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 prospects¹.

\$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)

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:

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 antisealing 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
1985a	46,368	41,291	87,659

Source: European Statistical Office (Eurostat), as reported by Market and Industry Analysts (MIA, 1986).

The Council of the European Community in Council Directive 83/129 EEC prohibited the import into the Community of:

a. First 10 months.

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 reexports 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

		Annual					
Origin	1975	1979	1980	1981	1982	1983	Average 1979-198
Intra EC	47,811	33,074	18,590	9,294	12,257	2,563	15,155
Extra ECa	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	_	_	_	_	_	_
Totalb	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

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

		Annual					
Origin	1975	1979	1980	1981	1982	1983	Average 1979–1983
Intra EC	34,517	29,581	41,736	75,247	90,219	205,188	88,394
Extra ECa	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	

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						
	1975	1979	1980	1981	1982	1983	Average 1979–198	
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	

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
Greecea	38,389

Source: European Statistical Office (Eurostat), as reported by MIA (1986).

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		1985a			
	Pupsb (no.)	Other (no.)	Total (no.)	Pupsb (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 (Expo	rts)						
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	

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-

a. January-October inclusive.

b. Harp and hooded seals.

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

		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 seal-skin 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

		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						
	1979	1980	1981	1982	1983	Average		
Imports			· · · · <u> </u>			-		
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		

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					
	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	

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 antisealing 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 nonbulky 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	1984ª
Number of Skins	24,748	34,488	9,517	11,350

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

		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

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 antisealing 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 antisealing 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 seal-skin 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			Species	Type of	•			Averag	ge Price Per	Skin		
Catch	Seller	Buyer	of Seal	Skina	Currency	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	Harpb	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	Ringedc	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

	Species	Type			Price l	ndex 19	80 - 100		
Area of Catch	of Seal	of Skin ^d	1975	1979	1980	1981	1982	1983	1984
Eastern Arctica	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	Harpe	Raw	77	82	100	93	93	46	42
West Icea	Harp/ Hooded	Raw	111	91	100	93	123	114	59
East Icea	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	100e	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 East Ice Norwegian Sealing	. 6 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	<u>-</u>	
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		<u>-</u>

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.

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								
catcha	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 reexport. 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)	(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						
Sourceb											
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).

Table 16.18

Norwegian Exports of Sealskins and Main Destinations, 1976–1984

				(Nkr '00())			
	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).

a. Data for 1984 not available.

b. Because of incomplete source list, figures do not add to the total.

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 Productiona	•					
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 Fisharlag (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

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Species

Ringed

ı	1983	67,182	19,153	5,485	918	56	92,974
	1982	71,491	17,561	6,449	888	64	96,453
	1981	76,989	14,081	6,197	. 658	37	97,962
	1980	74,543	12,623	6,416	869	4	94,324
83	1979	97,326	12,963	5,916	784	88	117,027
Table 16.21 Catches of Seals in Greenland, 1971–1983	1978	90,528	10,978	6,404	619	37	108,626
.21 enland,	1977	81,168	10,031	5,978	642	28	97,877
Table 16.21 s in Green	1976	71,882	8,074	5,048	864	83	85,951
T of Seals	1975	72,793	6,146	4,764	685	72	84,460
atches	1974	74,051	7,244	4,019	616	89	85,998
Ü	1973	77,775	9,300	3,331	661	49	91,116
İ	1972	67,714	6,036	4,208	707	71	78,736
	1971	64,534	5,608	2,378	707	92	73,319

Source: Ministry for Greenland, Denmark, as reported by MIA (1986).

Total Number

Harbour

Bearded

Hooded

Harp

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
<u>Value</u> (<u>Dkr'000)</u>														
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
Fotal	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
F otal	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

			Nu	mber of S	kins		
Species/Age	1974	1979	1980	1981	1982	1983	1984 35,260 4,729 691 1,181 41,861
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

		_	(Dk	r 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).

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

a. Usually two auctions per year for ringed seal, one for other species.

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 States²

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.

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, 1980–1985a

	•		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) Hooded seal (quota)	4,000 3,300	4,000 3,300	4,000 3,300	4,500 3,300	4,500 3,300	4,500 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	45,969a

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

				Number	of Skins			Annual
Source of Skins	1975	1979	1980	1981	1982	1983	1984	Average 1979-1983
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

			Number	of Skins		
Source 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	99 471	-	-
juvenile	აა,ა 62	36,351	11,701	33,471	01.407	10.054
adult	13,237	8,938	18,432	17,915	21,407	10,854
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

		Number of Skins					
Source 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-totala	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-totala	28,487	15,456	17,105	17,825	86	582	
Greenland ^b							
Sub-total	2,721	2,383	2,461	1,319	-	1,181	
Fotal	38,027	25,248	27,875	24,975	214	2,207	

Source: Modified from Market and Industry Analysts (1986).

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

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.

\$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 RGTDb	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).

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.

a. Based on assumption that 85% of skins purchased are from ringed seals.

b. Purchases average two-thirds of the annual harvest.

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

			Numb	er of Skins	3		
Source	1975	1979	1980	1981	1982	1983	1984
South Africa/							
Namibia	75,731	75,470	66,521	68,605	91,425	45,969ª	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).

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

a. Namibia only.

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	<u> </u>	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	1984a
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 West	16,473	22,748	19,565	15,817	1,025	-
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).

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-

a. First 11 months

b. Figures do not add to the total due to incomplete data.

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, 1979–1984a

Destination	1979	1980	1981	1982	1983	1984
Quantity (cwt)						
United States Norway	31,195 57,087	30,211 12,532	51,326	40,443 780	39,694 4,265	47,454
Netherlands Other	- -	11,116 8,000	- 35,444	28,069 834	8,751 -	15,400
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).

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-

a. Excluding cod-liver, herring and whale oil.

tionist groups. The Spillers spokesman said that even though the anti-sealing campaign was directed principally against the culling of pups, "the petowning 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

	Number of Skins						
Source	1979	1980	1981	1982	1983	1984	Average 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 availabilitya	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 reimporting 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	30,000a
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	30,000ª

- 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	EC ban on imports of whitecoats and bluebacks, and	Imports 6,000 skins per year	Domestic (U.S.S.R.) source of supply exists
Marine Mammal Protection Act of	generally negative market	Local supply 1,500	Potential unknown
1972	No immediate	No growth expected	
	prospects for revival	Hong Kong	
	Subsidies by Norway and Denmark support a price of \$10	Extremely limited use of sealskins	
	per skin which is too low to attract Canadian hunters	Local fur industry sees little potential for sealskin products	
		Market being explored by Canadian Sealers Association	
		<u>China</u>	
		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	2,000-3,000 skins per year	Demand unknown	5,000-7,000 skins per year
skins per year, high quality, alum tanned, imported from Norway	Uses lower-quality skins	Uses lower-quality skins	Uses lower-quality skins
Potential: with great mar- keting effort, additional demand of 2,000-4,000 skins		Potential appears limited by competition from imports of goat skins, etc.	
Some potential for sports-type garments and possibly hats and vests for police/armed forces, but no firm estimate of demand			
Meat	Animal Food	Oil	
Demand probably limited mainly to Newfoundland	Nutrition and taste acceptable	Export market only	
Currently only 1 processor	No current market	Must compete with producers in Europe	
operates	Possible potential for use by fur- ranching industry in Atlantic	Price currently too	
Potential is limited without considerable development effort	Canada (needs to be explored)	low to justify hunt	
Meat price probably not high enough to sustain sealer interest			
Sealers' own consumption and dockside sales may sustain some demand			

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	No whitecoats	No whitecoats	No whitecoats	
±50,000 1 1.	Mainly beaters	No age-profile	No age-profile	
±50,000, depending on age profile	Use of large vessels	constraint	constraints	
on age protile	and Carino processing plant necessary	Longliner/landsmen could supply ^a	Longliner/landsmen could easily supply	
	•	But, annual	No processing plant	
	<u>But,</u> large vessels unlikely to be	longliner/landsmen harvest ranged from	exists for this level of harvest, but feasibility	
	interested without whitecoats (animals too scattered)	30,000 to 50,000, so stability of supply may be an issue	study for primary processing plants in Fleur de Lys suggests	
	wo scattered)	may be an issue	this harvest level is	
		Maintaining inven-	feasible	
		tory of pelts as balancing mecha-		
		nism would make		
		this harvest level		
		commercially feasible		
		But, no economic		
		processing facilities		
		exist to handle this		
		quantity of animals		

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.

References

- Barzdo, J. 1980. International trade in harp and hooded seals. Fauna and Flora Preservation Soc. and Int. Fund Anim. Welf.
- Boles, B., L. Jackson and M.G.A. Mackey. 1983. Breaking the ice: seal and seal harvesting patterns and benefits in relation to navigational ice breaking in Lake Melville, Labrador. Rep. by Labrador Inst. North. Studies, Memorial Univ. Newfoundland, for Dept. Development Newfoundland Labrador and Dept. Regional Economic Expansion. Goose Bay, Labrador.
- Canadian Sealers Association, 1985. Brief to the Royal Commission on Seals and the Sealing Industry in Canada. St John's.
- Cascinari, R. 1985. Associazione Manufatturieri Pelli-Cuoio e Succedanei (Italian Leather Association). Personal communication with P. Davies, Market and Industry Analysts, Brussels.
- Convention on the International Trade in Endangered Species. 1978–1982. Import and Export Statistics of Cape Fur Seals.
- Denmark. 1971-83. Hunting Statistics. Based on Greenlander's list of game caught in Greenland. Ministry for Greenland, Copenhagen.
- Descottes, H. 1985. President of André Lux Inc. Personal communication with M. Guam, Market and Industry Analysts, Brussels.
- Dixon, A.M. 1984. The European trade in sealskins. IUCN Wildlife Trade Monitoring Unit. Cambridge. Traffic Bulletin 6(3/4): 54-65.
- Dwan, H. 1985. Managing director of Hudson's Bay and Annings Limited. Personal communication with P. Davies, Market and Industry Analysts.

- Econotech. 1983. Usine de traitement des peaux de phoques aux Îles-de-la-Madeleine. Prepared for the Minister of Regional Economic Expansion. Econotech Limited, Montreal.
- European Communities. 1983. Council Directive of 28 March 1983 concerning the importation into Member States of skins of certain seal pups and products derived therefrom.

 Official Journal of the European Communities. L 91/30.
- George, R.E. 1986. Economic benefit-cost study of the seal hunt off Canada's east coast.

 Technical Report 9, Royal Commission on Seals and the Sealing Industry in Canada.

 Deposited with DFO Headquarters Library, Ottawa.
- Heid, M. 1985. Shoe industry spokesman. German Shoe Manufacturers' Association. Personal communication with M. Guam, Market and Industry Analysts, Brussels.
- Hill, R.H. 1983. The meaning of work and the reality of unemployment in the Newfoundland context. Community Services Council of Newfoundland, St. John's.
- Hill, R.H. 1986. The social and cultural impacts of the seal utilization process in Newfoundland.

 Technical Report 19, Royal Commission on Seals and the Sealing Industry in Canada.

 Deposited with DFO Headquarters Library, Ottawa.
- King, J.M. 1981. An evaluation of Canada's east coast sealing industry: the 1980 experience.

 Research paper submitted for Degree of Bachelor of Applied Arts (Geography). Ryerson Polytechnical Institute, Toronto.
- King, W., and T. Burke. 1985. Preliminary report on the potential utilization of seal meat in process products. College of Fisheries, St. John's.
- Kurshneiverband. 1985. Kurshneiverband Furriers Association, Germany. Personnal communication with D. Knols, Market and Industry Analysts, Brussels.
- Levitan, S. 1985. S. Levitan Fur Dealers. Personal communication with P. Davies, Market and Industry Analysts, Brussels.
- Market and Industry Analysts. 1986. A study of the world market opportunities for Canadian sealing products. Technical Report 12, Royal Commission on Seals and the Sealing Industry in Canada. Deposited with DFO Headquarters Library, Ottawa.
- Mitchell, L. 1985. Meat purchaser for Pedigree Petfood Limited. Personal communication with M. Guam, Market and Industry Analysts, Brussels.

- NewLantic Group. 1984. Report of the possibility of establishing seal processing facilities at Fleur-de-Lys, Newfoundland.
- Plant, T. 1985. Research and Development Manager, Spiller Foods Limited. Personal communication with M. Guam, Market and Industry Analysts, Brussels.
- Rieber, C. 1985. Managing director, G.C. Rieber and Company. Personal communication with P. Davies, Market and Industry Analysts, Brussels.
- Research Associates. 1985. LEAD, sealskin craft study, processing, production and market review. Draft II. Prepared for the Canadian Sealers Association, St. John's.
- Research Dimensions. 1985. A quantitative report on attitudes among Canadians toward the seal hunt, Phase II. Prepared for the Canadian Sealers Association.
- Richard, A. 1985. Assistant to the President, Fédération nationale de la fourrure. Personal communication with M. Guam, Market and Industry Analysts, Brussels.
- Sharp, I. 1985. Editor of the fur trade journal: Fur Review. Personal communication with P. Davies, Market and Industry Analysts.
- Small, H. 1985. Baie Verte Peninsula Economic Development Council. Personal communication with Gardner Pinfold Consulting Economists Ltd., Halifax.
- Stormo, B. 1983. [Utilization of seal meat and seal offal.] Published by Fiskeriteknologisk Forskningsinstitutt, Tromsø. (Translation from Norwegian, Fish. Aquatic Sci. 5094, 1984.) Tromsø. Norway.
- United States. 1983. Draft environmental impact statement on the Interim Convention on Conservation of North Pacific Fur Seals. Dept. of Commerce, and Dept. of State, Washington, D.C.
- United States. 1985. Environmental impact statement on the Interim Convention on Conservation of North Pacific Fur Seals. Dept. of Commerce, and Dept. of State, Washington, D.C.
- Watson, W.G. 1985. Accommodating conflicting interest: the economics of sealing. Brief to the Royal Commission on Seals and the Sealing Industry in Canada. Montreal.

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

	Licensed Sealers	Licensed Sealing Vessels			al Landin		
Areaa	1984	(35'-65')	1980	1981	1982	1983	1984
A	1,656	35	27,806	33,861	21,493	22,679	11,791
В	1,991	42	22,610	20,931	21,146	15,781	5,187
C	872	4	1,302	1,239	1,174	835	844
Dр	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
Н	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
Oc	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, 1983a

Area	\$ million Area Major Species												
	Cod	Flounders	Turbot	Redfish	Capelin	Herring	Mackerel	Lobster	Crab	Shrimp	Scallop	Other	Total
A	6.0	0.1	1.5	.0	0.1	0	0.6	Ø	2.3	2.5	_	0.6	13.7
В	10.6	_	1.4	0	0.6	0.1	0.2	2.6	2.4	-	-	0.8	18.7
C	4.3	0	0.5	0.1	0.5	Ø	0.1	0.8	1.4	-	_	0.6	8.3
D	-11.1	3.3	1.2	Ø .	1.8	Ø	0.6	0.1	0.2	_	Ø	0.7	19.0
E	4.0	0.2	0	-	2.2	Ø	0.1	0.2	1.5	-	_	0.2	8.4
F	7.8	0.2	0.5	1.0	· Ø	· - ·	Ø	Ø	2.3	-	Ø	0.1	11.9
G	4.4	2.2	Ø	Ø	0.1	· .Ø	Ø	0.1	0.4	-	· -	0.2	7.4
H	12.9	4.3	0	0.2	Ø	ø	0	1.4	_	_	0.1	0.4	19.2
I	6.0	1.4	Ø	0.6	_	Ø	0	1.4	Ø.		Ø	0.2	9.6
J	12.6	1.4	0.1	1.3	_	0	Ø	. 0.4	_	-	_	0.8	16.6
K	1.1	0.1	· -	Ø	-	0.2	0	0.8	_	_	Ø	0.2	2.2
L	1.1	0.1	· - ·	0	0.3	1.0	0.1	1.1	_	- '	0.2	0.1	4.0
M	3.1	0.2	Ø	Ø ·	Ø	0.2	Ø	1.6	_	1.2		0.2	6.5
N	8.9	Ø	Ø	Ø		0.5	. 0	1.2	_	1.1	0.3	0.2	12.2
0	6.4		Ø		Ø	0	-	-	-	· -	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)

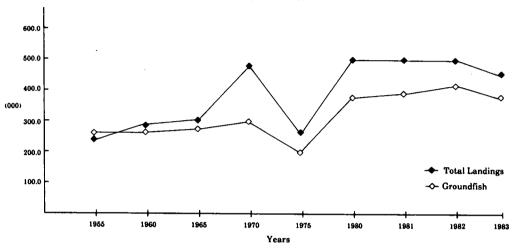
	Quantity (000 t)		Value/t	tonne (\$)	Value (\$	000,000)
Year	Ground- fish spp.	Other Species	Ground- fish spp.	Other Species	Ground- fish spp.	Other Species
1955	251	40	43.0	80.0	10.8	3.2
1960	265	21	47.9	142.9	12.7	3.0
1965	275	29	68.7	148.3	18.9	4.3
1970a	307	168	84.4	53.0	25.9	8.9
1975	194	63	165.0	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

		R	egistered	Fisherm	ien						
Coastal Areaa	Full-	time	Part	-time	То	tal					
	(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

	Nt Re				
Coastal Areaa	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

Programme Brown Style Committee

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 Communities²

	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 rateb (%)	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 Trade	20 45	5 25	10 5	15 10	10 15
Finance, insurance and realty	10	5	0	· 0	5
Community businessa Public admin. and	110	60	15	25	40
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
Alloccupations	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 Clerical Sales Services Primary occupations	20 30 15 55 70	5 10 5 15 40	0 10 5 5 25	5 10 10 5 35	10 15 10 15 35
Processing	60	20	0	45	15
Machining Construction	5 30	5 10	0 10	0 5	0 5
Transport occupations Other	5 25	0 20	5 10	5 15	5 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, 1979a

	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).

 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 snow-mobiles 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

		Northern Peninsula	
(no.)	(%)	(no.)	(%)
17,675	100.0	10,640	100.0
4,450	25.2	2,265	21.3
2,875	16.3	2,780	26.1
1,345	7.6	620	5.8
1,105	6.3	620	5.8
2,795	15.8	1,305	12.3
245	1.4	115	1.1
4,095	23.2	2,375	22.3
775	4.4	550	5.2
525	-	355	-
	Coa (no.) 17,675 4,450 2,875 1,345 1,105 2,795 245 4,095 775	17,675 100.0 4,450 25.2 2,875 16.3 1,345 7.6 1,105 6.3 2,795 15.8 245 1.4 4,095 23.2 775 4.4	Coast Pening (no.) (%) (no.) 17,675 100.0 10,640 4,450 25.2 2,265 2,875 16.3 2,780 1,345 7.6 620 1,105 6.3 620 2,795 15.8 1,305 245 1.4 115 4,095 23.2 2,375 775 4.4 550

Source: 1981 Census of Canada.

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,

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.

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

	Northe	rn Peninsula	Northeast Coast		
SICa Industry	Firms	Employees ^b	Firms	Employeesb	
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

	C	entral	Bonavista		
SICa Industry	Firms	Employeesb	Firms	Employees	
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	100.0	
All industries	1,710		
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 incomegenerating 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 long-liners 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 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
West coast northern peninsula	limited fish harvesting opportunities; peak-time problems at fish plants	
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;	opportunity for improving transporta- tion system for "salt bulk" cod
	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	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 crabprocessing 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 syntheticmaterial 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 antisealing 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 antisealing 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 incomegenerating 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 longerrange 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: cooperatives, 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.

References

- Aiken, D.E. 1984. Aquaculture in Atlantic Canada. Proceedings of the National Aquaculture Conference: Strategies for aquaculture development in Canada. DFO, Ottawa.
- Boudreau, G. 1985. Department of Fisheries and Oceans, Magdalen Islands. Personal communication with Gardner Pinfold Consulting Economists Limited.

Alternatives to the Sealing Industry

- Canada. Dept. of Fisheries and Oceans (DFO). 1980. Fishing fleet composition statistics. St. John's.
- Canada. Dept. of Fisheries and Oceans (DFO). 1983. Regional profiles of the area north of 50 degree latitude in Newfoundland and Labrador. DFO, Economics Branch, Newfoundland Region.
- Canada. Task Force on the Atlantic Fisheries. 1983. Navigating troubled waters. Minister of Supply and Services Canada, Ottawa.
- Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC). 1985. Advice on the management of snowcrab fisheries in the estuary and north shore of the Gulf of St. Lawrence. CAFSAC Advisory Doc. 85/1.
- Canadian Sealers Association. 1985. Brief to the Royal Commission on Seals and the Sealing Industry in Canada. St. John's.
- Carey, T. 1985. Department of Fisheries and Oceans. Personal communication with Gardner Pinfold Consulting Economists Limited, 12 April 1985.
- Caron, D. 1985. Department of Fisheries and Oceans, Quebec Region. Personal communication with Gardner Pinfold Consulting Economists Limited.
- Chambre de Commerce des Îles-de-la-Madeleine. 1985. Brief to the Royal Commission on Seals and the Sealing Industry in Canada. Cap aux Meules, Que.
- Economic Council of Canada. 1980. Newfoundland: from dependence to self-reliance.

 Ottawa.
- Fuchs, R.P. 1985. Half a loaf is better than none: the Newfoundland rural development movement's adaptation to the crisis of seasonal unemployment. Paper presented to the Second Conference on Provincial Social Welfare Policy, University of Calgary.
- Gardner Pinfold Consulting Economists Limited. 1986. Alternative employment options for those dependent, directly or indirectly, on sealing and the seal industry in Atlantic Canada. Technical Report 13, Royal Commission on Seals and the Sealing Industry in Canada. Deposited with DFO Headquarters Library, Ottawa.
- Hill, R.H. 1983. The meaning of work and the reality of unemployment in the Newfoundland context. Community Services Council of Newfoundland, St. John's.
- Jackson, E.T. 1984. Community economic self-help and small-scale fisheries. DFO, Ottawa.

Alternatives to the Sealing Industry

- King, J.M. 1981. An evaluation of Canada's east coast sealing industry: the 1980 experience.

 Research paper submitted for Degree of Bachelor of Applied Arts (Geography).

 Ryerson Politechnical Institute, Toronto.
- Lewis, J.E. 1985a. Testimony before the Royal Commission on Seals and the Sealing Industry in Canada, 21 May, St. John's, Vol. 1, p. 159-192.
- Lewis, J.E. 1985b. Benefits of seal tourism to Canada. Brief to the Royal Commission on Seals and the Sealing Industry in Canada. On behalf of Atlantic Marine Wildlife Tours Ltd., Fredericton.
- Matthews, R. 1983. The creation of regional dependency. University of Toronto Press,
 Toronto.
- McAllister, I. 1966. Newfoundland and Labrador: the first fifteen years of Confederation.

 Dicks, St. John's.
- Newfoundland. Royal Commission on the Economic State and Prospects of Newfoundland and Labrador. 1968. Report. Queen's Printer, St. John's.
- Newfoundland and Labrador. Dept. of Development. 1984. Directory of manufacturers, 1983. St. John's.
- Osberg, L. 1986. Policies for adjusting to a decline of the sealing industry: the Norwegian experience. Technical Report 8, Royal Commission on Seals and the Sealing Industry in Canada. Deposited with DFO Headquarters Library, Ottawa.
- Ridler, N.B. 1984. A preliminary economic evaluation of salmon aquaculture in the Maritimes. University of New Brunswick, Fredericton.
- Saxby, D.J. 1984. Aquaculture a monetary black hole? Economic perspectives. Proceedings of the National Aquaculture Conference: Strategies for aquaculture development in Canada. DFO, Ottawa.
- Science Council of Canada. 1985. Aquaculture: an opportunity for Canadians. Ottawa.
- Usher, P.J. 1982. Renewable resources in the future of Northern Labrador. Report to the Labrador Inuit Association.
- Vardy, D. 1985. Newfoundland College of Fisheries, President. Personal communication with Gardner Pinfold Consulting Economists Limited.

Alternatives to the Sealing Industry

- Watson, W.G. 1985. Accommodating conflicting interests: the economics of sealing.

 Brief to the Royal Commission on Seals and the Sealing Industry in Canada.

 On behalf of the International Fund for Animal Welfare, Montreal.
- Weber, F. 1985. Personal communication with Gardner Pinfold Consulting Economists Limited, 6 May 1985.
- Williamson, H.A. 1986. Sealing in Labrador. Technical Report 20, Royal Commission on Seals and the Sealing Industry in Canada. Deposited with DFO Headquarters Library, Ottawa.

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	*	ś.	*	
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 snow-mobiles 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

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 \$7,50,000 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 reinvested 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 seal-skins, 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.