '000 (1983)	1,053	127	1,180		

Sources: Denmark, Ministry for Greenland and Royal Greenland Trade Department (RGTD), as reported by Market and Industry Analysts (1986).

a. Purchases by RGTD and private traders.
b. Receipts include bonus.
c. Values deflated by Consumer Price Index (1971 = 100).
d. Change from previous year.

While the seal harvest in Greenland has suffered from the adverse publicity generated by the "whitecoat" hunt in Canada, the decline of the Canadian seal industry can be expected to have a favourable effect on the size of the Greenland seal harvest. Harp seals are a migratory species and frequent Greenland waters. Kapel (1985, p.12) has noted the historic data on the interdependency between Newfoundland and Greenland seal catches:

> *Just before World War II the catch of harp seals at Newfoundland was at the level 100,000–200,000 annually, or somewhat less than in the first decades of the 20th century . . . During the war catches almost ceased at Newfoundland. At the same time the catch of harp seal in Greenland reached a high level. Just after the war the catch of harp seal at Newfoundland increased to a very high level in the 1950s and 1960s (about 250,000–350,000). During that period catches in Greenland were reduced to about one third of their previous level. Since 1972 catches of harp seals at Newfoundland have been reduced by quota regulation to a level of 125,000–175,000 per year, and since the early 1970s catches in Greenland have increased markedly . . . In conclusion the indications of long-term relations between the catches at the breeding and molting patches and the catch levels for harp and hooded seals in Greenland appear evident.*

As long as the Danish authorities are willing to provide a cash market for seal pelts, there is no reason why the Greenland seal harvest should be expected to decline. Indeed, given the increased availability of harp seals that can be expected as a consequence of the decline of the Canadian sealing industry, the number of seal pelts offered for sale may be expected to increase. The further increase in the Greenland seal harvest can be expected to be rather modest, however, since the hunt for seals in Greenland is based primarily on the food needs of specific communities. Kapel and Petersen (1982) argue convincingly that the traditional hunting communities of Greenland hunt only enough of the prey species to satisfy their own subsistence needs. Since skins are generated as a by-product of the subsistence hunt for meat, one would expect only a gradual increase in the supply of skins as the food needs of the local population in northern and eastern Greenland increase.

The marketing problems faced by the Royal Greenland Trading Company are very likely to persist. The Greenland Home Rule Authority assumed full control of fisheries, including sealing, in January 1985, and since that time has been financially responsible for subsidizing sealing.

Conclusions

Much of the Canadian discussion of the domestic sealing industry has focused on the impact of the decline in sealing on the incomes and employment prospects of the sealers of Newfoundland, Labrador, the Quebec north shore and the Magdalen Islands. Given the very high unemployment rates of this region (29.5% in March 1985) and the lack of other options to earn income during the sealing season, this is an understandable focus. But the chief lessons of the experience of other sealing nations is that there may be other, and very strong, reasons to support the continuance of sealing.

In Greenland, the prime consideration in policy making has been to maintain a market for sealskins in order to protect the traditional way of life of outlying Inuit communities. The costs, in financial terms, of such a policy are small, whereas the costs, in social terms, of simply allowing the hunting economy of traditional Inuit communities to collapse would be very severe for the people affected.

In Norway, finding alternative employment for ex-sealers has simply not been a problem. The Norwegian sealing industry has contracted dramatically in the last 20 years, but for much of that period the national unemployment rate was less than 1%. Norwegian authorities have, nonetheless, decided to maintain by subsidy a core capacity in the industry, because of their concern for the possible long-term consequences for the fisheries of an increase in the harp seal population. Fishing is of special importance for the more isolated and marginal northern regions of Norway, where there are very few other employment opportunities. The concern in Norway has not been the past and present loss of a relatively small number of sealing jobs; rather, it is the potential future loss of many thousands of jobs in the fishing, fish-processing and supplier industries.

Maintaining a core capacity in the Norwegian sealing industry can be seen as a form of insurance against the possibility that future events will show a clear and direct link between expanding seal populations and declining fish catches. At this point in time, the scientific evidence is not strong enough to say with reasonable certainty that such a link definitely

exists. However, in the social and political context of Norway, a widespread popular consensus exists in favour of the maintenance of the sealing industry.

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Chapter 6

1. Harbour seal.
   F. Bruemmer.

2. Northern fur seals.
   F. Bruemmer.

Chapter 7

1. Send-off of the sealing fleet.
   Provincial Archives of Newfoundland and Labrador.

2. Discharging seals from *SS Eagle*.
   Provincial Archives of Newfoundland and Labrador.

Chapter 13

1. Igloo at night (circa 1960).
   SSC – Photo Centre Library – ASC.

2. Conditioning sealskin by chewing it (1951).
   W. Doucette / Public Archives of Canada / PA-145968.

3. Seal hunter and sled.
   SSC – Photo Centre Library – ASC.

4. Naalak Nappaaluk (seal hunter) with Charlie Arngak.
   Makivik Corporation.

5. Inuit hunting camp (circa 1940).
   Public Archives of Canada / PA-42047.

6. Inuit hunter and catch.
   Arctic Biological Station, Ste-Anne-de-Bellevue.

7. Cleaning sealskins.
   SSC – Photo Centre Library – ASC.

Chapter 14

1. Sealing vessel near the Front.
   Public Archives of Canada / PA 128771.

2. Deblubbering sealskins, St. John's (circa 1920).
   Provincial Archives of Newfoundland and Labrador.

Chapter 15

1. Discharging sealskins, St. John's.
   Atlantic Guardian / Public Archives of Canada /PA 145967.

2. Crew's quarters on sealing vessel.
   Provincial Archives of Newfoundland and Labrador.

3. "Copying" at the Front.
   R. Greendale.

4. Landsman sealer, Magdalen Islands.
   F. Plante.

Chapter 17

1. Seal watching.
   Atlantic Marine Wildlife Tours / E. Lewis.