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ANNEX I

THE EVOLUTION OF SCIENTIFIC DATA CONCERNING THE CONSERVATION STATUS OF POPULATIONS OF HARP AND HOODED SEALS

A Report prepared for the
Directorate-General for Environment,
Consumer Protection and Nuclear Safety
of the Commission of the European Communities

by

John Harwood
Sea Mammal Research Unit
Natural Environment Research Council
UK

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SUMMARY

This report provides a summary of information which has become available since the beginning of 1985 on the status of stocks of harp and hooded seals in the North Atlantic. This information comes from papers in the general scientific literature and those submitted to appropriate working groups of the Northwest Atlantic Fisheries Organization, the International Council for the Exploration of the Sea, and the Norwegian-Soviet Sealing Commission.

Since the implementation of the European Parliament's resolution concerning the importation of products from young seals in 1982, catches of harp and hooded seals in the Northwest Atlantic and at Jan Mayen (the West Ice) have declined dramatically. However, catches from both stocks increased substantially in 1987. There has been no major change in catches from the White Sea (East Ice) stock of harp seals.

Recent analyses suggest that the world population of harp seals is between two and three million individuals. It is possible that the Northwest Altantic stock is increasing under the current, reduced catches but the available evidence for this is not yet conclusive. The status of the Jan Mayen stock is unclear. There is some evidence that the White Sea stock was increasing, although the published information on this is very limited, but the stock now appears to be stable or possibly decreasing.

Estimates of the abundance of hooded seals are less reliable than those for harp seals. However, recent aerial surveys of the breeding concentrations in the Davis Strait and off of Newfoundland indicate that a significant proportion of the Northwest Atlantic stock is usually not available to commercial sealers because of the remoteness of the breeding areas and the very short period that pups are on the ice.

Most of the commercial catch of harp seals in the Northwest Atlantic and at Jan Mayen is made up of beaters (animals less than one year old who have been left by their mothers). Most of these animals are shot. As a result the proportion of animals which are not killed immediately or which escape from the hunt with serious wounds has increased substantially.

1. INTRODUCTION

This report provides a review of scientific information which has become available since January 1985 on the population biology of the harp seal (Phoca groenlandica) and the hooded seal (Cistophora crystata) in the North Atlantic.

1.1 Structure of report

The next two chapters are devoted to the harp seal and the hooded seal respectively. Each chapter provides information on basic biology, historical catches, detailed information on catches since 1971, current information on stock size and status, the effects of the reduction in the kill of pups since 1982, and implications for future management. A final chapter is devoted to humanitarian and economic aspects of the hunts. I have no special expertise in these areas, and I have merely summarized the available information which appears to be relevant to the Community Directive.

1.2 Progress since 1985

There have been four major international meetings concerned with harp and hooded seals since the beginning of 1985. The ad hoc Working Group on Seals of NAFO (the Northwest Atlantic Fisheries Organization), which provides scientific advice on the management of stocks in the northwest Atlantic, met in Copenhagen in January 1985. At the request of the Norwegian government, ICES (the International Council for the Exploration of the Sea) established a Working Group on Harp and Hooded Seals in the Greenland Sea. This working group met in Copenhagen in September 1985. It was unable to carry out any detailed analysis because of a lack of essential data. However, as a result of the recommendations of the working group, the papers of the joint Norwegian-Soviet Sealing Commission have been translated into English and made available to the members of the working group. The ICES Working Group will meet again in October 1987. The Norwegian-Soviet Commission met in Leningrad in November 1985 and in Oslo in November 1986.

In August 1984 the government of Canada set up a Royal Commission on Seals and the Sealing Industry in Canada. One of the terms of reference of the Commission was to inquire into and report on "the status of Canadian stocks and measures currently in force in Canada to conserve, manage, protect and regulate the harvesting of seals". The Commission reviewed published information on these topics, conducted interviews with scientists working on them, and commissioned a number of specific studies. Its report was published in September 1986.

In addition, a number of papers on harp and hooded seals have appeared in scientific journals since 1985.

I have drawn upon all these documents in preparing this report.

2. CURRENT STATUS OF THE HARP SEAL

2.1. Biology

Harp seals are not particularly large animals: adults attain an average length of 169cm and weigh about 130kg; there is no obvious difference in size between the sexes.

2.1.1. Distribution

The species is restricted to the North Atlantic. During the summer and autumn months it is found along the ice edge in the eastern Canadian Arctic, along the west and east coasts of Greenland, and in the Barents and Kara Seas. During early winter, all adults and most juveniles move south to the breeding areas. Animals from Arctic Canada and Greenland breed in large aggregations in well-defined and relatively well-known areas, called "whelping patches", on drift ice along the east coast of Labrador, the north coast of Newfoundland and in the Gulf of St Lawrence. This group is referred to as the **Northwest Atlantic stock** and is further divided into a **Gulf herd** (those breeding in the Gulf of St Lawrence) and a **Front herd** (those breeding off of Newfoundland and Labrador). Seals from east Greenland and Spitzbergen (and probably some from west Greenland) breed around Jan Mayen and are referred to as the **Jan Mayen stock** or, more confusingly, as the **West Ice stock**. Seals from the Kara and Barents Sea breed on drift ice in the White Sea and are referred to as the **White Sea or East Ice stock**. On the basis of recoveries of tags attached to pups there appears to be little interchange of animals between the three stocks, but information necessary to calculate the probability that an animal which is tagged in one stock will be recovered elsewhere is not available. Without this information it is not possible to evaluate the degree of interchange between the stocks.

2.1.2. Birth, Moult and Nomenclature

Pups are born during a relatively short period in March. At birth they weigh approximately 10 kg, have a pure white coat and are known as "whitecoats". They are fed by their mothers for approximately 12 days, after which time the females leave their pups and move away from the breeding areas, first to feed intensively and then, in April and May, to moult. In the Northwest Atlantic the moulting areas are on drift ice along the north and east coast of Newfoundland. The deserted pups, now weighing around 35 kg, moult their white fur and are known as "ragged-jackets" for the period of the moult. Just before, or soon after, their moult is complete these pups, now about two and one half months old and known as "beaters", also move away from the breeding areas to areas where food is abundant, although they

may not begin feeding for up to six weeks. They take up to five years to attain the adult coat with its characteristic harp-shaped mark on the back. From their first birthday until they acquire this adult pelage they are known as "bedlamers". Animals with adult markings are referred to as "old harps" in the hunting statistics. After the moult, all animals move northwards to the summer feeding grounds.

2.2. Exploitation

2.2.1. Nature of Hunt

Harp seals have been hunted by man for thousands of years. Initially, exploitation was for meat, oil and skins for domestic use. Commercial exploitation, primarily for oil, began in the 18th century. Seals were either caught in nets or clubbed on the whelping patches. The extent of the hunt increased substantially with the development of ice-breaking vessels capable of penetrating close to these patches. In the 20th century the harvest of skins has been far more important than the yield of oil.

2.2.2. Methods of Killing

Until recently a variety of methods have been used to take harp seals. During the summer months most animals are shot, either in the water or when they are hauled out on ice, by native people in the Canadian Arctic and Greenland. Some animals are drowned in specially-set nets during the summer and as they move southwards to the breeding grounds. Whitecoats and ragged-jackets are usually rendered unconscious (or killed outright) by clubbing and then the major blood vessels are severed. However, each year in the White Sea about 24,000 ragged-jackets are transported from the ice to state farms. Once they are fully moulted they are apparently killed by injection of the muscle relaxant succinylcholine. Beaters, moulted bedlamers and old harps are usually shot, either in the water or when hauled out, from a range of about 30m.

2.2.3. History of Catches

Catches in the Northwest Atlantic were at the highest in the 19th century, reaching a maximum of 687,000 in 1831. During the rest of the century catches fluctuated widely but gradually declined. In this period most of the hunting was carried out by Newfoundlanders, with a few Scottish vessels joining in toward the end of the century. Norwegian vessels joined the hunt in the 1930's and dominated it from 1950 onwards. After the Second World War catches rose sharply to a maximum of 320,000 (including 246,000 pups) in 1951 and then declined to around 150,000 per year in the 1960's. Since 1971 the catch in the Gulf and at the Front has been regulated through a quota set initially

by the International Commission on Northwest Atlantic Fisheries (ICNAF) and later by its successor NAFO. In calculating this quota an allowance is made for the unregulated catch in Labrador, Arctic Canada and Greenland, although in most years the actual catch in these areas exceeded the allowance - sometimes by a wide margin. Until 1983 the bulk of the hunt was for whitecoats and was carried out from large icebreakers; most of the beaters, bedlamers and old harps were taken around Newfoundland by "landsmen", operating from small boats relatively close inshore, and by "longliners", using somewhat larger boats than the landsmen and operating over a wider area. Quotas, allowances and actual catches for the period 1971-85 are shown in Tables 2.1 and 2.2.

Seals on the West Ice (Jan Mayen) were hunted by a number of European nations in the late 18th and early 19th century. However by the late 19th century only the Norwegians were operating in this area, although they have been joined by Soviet vessels from 1958 to 1966 and since 1975. The maximum annual take was of 120,000 animals in the late 19th century. Norwegian catches averaged about 50,000 per year in the period 1860-85 and 25,000 per year in the period 1886-1900. Catches fell again to about 15,000 per year in the first 20 years of this century, and then rose to about 35,000 in the late 1930's. A joint Norwegian-Soviet sealing commission covering the exploitation of harp and hooded seals on the West and East Ice was established in 1958 and in 1971 the first quota, of 15,000 harp seals, was set Quotas and actual catches are shown in Table 2.2.

In the White Sea harp seals are taken by the USSR and Norway under a treaty agreement. The highest levels of exploitation occured at the beginning of the 20th century when up to 350,000 seals were taken in one year. Kills had declined to 50,000 by 1925 and during this period a ban on Norwegian ships entering the White Sea was introduced and quotas were established. Soviet quotas in the White Sea itself have been around 30-35,000 animals and Norway has been allowed to take between 14,000 and 18,000 animals (mostly bedlamers and old harps) as they move north out of the White Sea. The average catch for the period 1977-81 was 49,000. Reported catches and quotas are shown in Tables 2.3.

Year	Quota	Allocation	Catch
1971	245,000[1]	-[2]	231,000
1972	150,000[1]	-	130,000
1973	150,000[1]	-	124,000
1974	150,000[1]	-	147,000
1975	150,000[1]	-	174,000
1976	127,000[1]	-	165,000
1977	160,000	10,000	167,000[3]
1978	170,000	10,000	176,000
1979	170,000	10,000	178,000
1980	170,000	13,000	194,000
1981	168,000	13,800	219,000
1982	175,000	11,000[4]	191,000[5]
1983	175,000	11,000	78,000[5]
1984	175,000	11,000	31,000[6]
1985	175,000	11,000	18,000[7]
1986			25,000
1987			39,000

Table 2-1: Quotas, allocations and catches of harp seals in the Northwest Atlantic, to the nearest 1,000. Sources - NAFO official statistics, Report of the Canadian Royal Commission Table 30.3.

1. Includes an allocation of 30,000 for the landsmen's hunt (45,000 in 1971) which was essentially unregulated during this period.
2. No allowance made for catch in Labrador, Arctic Canada and Greenland.
3. Includes catches from Labrador, Greenland and Arctic Canada.
4. No specific allowance identified for Greenland.
5. Does not include catch in Labrador.
6. Catches for Labradors, Arctic Canada and Greenland not available.
7. Preliminary data from Newfoundland and Quebec only.

YEAR	ALLOCATION			CATCH
	NORWAY	USSR	SCIENTIFIC	
1972				15,200
1973				11,900
1974				14,700
1975				5,100
1976	15,000[1]	1,500		12,600
1977	15,000	2,000	500	17,100
1978	15,000	2,000	800	16,500
1979	16,000	2,500	1,000	15,300
1980	21,000[2]	4,000[3]	1,500	13,500
1981	21,000	4,000	1,000	15,500
1982	21,000	4,000	1,500	11,900
1983	14,000	4,500	1,000	7,800
1984	7,000[4]	4,500	500	2,000
1985	7,000[5]	4,500[5]	500	600
1986	7,000[5]	4,500[5]	500	4,800
1987	20,500	4,500[5]		11,400[6]

Table 2-2: Allocations and reported catches for harp seals on the West Ice (Jan Mayen), to the nearest 100. Source - reports of the Norwegian-Soviet Sealing Commission, Øritsland (pers. comm.).

1. Since 1974 seals have been pemitted to fill up incomplete pup quotas with 1+ animals taken after 10 April.
2. Includes 4,000 1+ animals.
3. Includes 1,000 1+ animals.
4. Opening date moved to 10 April, effectively preventing the taking of white coated pups.
5. Pups only.
6. Provisional figures, Soviet catch data not available.

YEAR	ALLOCATION		CATCH
	USSR	NORWAY	
1975	30,000	14,000	40,500
1976	30,000	14,000	42,700
1977	35,000	14,000	43,000
1978	34,000	16,000	31,500
1979	34,000	16,000	51,700[1]
1980	34,000	16,000	55,000[2]
1981	45,000	17,500	63,000[3]
1982	60,000?	17,500	76,000
1983	64,000	18,000	83,100
1984	65,000	18,000	74,000
1985	61,000	19,000	80,000
1986	61,000	19,000	80,100
1987	61,000	19,000	1,900[4]

Table 2-3: Allocations and catches of harp seals on the East Ice (White Sea), to the nearest 100. Source - Reports of the Norwegian-Soviet Sealing Commission, Øritsland (pers. comm.).

1. Includes 2,000 hides from seals caught in fishing nets in Norwegian waters, and 1,100 from seals caught in nets along the Murman coast. The total number of seals caught in this way was estimated to be 7-11,000.
2. Includes hides of 3,300 seals drowned in nets in Varangar.
3. Does not include 2,000 seals drowned in nets in eastern Finnmark and 250-300 seals killed by a Norwegian sealer but lost because they drifted inside Soviet territorial waters.
4. Norwegian catches only.

2.3. Population Size

It is difficult to estimate the size of a harp seal stock. Although most of the breeding animals congregate in large whelping patches where they can be counted from the air, these patches are moved substantial distances by wind and tide, and are therefore difficult to find. In addition weather conditions in March are often unsuitable for aerial surveys.

In recent years the number of pups born in the Northwest Atlantic and at Jan Mayen (the West Ice) has been estimated by attaching numbered tags to the hind flippers of large numbers of pups and counting the number of tags recovered by hunters. These analyses have provided estimates of around 500,000 for pup production in the Northwest Atlantic in 1978, 1979, 1980 and 1983 (Bowen and Sergeant 1983, 1985), implying a total population of around two million animals. Most of these estimates are based on recoveries made at least one year after tagging, to ensure that there has been adequate mixing of tagged and untagges animals before they are recaptured. However, Bowen and Sergeant rejected a low estimate for pup production in 1983, based on recaptures after one year, and chose to use a higher estimate based on recoveries made within one year of tagging. Cooke, Trites and Larkin (1985) have pointed out that this is not acceptable statistically; they believe that the 1983 estimate (of only 136,000 pups) should be included.

The basic mark-recapture analysis relies on a number of restrictive assumptions. Although Bowen and Sergeant made highly creditable attempts to test the validity of all of these assumptions and to determine the bias caused by any violations, nonetheless Cooke et al (1985) found a number of anomalies in Bowen and Sergeant's estimates. In addition, they found that the mark-recapture estimates fell outside the feasible range suggested by their own analysis of population trends as indicated by the age structure of the catch (see below). These findings led the Canadian Royal Commission to conclude that the tagging estimates were biased upwards (Vol 3, p110).

Similar methods, although based on far fewer tagged animals, have provided an estimate of 49,000 for pup production at the West Ice in 1977-78 (Øritsland pers. comm.) implying a total population of about 200,000. However, the West Ice estimate is based on a very small number of recoveries and is probably substantially less reliable than that for the northwest Atlantic stock.

Large scale tagging exercises were not conducted in the Northwest Atlantic before 1976 and estimates of pup production from these years are based on analyses of the numbers of animals of different ages in samples collected on the moulting grounds. The traditional method for

analysing these data, known as the Survival Index (Sergeant 1971, Winters 1978), is based on the fact that, until quotas were introduced in the 1970s, there was considerable variation in the number of pups killed each year and therefore the proportion of animals in particular year-classes also varied. In theory, this variation can be used to estimate the number of pups born in a particular period. In fact the method in its traditional formulation is unreliable, but recent modifications to the method (Cooke 1985, Ugland 1982) have a better theoretical basis. However, Cooke et al (1985) point out the even the modified method has problems and suggest instead a joint estimation of pup production and adult survival using long series of age structure data from the commercial catches.

The only published estimates for the East Ice (White Sea) stock are from 1962-65 based on the old version of the Survival Index. These have been extrapolated forward (Benjaminsen 1979) using the known catches and the results of some aerial surveys of moulting groups to provide an estimate that pup production in 1978 was around 200,000, implying a total population of around 800,000. Recent reports of the Norwegian-Soviet Sealing Commission refer to Norwegian estimates of a stock size of 1,200,000 animals but it is not clear how these have been obtained.

2.4. Population Status

For the Northwest Atlantic stock the ICES Working Group (ICES 1982), and reports of recent meetings of the NAFO Seals Group (NAFO 1983, NAFO 1985) have concluded that the stock probably increased from the mid-1960s to the mid 1970s, although the possibility of a decline could not be ruled out. A similar conclusion was reached by the Canadian Royal Commission.

The NAFO and ICES conclusions are based on a comparison of estimates of pup production from the period when catches were variable (the 1960s to the mid 1970s) using the modified Survival Index method, with estimates from the late 1970s using mark-recapture analysis (Bowen and Sergeant 1983). Certainly the mark-recapture estimates are substantially higher than those from the Survival Index and the confidence limits for each estimate (which indicate the precision of the estimate) hardly overlap. However, as noted above, there is now a general belief that the mark-recapture estimates are biassed upwards. The Canadian Royal Commission's conclusion is based on the analyses presented by Cooke et al (1985). They used a maximum likelihood technique to fit a basic demographic model to changes in the age structure of the catch for the different hunts which have exploited the Northwest Atlantic stock. In the process they estimate the trajectory of pup production over the period of recorded catches. This model can also be extrapolated forward to examine the possible effects of different management regimes.

It should be noted that the conclusions which Cooke et al (1985) draw from their analyses are different from those drawn by the Royal Commission. The Commission concluded that the population probably increased between 1972 and 1983 and that if it did decrease the rate of decrease was very slow. It also concluded that the population has certainly increased since 1983, possibly by up to 5% per year. Cooke et al conclude that none of the available data sets are sufficient to distinguish between a decrease or an increase in pup production over the last 10 years. They believe that around 320,000 pups have been born each year since 1971. They conclude that a population of this size can probably sustain catches at their current, reduced, levels but they do not believe that the current rate of increase can be estimated reliably. However, there can be little doubt that the imposition of quotas in 1971 did at least reduce the rapid population decline that has occured in the previous decade.

Some support for the Royal Commission's conclusion comes from an analysis by Roff and Bowen (1986) of changes in the age structure of samples seals taken from the moulting patches in recent years. Although there is a great deal of year to year variability in the proportion of young animals, there has been a significant increase in this proportion over the period 1967 to 1983. They therefore conclude that the population was able to increase over this period.

Assessment of the status of the East Ice stock is based on a series of aerial surveys of moulting congregations, which do show a steady increase in the mid-1970s (Benjaminsen 1979). However, the same analysis also indicated a major decline in pup production over the period 1962-65. Since the mid-1970s Norwegian scientists have consistently expressed a belief that the stock was increasing and that quotas should be raised to stop the growth of the stock. Soviet scientists have adopted a more cautious approach. However, both groups are in agreement that recent changes in the age structure of the population indicate a decline in productivity, although there is disagreement as to the likely cause. Norwegian scientists suggest that it is because the population is now limited by its food supply, whereas Soviet scientists have expressed concern about excessive exploitation.

The status of the West Ice stock is even less clear. The stock is estimated to have declined by 70-80% between 1945 and 1965 (Øritsland 1976). In recent years quotas appear to have been set using a potentially unreliable estimate of pup production and the assumption that the stock can sustain the same proportional harvest of pups as in the Northwest Atlantic. The dramatic invasion of the south coast of Norway by large numbers of harp seals early in 1987 has been cited in newspaper articles as proof that the West Ice stock has increased dramatically in size since the reduction in catches in 1983. Certainly large numbers of seals were involved (compensation was paid for about

60,000 animals which were drowned in fishing nets) and some of these animals had been tagged as pups on the West Ice. However, the West Ice stock cannot have increased so dramatically since 1983 because it is still too early for any of the extra pups which have survived since then to have been recruited to the breeding population. It seems much more likely that the invasion was the result of unusual weather conditions or changes in the distribution and abundance of preferred prey species. All that can be said is that the reduction in catches on the West Ice must have benefited the harp seal stock, but it is not possible to evaluate the extent of this.

2.5 Effect of Reduced Catches of Pups

The European Community's ban on trade in the skins of white-coated harp seals has virtually eliminated the market for pups killed in the northwest Atlantic and on the West Ice. Catches from these stocks have decreased substantially since 1982 as a consequence. There has also been a reduction in catches in the Canadian Arctic (NAFO 1985). However, the trade ban has had no effect on catches in Greenland and on the East Ice.

The fact that all three stocks of harp seals have managed to persist although they have been subjected to very high catches does indicate that such stocks can sustain some level of exploitation. At present it is not possible to determine what is a safe level and any future management should have a substantial annual or biennial monitoring component along the lines recommended by Cooke et al (1985). Current catches from the northwest Atlantic stock are probably sufficiently small in relation to the size of the stock to allow it to increase in size, although the rate of increase cannot be determined at present. The same may be true of the West Ice stock, although because it is so much smaller even less confidence must be attached to any conclusions.

It is unlikely that the take of whitecoats from the northwest Atlantic stock will increase in the near future if the recommendation of the Canadian Royal Commission that this component of the hunt should not continue is followed. Any increase in catches is likely to be of older animals and will probably be justified as an attempt to reduce damage to fisheries or to increase the income of local communities. If catches do increase it would be wise to remember the conclusion of the Canadian Royal Commission: "It is probable that catches of about the size taken in the late 1970s would allow the harp seal population to increase, but there is a chance that they would cause a decrease, and if this decrease were allowed to continue uncorrected for a period as long as 10-20 years, it might occasion a serious threat to the stock." This is a clear recommendation that any future exploitation must include an adequate monitoring programme, probably based on biennial aerial surveys (see Cooke et al 1985).

3. CURRENT STATUS OF THE HOODED SEAL

3.1. Biology

The hooded seal is one of the largest seals found in the North Atlantic. Males may weigh more than 300 kg, but females are smaller - the average adult weighs about 170 kg and is 2m long. The fur is grey to black with a heavy black mottling which tends to form an almost serpentine pattern. The species gains its name from the fact that adult males have a bladder which overhangs the upper lip and which, when inflated, forms a hood over the animal's nose. In addition they can inflate their nasal septum through the left nostril to form another, striking, reddish-purple bladder. Pups lose the white "lanugo", which is so characteristic in the harp seal, before they are born and have a particularly fine fur which is slate or silvery-blue above and silver below, with a clear demarcation between the two areas. Current knowledge about the biology of this species is described in detail by Kovacs and Lavigne (1986).

3.1.1. Distribution

Hooded seals are found throughout the northern part of the central and western North Atlantic. Their range overlaps considerably with that of the harp seal, although hooded seals do not occur so far to the east and normally use a different type of ice for pupping.

Pups are born in March on heavy pack-ice in three areas: the Front area off the east coast of Newfoundland and Labrador, with some animals also breeding in the Gulf of St Lawrence; the Davis Strait; and at the West Ice near Jan Mayen. A limited number of whelping patches - loose aggregations of large numbers of animals dispersed over several hundred square km of ice - are formed. Generally these consist of a core area with a relatively high density of animals surrounded by a much larger area of low density.

At present the North Atlantic population is provisionally divided into a **Northwest Atlantic stock** (animals born in the Davis Strait, Newfoundland and the Gulf of St Lawrence) and a **Greenland Sea stock** (those born on the West Ice), although there is no evidence nor firm belief that these are actually discrete groupings. Recent evidence collected from the Davis Strait whelping patch (NAFO 1985) indicates that there may be little interchange of breeding animals between this group and that breeding off of Newfoundland, although there is certainly interchange between the Front and the Gulf of St Lawrence. There is no evidence for any interchange with the West Ice herd.

After the breeding season animals from the Northwest Atlantic migrate northwards and those from the Greenland Sea migrate westwards to the

west and east coasts of Greenland, where they congregate on well-defined moulting areas. The best known of these is on the Greenland side of the Denmark Strait, but other congregations occur further north on the Greenland coast. At one time it was believed that animals from both stocks mixed on the Denmark Strait moulting ground, however there is no evidence that West Ice animals actually use this area. The distribution of the species for the rest of the year is poorly known, although pups appear to disperse widely and have been recorded on the east coast of the USA, Portugal, the Bay of Biscay, Ireland, the UK, Norway, and the Beaufort Sea (Burns and Gavin 1980, King 1983).

3.1.2. Birth, Moult and Nomenclature

Pups weigh approximately 20 kg at birth, and 40 kg at weaning, three to five days later (Bowen et al, 1985) - this is the shortest lactation period recorded for any vertebrate. Pups are known as "bluebacks" because of their characteristic colouration; they leave the ice within a few days of being weaned.

Although most pups are born within the whelping patches, the density of mothers and their pups these patches is relatively low and significant numbers of animals are born at lower densities outside the main aggregations (Hay et al 1985). One or more males are often found around each mother-pup pair and these groupings are often referred to as "family units". However, there is no evidence that one particular male stays with each pair nor that any of the males associated with the pair is the real father of the pup. Indeed the marked difference in size between males and females seen in hooded seals is, in other species, usually associated with a polygamous social organization where one male may copulate with many females in a single breeding season. However, females do tend to defend their pups fiercely and this has lead to large numbers of adult females being killed by hunters in "self-defence" during the hunt for pups.

3.2. Exploitation

3.2.1. Nature of Hunt

In general, the hunt for hooded seals has been associated with that for harp seals; indeed the two species were not distinguished in catch statistics from Canada for most of the 19th century. Although the breeding habitat of the hooded seal is different from that of the harp, both species breed in the same general area and once a sealing vessel had reached a harp seal whelping patch is was often possible to find a hooded seal patch in the vicinity. Until the latter half of the 20th century seals were taken both for their skins (mainly for leather) and for their oil, and a high proportion of the catch was of adult animals. Later the emphasis of the hunt switched almost entirely to fine skins and the hunt was directed towards bluebacks. However, because of the aggressive behaviour of female hooded seals, they were still killed in

large numbers until they were protected by special regulations in the early 1970s.

Away from the breeding areas almost all hunting has taken place in Greenland. Juvenile and adult animals have traditionally been taken by the native people of Greenland for their skin, meat and oil. In addition, until 1960 large numbers of moulting animals were taken in the Denmark Strait by Norwegian sealers operating from large vessels. Smaller numbers were taken by a Greenlandic vessel from 1959-67. Very small numbers of hooded seals have been taken by Norway as part of the hunt for harp seals on the East Ice, and rather larger numbers were taken in the northern Barents Sea and Svalbard area between 1946 and 1955.

3.2.2. Method of Killing

In general pups are killed in the same way as harp seal whitecoats (see section 2.2.2), older animals are shot. However, small numbers of animals are drowned in the net fishery for harp seals in Labrador and northern Quebec.

3.2.3. History of Catches

As noted above, catch statistics from Newfoundland did not distinguish between harp and hooded seals until 1895. From this time until about 1915 catches were often large (as many as 61,750 animals being taken in 1901) but highly variable (only 1,600 animals were taken in 1900, for example). Catches then declined to a very low level (only a few hundred animals being taken each year) between 1930 and 1945. Catches remained relatively low (averaging around 5,000) until about 1964 when there appears to have been a substantial increase in effort directed towards hooded seals and annual catches were around 15,000 until 1983. A catch allocation, based on scientific advice provided intially by ICNAF and later by NAFO, was introduced in 1974. Allocations and actual catches since then are shown in Table 3.1.

The development of the hunt for hooded seals at the West Ice is identical to that of the hunt for harp seals (see section 2.2.3). Norwegian catches averaged 30,000 per year in the period 1891-99 and 14,500 per year in 1905-10. The take of hooded seals on the West Ice before 1945 is not well documented. After 1946 annual catches by Norway increased rapidly to an average of 56,600 in the period 1950-55. The USSR joined in the hunt from 1958-66 and catches gradually declined to an average of 32,000 in 1965-70. A joint Soviet/Norwegian quota was first set in 1971 and quotas and actual catches since then are shown in Table 3.2. Norwegian sealers also took some hooded seals (mostly juveniles and adults) in the northern Barents Sea and Svalbard area in the period 1945-56. The average catch was around 1,500, but 6,700 animals were taken in 1952.

The hunt in Greenland has had three components: a take by the native people of Greenland which has continued throughout this century; a hunt on the moulting patch in the Denmark Strait by Norwegian sealers between 1945 and 1960; and a hunt on the moulting patch carried out by a Greenlandic vessel from 1959 to 1967. Scientific sampling on a large scale was also carried out by Norway at the moulting patch in the period 1970-78. All these catches since 1945 are shown in Table 3.3. Although the Greenlandic hunting statistics did not distinguish between the different seal species before 1939, the available evidence indicates that the catch of hooded seals in West Greenland declined from about 10-15,000 annually at the turn of the century to less than 1,000 in 1960 (Kapel, 1986). In the mid-1960s the catch shows a sudden increase to around 1,800. Another marked increase to around 4,000 occurred between 1971 and 1975 and since then catches have remained around this level. In East Greenland the catch increased rapidly in the 1970s from 200-700 to around 2,500. There have been significant changes in hunting methodology in Greenland during this period (in particular the use of motorised boats and the power of their engines has increased in recent years) and it is difficult to interpret these changes, although circumstantial evidence from local residents suggests that hooded seals have become more abundant in Greenland in recent years (Kapel, 1986).

In both Newfoundland and the West Ice attempts have been made to protect breeding females. In Newfoundland the allowed percentage of females in the take was limited to 10% in 1977; this was reduced to 7.5% in 1978 and 5% in 1979. On the West Ice since 1969 it has only been possible to kill females for "compelling safety reasons", but this protection did not appear to be very effective and in 1980 one pup was deducted from the quota for every adult female taken. In 1981 the deduction was increased to two pups per female.

YEAR	ALLOCATION	CATCH	
		PUPS	TOTAL
1971	-		14,946
1972	-		12,600
1973	-		6,567
1974	15,000	6,127	9,999
1975	15,000	7,647	15,611
1976	15,000	6,540	12,385
1977	15,000	8,970	12,093
1978	15,000	7,966	10,504
1979	15,000	11,948	15,125
1980	15,000	11,153	13,116
1981	15,000	10,661	13,076
1982	15,000	7,757	10,393
1983	12,000	-	128
1984	2,340	202	442
1985	2,340	369	784
1986		21	33

Table 3-1: Allocations and total catches of hooded seals off Newfoundland. Sources - official ICNAF and NAFO statistics.

YEAR	ALLOCATION	CATCH	
		PUPS	TOTAL
1971	30,000	19,572	30,250
1972	30,000	16,052	20,216
1973	30,000	22,455	26,449
1974	30,000	16,595	26,393
1975	31,800	18,905	27,195
1976	39,500	4,831	7,296
1977	46,000[1]	14,198	18,833
1978	42,500[1]	16,356	19,036
1979	35,120[1]	18,211	23,545
1980	20,000[2]	9,441	11,233
1981	20,000[3]	10,736	12,074
1982	20,000[3]	12,593	15,837
1983	20,000	419	612
1984	11,800	99	582
1985	11,300	1,886	2,119
1986	9,300	3,810	4,770
1987	20,000	-	7,794[4]

Table 3-2: Allocation and actual catches for hooded seals on the West Ice. Source: Øritsland (1980) and Reports of the Norwegian-SovietSealing Commission, Øritsland(pers. comm.).

1. Includes 10,000 males.
2. Pups only, pup quota reduced by one for every female taken up to a maximum of 400. No limit on take of adult males.
3. Pups only, pup quota reduced by two for every female taken up to a maximum of 400. No limit on take of males.
4. Provisional figures, Soviet catch data not yet available.

YEAR	WEST GREENLAND	EAST GREENLAND	DENMARK STRAIT		SCIENTIFIC
			NORWAY	GREENLAND	
1945	-	-	3,275	0	0
1946	-	-	17,767	0	0
1947	-	-	16,080	0	0
1948	-	-	16,170	0	0
1949	-	-	1,494	0	0
1950	-	-	17,742	0	0
1951	-	-	47,607	0	0
1952	-	-	16,910	0	0
1953	-	-	2,907	0	0
1954	1,097	201	18,292	0	0
1955	972	344	10,230	0	0
1956	593	264	12,840	0	0
1957	797	412	21,425	0	0
1958	846	365	14,950	0	0
1959	780	734	6,480	414	0
1960	965	1,104	7,930	773	0
1961	673	1,151	0	776	0
1962	545	1,314	0	967	0
1963	892	1,129	0	813	0
1964	2,185	918	0	360	0
1965	1,822	310	0	0	0
1966	1,821	1,052	0	782	0
1967	1,608	729	0	358	0
1968	1,392	661	0	0	0
1969	1,822	411	0	0	0
1970	1,412	713	0	0	797
1971	1,634	744	0	0	0
1972	2,383	1,827	0	0	869
1973	2,654	677	0	0	0
1974	2,801	1,218	0	0	1,201
1975	3,679	1,085	0	0	0
1976	4,230	833	0	0	323
1977	3,751	2,258	0	0	0
1978	3,635	2,769	0	0	1,201
1979	3,612	2,304	0	0	0

YEAR	WEST GREENLAND	EAST GREENLAND	DENMARK STRAIT		SCIENTIFIC
			NORWAY	GREENLAND	
1980	3,779	2,637	0	0	0
1981	3,745	2,452	0	0	0
1982	4,398	2,035	0	0	0
1983	4,155	1,321	0	0	0
1984	3,364	1,328	0	0	0
1985	3,188[1]	3,695[1]	0	0	0

Table 3-3: Catches of hooded seals off Greenland 1945-83. Sources - Kapel (1986), Øritsland (1980), Kapel (pers. comm.)

"-" indicates that data were not available.

1. Provisional, unpublished figures.

3.3. Population Size

The problems of estimating the size of either of the hooded seal stocks are similar to, but in many ways worse than, those encountered with harp seals. The whelping patches are found in remote areas (this is particularly true of the one in the Davis Strait) and their position is less predictable than that of the harp seal patches. Bowen, Myers and Hay (1987) point out that the whelping concentrations at the Front occur somewhere in an area of 50,000 km^2! In addition, because of the relatively small absolute size of the hunt, compared with that for harp seals, and the practical difficulty of getting to the whelping patches and moulting areas, the biology of the species was remarkably poorly known. Until 1984 the only estimates of pup production available where based on modifications of the Survival Index method (see Section 2.3), or on analysis of changes in catch per unit effort. However, in 1984 thorough aerial surveys were conducted of both the Davis Strait and the Newfoundland whelping areas (Bowen et al 1987). Aerial surveys were also flown at the Front in 1983 and 1985.

The Survival Index method relies for its success on large differences between years in the number of pups killed. In Newfoundland the most dramatic difference in catches was between 1965 (3,000 pups killed) and 1966 (16,400 pups killed) and this dominates all estimates made with the method. Calculations based on this method (Cooke 1982a, Winters et al 1982) suggest a pup production of about 34,000 in the period 1965-70. This is equivalent to a total population of approximately 150,000 animals. Similar calculations for the West Ice (Jacobsen 1982, 1984) give a pup production of 95,000 in 1956 and 54,000 in 1968.

Hay and Wakeham (1983) attempted to estimate pup production in Newfoundland from changes in the number of seals caught per working hour by large vessels during the period 1977-82. However, their estimates were only slightly higher than the total number of pups caught and were considered to be biased downwards because pups are only available to be caught for a very short period (NAFO 1983).

Until 1984 the only estimates for the size of the Davis Strait whelping patch were based on small scale aerial surveys in 1977 and 1978 which had resulted in estimates that pup production there was 12-13,000 (ICES 1982). Complete surveys of both the Davis Strait and the Newfoundland patches were conducted in 1984 using both fixed-wing aircraft and helicopters (Bowen et al 1987). Because of the short lactation period of the hooded seal there is no time when all the pups born within the season can actually be counted on the ice. At any particular time some pups will have already left the ice and others will not yet have been born. A correction has to be made for this,

based on a classification of the pups on the ice into a number of discrete age categories (Myers et al, in press). Using this correction, pup production was estimated to be 62,400 in Newfoundland and 19,000 in the Davis Strait (Bowen et al 1987). The estimate for Newfoundland includes a substantial number of pups (7,400) outside the main whelping concentration, but this figure is based on sightings of 12 pups, 3 of which were in one photograph. These estimates suggest that the total size of the Northeast Atlantic stock is around 300,000 animals. Jacobsen (1984) estimated that the current pup production on the West Ice is about 50,000 (but see below for a more detailed discussion of this estimate) suggesting a total population of 200,000 for the Greenland Sea and 500,000 for the North Atlantic.

3.4. Population Status

If the results of the 1984 aerial surveys in Newfoundland and the Davis Strait are really comparable with the earlier Survival Index estimates, they imply that the Northwest Atlantic stock has increased substantially over the last decade. Calculations carried out for the 1985 NAFO meeting suggest that this stock can sustain a hunt made up of the current Greenland catch (about 6,000 animals) and a take of 12,000 animals in Newfoundland, even if the Davis Strait whelping group does not contribute at all to the Greenlandic catch. These calculations offer an encouraging picture, since they are based on apparently pessimistic assumptions about the levels of natural mortality and the accuracy of the population estimates. However, there are some inconsistencies in the available data. For example, the age structure of the Newfoundland whelping group suggests that adults have suffered a high hunting mortality, whereas the age structure of the Davis Strait group suggests that these animals are subjected to very low hunting pressures. But these mortalities are not consistent with the estimates of the absolute sizes of the two groups and the average kill of adults over the last 20 years. These problems need to be resolved before it can be confidently concluded that this stock is increasing.

The status of the stock in the Greenland Sea is even less clear. The only available information comes from calculations made by Jacobsen (1984). Using his estimates for pup production in 1956 and 1968, the known catches from this stock and an estimate of natural mortality, he calculated that the stock continued to decline until the mid-1970s and then increased slowly. However, small changes in the value for natural mortality resulted in predictions of a continuing decline or a substantial increase. At present there appears to be no objective basis for discriminating between these different projections. The only clear implication is that this stock declined dramatically throughout the 1950s and 1960s.

3.5. Effects of Reductions in Pup Kill

Since the introduction of the ban in 1982 the catch of hooded seal pups has declined virtually to zero both in Newfoundland and on the West Ice, although there has been a recent increase on the West Ice. There seems no doubt that this change can be attributed entirely to the closure of the main market for blueback skins. The only remaining hunt is that carried out by the native people of Greenland which takes mostly adult animals. The Canadian Royal Commission has recommended against the resumption of the hunt for bluebacks in Canada, but in the past these skins have been very valuable.

In the past it has been concluded that hooded seals may be particularly vulnerable to over-exploitation because so little is known about their biology, because pup production seems to vary substantially from year to year, and because they have usually been taken as part of a much larger hunt for harp seals so that normal economic constraints on over-exploitation would not apply. However, there are some encouraging signs. The short lactation period and the existence of a large number of pups dispersed at low density across the ice means that only a fraction of the annual pup production is likely to be available to be hunted at any one time. The Davis Strait whelping patch seems to provide an unexploited refuge for a sizeable proportion of the population. And aerial surveys offer a reliable, if expensive, method for monitoring the population. Nevertheless, the biological basis for a sustainable yield from hooded seal stocks is less obvious than with harp seals, and one must agree with the Canadian Royal Commission in its conclusion that "it is far from clear that the TACs .....(set for the Northwest Atlantic stock) were sustainable."

4. HUMANITARIAN AND ECONOMIC ASPECTS

4.1 Humaneness of the seal hunt

The available evidence on the humanitarian aspect of the different hunts for harp and hooded seals were reviewed in considerable detail by the Royal Commission on Seals and the Sealing Industry in Canada. The Commission concluded that the net hunt was inhumane and should be phased-out as quickly as possible, that the methods for killing whitecoats and bluebacks were as humane as those used in slaughterhouses, and that the shooting of other age classes was probably more effective than hunting for sport. Nevertheless, the Commission recommended that there should be no hunt for whitecoats and bluebacks because of the overwhelming public opposition, even within Canada, to this hunt.

On the basis of the evidence presented, these conclusions are reasonable. However, the methods of killing used for whitecoats and bluebacks are vulnerable to abuse, particularly if the hunt is poorly policed. Thus the worst recent cases of ineffective killing have occurred in the Canadian landsmen's hunt, which is virtually unsupervised. In addition, it can be argued that the fact that the proportion of seal pups which are killed while still conscious is probably lower than the proportion of domestic animals that are killed in this way indicates inadequate supervision of slaughterhouse activities rather than an inherent quality in the activities of the seal hunt. The Commission's recommendation that pups whose mothers remain with them should not be killed is a sensible suggestion for reducing stress to adult females.

The Commission's conclusions about the net hunt appear to be entirely correct: it is very difficult to see any justification for the continuation of this killing method.

The available evidence suggests that in excess of 10% of all harp or hooded seals which are shot and whose carcasses are recovered did not die instantly. In some areas only 70-80% of all seals that are hit are recovered. These figures are, if anything, rather better than those recorded for sport hunting of large vertebrates in North America. However, that does not necessarily mean that they are acceptable for an industry which may kill hundreds of thousands of seals each year. It seems likely (see below) that any future increase in the number of harp and hooded seals which are killed will involve an expansion of the hunt for beaters and bedlammers. Most of these animals will be shot. As a consequence the amount of suffering caused will be substantially higher than if the same number of whitecoats or bluebacks was killed.

4.2 Economic Aspects

As a result of the EC ban on trade in the skins of whitecoats and bluebacks, the market price of seal skins has dropped dramatically and it is unlikely that any of the remaining hunts are economically viable without some form of subsidy. If the ban continues it is therefore unlikely that catches will increase for purely economic reasons.

However, it is possible that an increased kill of harp seals may be justified on the grounds of reducing damage to commercial fisheries. Calculations performed by the Canadian Royal Commission indicate that there might be some benefit to Canadian commercial fisheries from such an operation. However, the Commission notes that harp seals do most of their feeding in waters that are not commercially fished to any extent, and it recognizes that the basis for its calculations of the potential benefits is tenuous. It would be hard to justify a cull of this sort to the international scientific community without much more information on the diet and feeding behaviour of harp seals in Canadian waters. Similar, but more forceful, arguments would apply to a cull of West Ice seals for the same reasons.

Provided that the government of Canada abides by the recommendation of its Royal Commission, any increase in the hunt for harp seals in Canada is likely to be directed at animals other than whitecoats. This hunt will be more difficult to monitor and regulate than the hunt for whitecoats. At present the hunt for harp seals on the West Ice is so timed that whitecoats are not taken. If the EC ban is lifted this would probably change because it must be more efficient, as far as the industry is concerned, to take whitecoats.

The EC trade ban has had no discernable effect on the hunt for seals on the East Ice.

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ANNEX II

MARKET & INDUSTRY ANALYSTS

Report

MARKET & INDUSTRY ANALYSTS
SQUARE WISER 1, BOX 26, 1040 BRUSSELS, BELGIUM • TEL.: (02) 230.69.35 • TLX: 64805

THE DEVELOPMENT OF THE MARKET FOR SEALSKINS

FINAL REPORT

Prepared for:

THE COMMISSION OF THE EUROPEAN COMMUNITIES
Directorate General XI: Environment

Contract No B6615/3/87

October 22, 1987

THE DEVELOPMENT OF THE MARKET FOR SEALSKINS

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INTRODUCTION

Council Directive 85/444/EEC of 27 September 1985 called upon the Commission to prepare a report on "The development of the market for sealskins derived from the Inuits' traditional hunting, and of the market in other sealskins.....".

OBJECTIVES

The purpose of this study is to describe recent developments in the market for sealskins and to estimate probable future trends. The study also analyses the reasons for these developments, and in particular to what extent developments can be attributed to the Council Directives 83/129/EEC and 85/444/EEC of March 1983 and 27 September 1985 banning the import of pup seal products.

The market for sealskins, both raw and dressed or tanned depends on the markets for products manufactured therefrom such as garments, footwear, leather goods and souvenir items. The study therefore covers the markets for these products. For the sake of completeness the study also covers the markets for other products derived from sealing such as meat and oil.

The market for Inuit seal products has been set in the context of the worldwide supply of and demand for seal products. The study consequently analyses the situation for competitive sealing industries such as those of Norway and the Canadian Atlantic.

METHOD

The study has been carried out by a combination of an analysis of published data and interviews with informed respondents. Published data analysed includes:

- catch statistics
- foreign trade statistics
- auction data.

Informed respondents interviewed included:

- public authorites responsible for the sealing industries in the various countries
- traders in sealskins
- dressers and tanners of sealskins
- manufacturers of sealskin products.

NOTE ON STATISTICAL AND OTHER SOURCES

Reasonably reliable data is available on the hunt in most areas. In Greenland and the Canadian Arctic, where the hunt is carried out partly for subsistence, accurate data for the hunt are not available while accurate data on commercial sales of sealskins are.

Data on foreign trade in sealskins exist for the main sealing countries except South Africa, which for national security reasons does not publish them. The EC publishes foreign trade data on sealskins and, since January 1 1984, has separately identified whitecoats and bluebacks from other sealskins.

Foreign trade statistics for all countries distinguish between raw and dressed or tanned skins. Norway has always separately identified raw whitecoat and raw blueback skins, but does not make the same distinction for dressed skins. An analysis of the statistics makes it clear that in some cases raw skins are mistakenly classified as dressed skins in foreign trade statistics. Skins may be cut up or sewn together, so information on the number of skins may be misleading, particularly in the case of dressed skins. However, the picture obtained from foreign trade in sealskins generally corresponds well with information obtained from trade sources.

Limited statistical information on the commercial use of meat and blubber is available for Canada, Greenland, and the Norwegian hunt. Norway publishes foreign trade statistics on seal oil.

Since January 1 1984 EC foreign trade statistics have identified items manufactured from the skins of whitecoats and bluebacks. Otherwise there are no foreign trade data on trade in sealskin items from any source. The EC data on this subject are extremely suspect. In 1986 Greece reported exports of articles of pup seals worth ECU 37 million. We see no way that Greece could have obtained the skins to produce such a quantity of articles. Moreover nearly ECU 9 million of those were reported as going to the United States which bans imports of <u>all</u> seal products. In 1985 reports of ECU 855,000 of pup seal articles were reported from Belgium/Luxembourg to the Netherlands: this seems equally unlikely.

There are no official data on the production of sealskin items in any country. We have attempted to obtain information on this by means of interviews with manufacturers. Estimates on the production of sealskin items can also be made on the basis of the availability of sealskins. However the catch of seals varies from year to year for physical reasons (ice conditions, etc.) and sealskins have been traded as a commodity, with traders holding large stocks. A sealskin can be stored for at least five years before deteriorating. Therefore year to year changes in supply cannot be used as a guide to short term changes in production or demand. In the longer term of course supply and demand must balance.

Prices also give an indication of the state of the market. The average price per skins in foreign trade can be calculated. Prices paid to hunters in Canada, Greenland and Norway are known, although in the case of Greenland these are subsidised prices which bear no relation to market

values. In the past there were several auctions where sealskins were sold, notably the Copenhagen auction of Greenland skins. Although these auctions have now been discontinued they provide valuable data on past trends.

As far as possible, statistical series for the years 1979-1986 have been provided enabling trends for the four year period before the ban came into force and the four year period following it to be analysed. 1987 data are given where available.

As far as the information obtained from trade informants are concerned we should point out that businessmen are often understandly cautious about giving details of their affairs, particularly on such a sensitive issue as sealskins are at present and especially if the information is to be published. For this reason with a few well known execptions, we have with held the names of commercial organisations.

SUMMARY

1. Worldwide demand for sealskins has declined from about 425,000 skins a year in the early 1980's to about 110,000 skins a year at present. About 150,000 of the 425,000 skins were pup skins (whitecoats and bluebacks), for which there is now almost no demand. Demand for other sealskins has fallen by about 60 per cent.

2. The European Community now accounts for about 65 per cent of demand compared to about 80 per cent previously, mainly because demand in Canada, Norway and Japan has declined less sharply.

3. Government supported programmes are underway in Canada and Greenland in an attempt to increase domestic demand for sealskin articles. There is some evidence that the Soviet Union is increasing its imports of sealskin articles from the West, possibly to take advantage of low prices. There is also some evidence that the West European market for sealskin articles has ceased declining, and may be showing a modest improvement. There is, however, no evidence of markets developing elsewhere in the world, e.g. the Far East.

4. The main market for sealskins was for the manufacture of fur coats, which accounted for 70 per cent of demand. In Europe, the sealskin garment market has now almost totally collapsed except in Denmark. The sealskin footwear market, which accounted for about 20 per cent of demand, has declined less sharply and there is a continuing market in Europe especially in Germany, France and Norway. The sealskin leather goods market which largely depended on supplies of pup sealskins has also collapsed.

5. Prices for raw sealskins have fallen by up to 75 per cent between 1982 and 1986. There is some evidence recently of a slight increase in prices.

6. Commercial sealing throughout the world has declined. The United States commercial hunt ceased in 1984. The South African hunt also appears to have ceased. The Canadian Atlantic hunt has declined from 200,000 before 1983 to less than 50,000. Sales of sealskins by Canadian Artic hunters have fallen from 30,000-40,000 a year to less than 5,000. The only sealing industries which have maintained previous levels are those of Greenland and of Norway on the East and West Ice. In both these countries sealing is heavily subsidised. The Canadian Atlantic and Arctic hunts are also now subsidised but not to the same extent.

7. Since 1983 no whitecoats have been taken either by Canadian or Norwegian sealers (the Russians take whitecoats in the Barents Sea but for their own use). Greenlanders continue to take very small numbers of bluebacks. The Norwegians stopped taking bluebacks between 1983 and 1985, but since 1986 have resumed this hunt on a limited scale.

8. It seems most unlikely that, following the Royal Commission report, Canada will authorise a resumption of the whitecoat hunt. There is at least a possibility that Norway might authorise it in an attempt to control the harp seal "invasion" along her coasts.

9. It is universally agreed by both opponents and proponents of sealing that the decline in the market has been due to the anti-sealing campaign, although there is some evidence that, even without the campaign, demand would have declined due among other things to changing fashions and economic factors.

10. The 1983 European Community ban on pup sealskins is specifically blamed for the collapse in the market by people connected with sealing and the sealskin trade. They claim that the ban gave official approval to the anti-sealing campaign and that the public does not distinguish between pup seals and other seals. On the other hand it seems that the modest upturn in demand, at least for footwear in Europe, may have been helped by the fact that, since the introduction of the ban, anti-sealing propaganda has stopped.

OVERVIEW OF THE WORLD MARKET FOR SEALSKINS

This section gives an overview of developments in the worldwide supply and demand for sealskins between the late 1970's and the present. Individual country markets and industries are analysed in more detail in subsequent sections.

DEMAND

Up to the early 1980's, the world demand for sealskins was about 425,000 skins per year, of which about 80 per cent was accounted for by the European Community, about 5 per cent by other West European countries, 5 per cent each by Norway and Canada, and the remainder by the Far East, particularly Japan, and the United States. About 70 per cent of the skins were used for the production of garments, 20-25 per cent for footwear, and the remainder for leather goods. Small souvenir items are produced from the offcuts of the other productions and to avoid double counting we do not consider them separately.

Within the European Community, the main consumer of sealskins was Denmark (+/- 100,000 skins a year), closely followed by Germany (+/- 90,000). Denmark used the skins exclusively for the production of garments, about half of which were exported, mainly to Germany. German production was of garments, footwear and also of leather items. France and Italy were the next most important consumers, using about 50,000 skins a year each. In France the main production was of footwear and garments, while Italy produced garments and leather goods. Greece produced garments on behalf of German companies. The United Kingdom used small quantities of sealskin for the production of footwear and leather items.

Outside the European Community, the most important consumers of sealskins were Canada and Norway, each using about 20,000 skins a year. Norway produced footwear and leather goods, but very few garments, while Canada produced both garments and footwear and some leather items. The United States produced small quantities of garments.

Danish garment manufacturers were largely dependent on Greenland ring seals, but they also used harp seals, fur seals and bluebacks. The German garment industry used large quantities of South African fur seals, both directly and via associated companies in Greece, while the German footwear industry used considerable quantities of ring seals and older harp seals obtained from Norway.

France and Italy are thought to have been the major users of whitecoats for the leather and garment industries, although it seems clear that whitecoats must have also been used in other EC countries such as Denmark, Germany and Greece. Canadian garment manufacturers are known to have used Pacific Fur seals, as well as skins dressed in Europe. The United States garment manufacturers could only use locally produced sealskins, as imports were prohibited.

In 1982 the market for sealskins began to collapse and by 1985/86, it was estimated that world demand had fallen to about 100,000 skins, of which 70,000 in the European Community. The market is therefore thought to have fallen to 20 per cent of its former level. The Norwegian and Canadian markets have also declined but less drastically, while the United States market has been totally eliminated. Only the Japanese market has held up at previous levels. The garment market has fallen by over 80 per cent, but the footwear market has resisted better and has declined by about 55 per cent. The leather goods market, due to the decline in availability of pup seals, has also declined very sharply.

Within the EC the remaining important users of sealskins are: the Danish garment industry, which is now almost totally dependent on its domestic market, the French and German footwear industries, also almost totally dependent on domestic markets, and the Greek garment industry, which may be partially dependent on sales to Eastern Europe. In Norway a sealskin footwear and leather goods industry continues at a reduced level. In Canada, attempts are being made to build up a local sealskin industry and market and a similar attempt is being made in Greenland.

The demand for sealskin products declined as a direct result of the anti-sealing movement. Although the anti-sealing movement focussed on the whitecoat hunt, it is generally agreed, both in the trade and by Greenpeace itself, that protests against the whitecoat hunt affected demand for all sealskin products of whatever age or species. The decline in demand for sealskin products should also be seen in the context of widespread reaction against the use of fur animals in general in many countries.

Among traders and manufacturers, as well as within government circles in Greenland and Norway, the EC ban on pup sealskins is almost universally blamed as a contributory cause of the decline. It is claimed that the ban gave official sanction to the anti-sealing campaign and that the general public cannot distinguish between pup sealskins and other sealskins. Many people in the trade with whom we have talked consider that a lifting of the EC ban is a necessary condition for a significant revival of the market. They also think that the interested parties should collaborate to promote the case of sealing among the public, and efforts are being made in this direction, e.g. the Sealing Committee in Denmark and the cooperation between Inuits in Canada and Greenland as described elsewhere. Other people previously active in the sealskin trade, such as traders in London, on the other hand, seem to be resigned to the belief that the market has been killed.

The Danish market for seaskin garments declined less than elsewhere in Europe because of Denmark's close connections with Greenland. Danish consumers were more aware of the situation in Greenland, the Danish fur garment manufacturers felt some committment to Greenland, and retailers continued to stock sealskin garments. In Germany, in contrast, consumer demand collapsed and retailers and mail order houses ceased to sell sealskin garments.

The demand for sealskin garments was also affected by changes in fashion. Seal is heavier than other furs and is now considered less fashionable. Demand for sealskin footwear declined less than fur garments, possibly sealskin footwear is seen as being less of a "luxury" item, although in

fact sealskin footwear is relatively expensive whereas sealskin fur garments are cheaper than mink or fox garments. The decline in demand for sealskin footwear may partly be attributable to its high cost.

The decline in the market for seal leather goods is due to the extremely high cost, the lack of raw material following the cessation of the whitecoat hunt, and the reluctance of retailers to stock seal leather products.

The sealskin garment and sealskin leather goods market remain very depressed. Most of the sealskin footwear manufacturers to whom we have talked think their market is improving as anti-sealing publicity has declined.

The following tables are intended give a broad overall picture of demand for sealskins by country and end-use in the late 1970's and at present.

SUPPLY

We have assumed that demand for sealskins was around 425,000 a year until the early 1980's because supply was also at this level. A large number of sealskins were sold at auction so the equilibrium between supply and demand could be maintained by the price mechanism.

Supply and demand could also be equated by changes in stock levels. Dressed or tanned sealskins are not particularly perishable and can be stored for at least five years. In fact from year to year the actual supply of sealskins was not very elastic for technical reasons. Several of the hunts, the North Atlantic hunts for harp and hooded seals, and the United States hunt on the Pribilof Islands were subject to quotas, which were generally achieved. These hunts also took place during a short period of time whereas the skins were sold over a much longer period of time. In some sealing areas, notably the West Ice, the catch depended very much on physical conditions, and varied widely from year to year without reference to market conditions. The only hunts which took place throughout the year, and could potentially be adjusted closely to market demand were the Inuit hunts in the Canadian Arctic and in Greenland. In these cases it was not so much the hunt itself that could be adjusted as the number of skins offered for sale, in the one case to the Hudson's Bay Company, and in the other case to the Royal Greenland Trade Department. Sales to the Royal Greenland Trade Department, however, were made for guaranteed prices which did not reflect market conditions except indirectly and with a long delay by mechanism of the bonus system. It is therefore only sales to the Hudson's Bay Company that show a relatively smooth declining trend which started in 1982. All the other hunts show sudden fluctuations.

The first sudden drop in supply occured in 1983 when the big ships withdrew from Canada, the whitecoat and blueback hunt ceased, and the Norwegians stopped the commercial hunt on the West Ice. In 1983 world supply fell to half the level of the previous year. In fact the fall in supply in 1983 was even greater than the hunt figures suggest because most

of the skins of the Canadian landsman and longliner hunt were abandoned due to lack of deblubbering facilities.

A further large drop in supply occured in 1984 for a number of reasons: for technical reasons, the Norwegians were only able to take about half their quota on the East Ice and the South Africans, who had nevertheless carried out a cull, shipped very few skins to Europe, because of the collapse in the garment market. It is reported that the culled seals were left to rot on the beach. A further drop occured in 1985 when the United States commercial hunt ceased. In 1986 the position somewhat stabilised mainly because the Greenland Inuits continued to sell the same amount as previously and the Norwegians once again took their full East Ice quota. These two hunts now accounted for 70 per cent of world supply. In 1987 supplies increased for the first time since 1981 due to increased catches in Canada and by the Norwegians on the West Ice. The Canadian Atlantic Coast catch and the Norwegian hunts have been stimulated by the payment of large subsidies since 1984. The fall in supply in 1983 and in following years was not sufficient to prevent a build up in stocks, mainly held by the Royal Greenland Trade Department and Rieber. These stocks have now, however, been sold off at very low prices. The increased supplies from the Norwegian hunt in 1987 may have been partly due to the expectation of improved demand from the footwear industry, while the Canadians are known to be hoping for increased demand at home, and also possibly in new markets such as the Far East.

PRICES

Because of fluctuations in supply and the impossibility of obtaining reliable data on end-use, prices provide perhaps the best indication of trends in the market.

The data show that prices for sealskins tended to reach a peak in the early 1980's and then declined from 1982/83 to reach a level one half to one third of those of previous levels by 1985 or 1986. Because of the collapse of the market, auctions, which would normally give the best indication of underlying trends, have been discontinued.

The EC import price remains probably the best indication, since the EC is by far the largest market. However this price was distorted in 1986 by the disposal of the Greenland Trading Department stocks at "give away" prices. The only other price data available to 1986 is that for the Norwegian catch, which does suggest an improvement although the price is still below the level of 1984.

The data available suggests that prices, although still far below previous levels, may be increasing.

Table 1

Worldwide Availability of Sealskins, 1979-1987

(Number)

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total	409,302	412,322	445,080	418,657	212,812	131,375	111,919	103,603e	134,507e
of which from:									
. Greenland a	82,543	63,373	55,593	54,945	47,820	52,492	50,526	50,000e	50,000e
. Canada									
- Atlantic	179,028	192,415	213,848	182,336	56,925	33,337	21,476	25,714	42,269
- Arctic b	29,352	30,860	42,120	24,512	14,837	7,684	5,419	4,000e	4,000e
. Norway c	46,494	34,826	40,986	40,611	21,493	11,436	19,902	21,929	38,238
. United States	25,767	24,327	23,928	24,828	25,768	22,066	-	-	-
. South Africa/ Namibia d	75,470	66,521	68,605	91,425	45,969	4,355	14,596	1,960	n.a.

a Commercial sales to RGTD/KTU
b Commercial sales to Hudson's Bay
c Excluding Norwegian catch in Canada prior to 1983
d As from 1984 exports to Europe
e Estimate

Sources: Royal Greenland Trade Department; Fisheries and Oceans Canada; Hudson's Bay Company; Directorate of Fisheries Norway; US Department of Commerce; South African Department of Fisheries; Eurostat.

Table 2

Sealskin Price Trends: Average Price Per Skin, 1979-1986

	1979	1980	1981	1982	1983	1984	1985	1986
First hand value of Norwegian catch (raw skins excluding blubber) Nkr	150.9	145.4	143.5	155.8	74.0	75.1	38.8	60.1
Purchases by Hudson's Bay in Canadian Artic (rawskins cleaned and dried) C$	14.16	19.05	21.13	19.42	14.86	9.95	10.05	n.a.
Extra EC imports into the EC (raw skins) ECU	-	27.8	23.1	21.1	17.1	11.4	5.8	6.0
Fouke Company Auctions (dressed fur skins) US$	109.94	111.81	90.44	64.11	67.63	-	-	-
Royal Greenland Trade Dept. Auctions (raw ring sealskins) Dkr	131	159	114	88	56	36	-	-
Canadian Atlantic coast purchases by processors (raw skins with blubber) C$	22.2	29.6	25.4	25.4	12.4	11.5	n.a.	n.a.

Sources: MIA calculations based on Fisheries Directorate Norway: Hudson's Bay Company: Eurostat: US Department of Commerce: Royal Greenland Trade Department: Fisheries and Oceans Canada.

Table 3

Overview of World Demand For Sealskins by End Use: Situation in Late 1970's
('000 skins)

Type of skin	Total	Garments	Footwear	Leather goods
	425	300	95	30
. South African fur seal	70	70	-	-
. North Pacific fur seal(US)	25	25	-	-
. Ring seal	75	55	20	-
. Bluebacks	20	20	-	-
. Whitecoats	130	105	-	25
. Other harp	100	25	70	5
. Other hood	5	-	5	-

Source: MIA Estimates

Table 4

Overview of World Demand For Sealskins by Main Countries: Situation in Late 1970's
('000 skins)

	Total	Garments	Footwear	Leather goods
Total	425	300	95	30
EC	340	245	70	20
of which:				
. Denmark	100	100	-	-
. Germany	90	50	35	5
. France	50	15	30	5
. Italy	50	40	-	10
. Greece	40	40	-	-
. UK	5	-	4	1
Norway	20	2	14	4
Canada	20	10	8	2
United States	10	10	-	-
Switzerland	10	10	-	-
Japan	10	7	2	1
Others	20	16	1	3

Source: MIA Estimates

Table 5

Overview of World Demand For Sealskins by Main Countries; Situation in Mid 1980's
('000 skins)

	Total	Garments	Footwear	Leather Goods
Total	110	58	42	10
EC	70	40	25	5
of which:				
. Denmark	25	25	-	-
. Germany	20	5	15	-
. France	10	-	10	-
. Italy	7	2	-	5
. Greece	8	8	-	-
Norway	10	1	6	3
Canada	15	7	8	-
Japan	10	5	3	2
Others	5	5	-	-

Source: MIA Estimates

WHITECOATS AND BLUEBACKS

In this section we bring together information on the catch of and the market for whitecoats and bluebacks.

Whitecoats are the pups of harp seals. They cease to be whitecoats when they shed their pup fur after the age of about one month. They are taken on the breeding grounds of the Canadian Atlantic coast and on the East and West Ice. Harp seals do not breed in Greenland or in the Canadian Arctic and whitecoats have therefore never been taken by Inuits.

Bluebacks are the pups of hooded seals and remain bluebacks up to the age of about one year. They are taken in all areas where hooded seals are hunted, namely the Canadian Atlantic coast, and Arctic, Greenland and the West Ice.

Since 1983 Canadian and Norwegian sealers have ceased taking whitecoats. The Soviet Union continues to take whitecoats on the East Ice, but as far as is known none of these find their way to the West, therefore any whitecoats traded since 1983 must have been taken in 1982 or previously. Bluebacks have continued to be taken in Greenland and the Canadian Arctic, but the numbers were never large and even fewer find their way into international trade, although we have been unable to find any exact statistics on this subject. Before the Copenhagen auctions ceased in 1985 only 1,000-2,000 Greenland hooded seals of all ages were sold each year, and the number of seals coming from the Canadian Arctic is now only a few thousand, about 80 per cent of which are ring seals. No bluebacks have been taken on the Canadian Atlantic coast since 1983. The Norwegians virtually ceased taking bluebacks on the West Ice for several years after 1983, but in 1986 they did take nearly 3,000 and it seems likely that they took even more in 1987.

Norwegian Fisheries Directorate data suggests an average "first hand" value of blueback skins of Nkr 100 in 1986 compared to Nkr 225 in 1982.

The table below overestimates the number of bluebacks available since all the Greenland hooded seals were not bluebacks, on the other hand, a small number of bluebacks may have become available from the Canadian Arctic.

According to these statistics 599,000 whitecoats and bluebacks became available in the four year period 1979-82 or 35.6 per cent of total worldwide availability of 1,685,000. In the four following years whitecoats and bluebacks accounted for less than 1 per cent of total availability of 559,000 sealskins. This proportion will be higher in 1987, but it is not yet known how many of the nearly 8,000 hooded seals taken by Norway on the West Ice were bluebacks.

Table 6

Commercial Availability of Whitecoats and Bluebacks, 1979-1986,

	1979	1980	1981	1982	1983	1984	1985	1986
Whitecoats	124,653	104,770	157,841	117,903	-	11	25	4
of which from:								
. Canadian Atlantic	120,134	104,735	151,161	114,445	-	-	-	-
. East Ice	113	35	11	-	-	-	-	-
. West Ice	4,406	21,872	21,240	20,145	-	11	25	4
Bluebacks	30,767	71,872	21,240	20,145	-	1,280	254	2,739
of which from:								
. Canadian Atlantic	11,948	11,098	10,671	7,757	-	-	-	1
. West Ice	16,098	8,391	10,569	11,069	-	99	254	2,738
. Greenland (a)	2,721	2,383	2,461	1,319	-	1,181	-	-

(a) RGTD auctions, all hooded seals

Source: MIA calculations based on RGTD, Fisheries and Oceans Canada, Fisheries Directorate, Norway.

European Community foreign trade statistics have distinguished pup sealskins from other sealskins since 1984. The Norwegian foreign trade statistics have for many years distinguished raw whitecoat and blueback skins. The Norwegians however do not make the same distinction for dressed skins. Canadian foreign trade statistics do not distinguish whitecoats and bluebacks either raw or dressed.

Eurostat indicates that in the three years 1984-86 the European Community imported a total of 13,553 whitecoat and blueback skins. The main flows were:

Year	Number	Raw/ Dressed	From	To
1984	7,649	Dressed	Sweden	Denmark
1985	1,772	Raw	Greenland	Germany & Denmark
1986	2,528	Dressed	Norway	Germany & Spain
	948	Dressed	Canada	Italy

In the same period Community exports of 6,851 whitecoat and blueback skins were recorded, the main flows being:

Year	Number	Raw/ Dressed	From	To
1984	3,013	Dressed	Germany	Japan
1985	1,107	Dressed	Germany	Japan, Austria, Malta
	1,194	Raw	Denmark	Greenland

There has also been some intra Community trade in these skins.

Table 7

EC: Foreign Trade in Pup Sealskins, 1984-1986
(Number)

	1984	1985	1986
Raw skins			
Total Imports	159	2,800	1,603
of which:			
. Intra EC	-	1,028	1,600
. Extra EC	159	1,772	3
Total Exports	883	1,424	170
of which:			
. Intra EC	495	-	-
. Extra EC	388	1,424	170
Dressed skins			
Total Imports	8,052	1,706	4,263
of which:			
. Intra EC	35	1,586	781
. Extra EC	8,017	120	3,482
Total Exports	4,929	3,731	590
of which:			
. Intra EC	1,352	2,559	470
. Extra EC	3,577	1,172	120

Source: Eurostat

Whitecoat skins are mainly used for trimming garments and for fine leather. Blueback skins are used for making garments. In 1984, the EC introduced a customs heading for "articles of furskins of pups of harp and hooded seals". It may be noted that there is no heading for articles of "other" sealskins. It may also be noted that this heading presumably excludes articles of pupseal leather.

On an import basis the statistics show a declining Community trade in such articles from just under ECU 2 million in 1984 to less than ECU 1 million in 1986. The export statistics show a similar trend except in 1986 when exports of over ECU 37 million are recorded, most of which by Greece. There is every reason to doubt the figures for Greece in 1986.

a) Greek exports to EC member states are not confirmed by the import data for these states.
b) Nearly ECU 9 million of the Greek exports are to the United States; this would be illegal.
c) There is no evidence in the statistics of Greece having imported sufficient quantities of pup skins to be able to produce such quantities of articles.
d) Our interviews in Greece provide no evidence of large scale production of articles of pup skins.

If the Greek figures are excluded, exports show a continuing downward trend in 1986.

Nevertheless some of the other figures are difficult to understand. For example, of the EC imports of ECU 1,898,000 in 1984, ECU 1,426,000 were accounted for by Belgian/Luxembourg. Our investigations indicate no market for sealskin products in Belgium. The figures are all the more surprising in that ECU 682,000 of the Belgian imports are recorded as coming from the Netherlands, a country in which there has been a voluntary ban on trade in sealskins since 1970. Similarily in 1985, of Community imports of ECU 922,000, ECU 630,000 are reported as having been from the Netherlands into Belgium/Luxembourg.

Our conclusion is that the Community's statistics on trade in pupseal articles are suspect, but that further light on this question could only be obtained by checking individual customs declarations.

Table 8

EC: Foreign Trade in Articles of Pup Sealskins, 1984-1986
(ECU '000)

	1984	1985	1986
Imports	1,898	922	736
of which:			
. Intra EC	1,512	813	680
. Extra EC	369	109	48
Exports	1,891	686	37,291 (443)
of which:			
. Intra EC	950	270	23,064 (214)
. Extra EC	939	416	14,225 (179)

Note: Figures in brackets excluding Greece

Source: Eurostat

SEALING INDUSTRIES

This section analyses in detail the sealing industries in the main supplying countries. Sealing is now only being conducted as a commercial activity by Canada, Norway and Greenland. Commercial sealing has now ceased in the United States and probably also in South Africa. Commercial sealing is conducted in the Soviet Union but for domestic consumption not for export.

NORWAY

The Sealing Industry

Norwegian sealing is conducted in two areas of the North Atlantic:

- The "East Ice" or Bering sea area, where only harp seals are caught.
- The "West Ice" or Jan Mayen area, where both harp and hooded seals are caught.

The hunt is carried out by professional sealers in ships, and in both areas under quotas agreed with the Soviet Union. Sealing takes place between end March and early May each year.

The seals are landed at Tromsoe where there is a deblubbering plant. Both the skins and the oil are exploited commercially. Since 1983 the Norwegian government has insisted that the carcasses should not be abandoned at sea, as a result attempts are being made to exploit the meat. Some is ground down into animal feed and some is given to the ships' crews as payment in kind, for their personal consumption.

Before 1983 Norwegian ships also sealed in Newfoundland for both harp and hooded seals, and under quotas set by the Canadian government. These seals were mostly deblubbered at a Norwegian-owned plant in Canada and the skins and oil shipped to Norway.

The East Ice quota was 19,000 harp seals in 1987. The quota has been increased regularly in recent years as the seal stocks recover from over-exploitation in the 1950's and 1960's. The Norwegians attempt to take up their full quota, and in most years the ice conditions enable them to do so. None of the harp seals taken are whitecoats.

Table 9

Norway: East Ice Quotas and Catches, 1979-1987
(Number)

Year	Quota	Catch
1979	16,000	13,531
1980	16,000	15,202
1981	17,500	17,465
1982	17,500	17,456
1983	18,000	18,089
1984	18,000	8,876
1985	19,000	19,007
1986	19,000	19,017
1987	19,000	19,000

Source: Fisheries Directorate

The West Ice catch was to a considerable extent for whitecoats and bluebacks. Difficult and unpredictable ice conditions meant that the catch fluctuated widely from year to year. When the Norwegians decided to stop the commercial whitecoat and blueback hunt in 1983 they ceased large scale sealing on the West Ice. But sealing for scientific purposes continued and in 1986 out of a total catch of 2,912, 2,738 were bluebacks. In 1987 the quotas and the catch increased dramatically. The Fisheries Directorate gives a number of reasons for this.

1. The desire to control the "harp seal invasion".
2. The presence of a coast guard vessel which helped the sealing ships to find the seals.
3. The fact that the decline in the fishing industry has made sealing more attractive.
4. A possible upturn in the market for sealskins.

Table 10

Norway: West Ice Quotas and Catches, 1979-1987

	Harp		Hooded	
Year	Quota	Catch	Quota	Catch
1979	20,000	12,780	28,720	20,181
1980	21,000	9,874	16,700	9,749
1981	21,000	11,782	16,700	11,738
1982	21,000	9,692	16,700	13,463
1983	14,000	3,318	16,700	86
1984	7,000	1,978	8,000	582
1985	7,000	557	8,000	338
1986	7,000	13	8,000	2,899
1987	20,500	11,444	16,700	7,794

Source: Fisheries Directorate

At the same time as they stopped large scale hunting on the West Ice, Norwegian sealers withdrew from Newfoundland altogether. The Newfoundland hunt had also been largely dependent on the hunt for whitecoats and bluebacks, and was as important as the West Ice.

Table 11

Norway: Newfoundland Quotas and Catches, 1979-1982

	Harp		Hooded	
Year	Quota	Catch	Quota	Catch
1979	20,000	20,288	9,000	8,306
1980	20,000	20,213	9,000	5,707
1981	22,000	22,382	9,000	5,367
1982	24,000	24,238	9,000	4,562

Source: Fisheries Directorate

The Norwegian sealing fleet consists of ships of around 400 tonnes with crews of about a dozen men. The ships are mainly based at Tromsoe and are used as fishing boats outside the sealing season. Since 1983 only 6 ships have been in use. Previously the number was considerably greater.

Table 12

Norway: Number of Ships, 1979-1986

Year	Total	Newfoundland	West Ice	East Ice
1979	18	4	10	4
1980	15	3	9	3
1981	14	3	6	5
1982	14	3	6	5
1983	6	-	2	4
1984	6	-	2	4
1985	5	-	1	4
1986	6	-	2	4

Source: Fisheries Directorate

The "first hand" value of the Norwegian catch, that is to say the price paid to the sealers, has fallen drastically from Nkr 13.5 million in 1982 to less than Nkr 2 million in 1986 due to a drop in the number of seals caught and a fall in the average value of each seal. The drop in the value of seals has been due to a fall in the value of skins which in 1982 represented nearly 90 per cent of the value of the catch.

Table 13

Norway: Value of Skins, 1979-1986

Year	Number of skins	Average value per skin (Nkr)	Skins as % of total value of catch
1979	75,088	150.9	88.5
1980	60,746	145.4	85.8
1981	68,745	143.5	84.9
1982	68,211	155.8	88.2
1983	21,493	74.0	68.7
1984	11,436	75.1	66.7
1985	19,902	38.8	49.9
1986	21,929	60.1	71.6

Source: Fisheries Directorate

The value of blubber on the other hand has held up, and in 1986 represented nearly 30 per cent of the value of the catch. In 1985 blubber had represented half of the value of the catch. The decline of the value of the blubber in 1986 compared to 1985 was due to the seals having less blubber, reportedly because they were underfed, possibly due to over population.

Table 14

Norway: Value of Blubber, 1979-1986

Year	Number of seals	Tonnes of blubber	Value of blubber (Nkr 000)	Average value of blubber (Nkr per kilo)
1979	75,088	1,475	1,475	1.0
1980	60,746	1,008	1,462	1.45
1981	68,745	1,322	1,754	1.32
1982	68,211	1,348	1,416	1.05
1983	21,493	631	724	1.15
1984	11,436	342	428	1.25
1985	19,902	621	776	1.25
1986	21,929	401	522	1.30

Source: Fisheries Directorate

We have no information on the value of the meat, much of which, as previously stated, is given to the crews of the sealing ships.

The Norwegian sealing fleet is now heavily subsidised. Up to 1982 the subsidy was in the form of a payment around Nkr 1 per kilo for the blubber. As from 1983 the blubber subsidy was phased out and replaced by a subsidy based on:

a) A payment to the ships for each day they stayed in the sealing area.

b) A payment for each seal caught.

In addition payments are made for tagging. The 1987 budget for the subsidy is Nkr 7 million which would be paid if all ships stayed for the maximum 30 days in the sealing areas, and if the full quota of seals was caught.

In previous years subsidies paid out were as follows:

	(Nkr millions)	
1979	1.46	
1980	1.50	
1981	1.98	
1982	1.98	
1983	4.49	(including Nkr 690,000 blubber subsidy)
1984	4.26	
1985	4.85	
1986	4.84	

As can be seen, in 1983, the year in which Norway withdrew from Newfoundland, and reduced activity of the East Ice, the value of the subsidy more than doubled. In 1986 the subsidy represented two and a half times the first hand value of the catch and was equivalent to Nkr 220 per seal caught. In 1982 the subsidy had represented only 15 per cent of the value of the catch and Nkr 29 per seal caught.

It is obvious from these figures that, without the subsidy, Norwegian sealing would cease. There are a number of reasons why Norway continues to subsidise sealing in this way. Although sealing has never been a very large industry compared to fishing, it is of considerable importance to some small communities. Norway also feels that it is prudent to keep a sealing capability in being in case the market revives and to be able to control seal stocks if this proved necessary to protect the fisheries. No doubt there are political and strategic considerations in that Norway would not like to abandon sealing entirely to the Soviet Union in these sensitive areas. The way the subsidy is applied suggests that this may be the case.

Trade in Sealskins and Other Products

Norway is the world's largest trader in sealskins. She imports raw skins which are dressed or tanned in Norway. Most of the dressed or tanned skins are then exported because there is little demand for sealskins within Norway. The skins from the Norwegian catch are also dressed and tanned in Norway before being exported. In the four year period, 1979-82, that is to say before the collapse of the market, Norway obtained the following rawskins:

. Canada (including Norwegian catch in Canadian waters)	467,553
. Norway (excluding Norwegian catch in Canadian waters)	162,917
. Denmark/Greenland	71,288
. South Africa/Namibia	125,490
. Others	30,594
Total :	857,842

This quantity represented about 55 per cent of the commercially available raw skins worldwide during the period. In particular, according to Canadian statistics, Norway took 67 per cent of Canadian exports during the period. Norway's imports also represented 28 per cent of skins commercially available from Greenland, and 41 per cent of those available from South Africa/Namibia. The only important source of sealskins not handled to a greater or lesser degree by Norway was the United States, where, as described elsewhere, an American company had the monopoly of dressing.

In the four year period 1983 to 1986, Norwegian imports of sealskins have fallen sharply, as has the number of skins available from Norway's own catch. Nevertheless, Norway's relative importance in the declining international sealskin trade has probably not decreased. During the period Norway actually imported more skins from Greenland (99,109) than in the previous four years, and took 100,000 skins from Canada, representing 97 per cent of Canada's much reduced exports. On the other hand, Norway has taken no skins from South Africa since 1982.

The sharp decline in the number of skins imported has been accompanied by a drop in the average value per skin. As a result the total value of Norwegian imports is only a fraction of previous levels.

Table 15

Norway: Imports of Sealskins, 1979-1986

Year	Quantity	Value (Nkr'000)	Average Price (Nkr per skin)
1979	197,795	17,156	86.7
1980	115,834	13,353	115.3
1981	250,802	24,269	96.8
1982	130,494	15,143	116.0
1983	108,342	10,650	98.3
1984	38,357	1,425	37.2
1985	66,375	3,788	57.1
1986	15,656	668	52.3

Source: Fisheries Directorate

Norwegian foreign trade statistics do not provide information on the number of dressed skins exported, only on their value. Norway has traditionally exported dressed skins all over the world, but about 80 per cent of exports have been to the EC, and much of the remainder to other West European countries. Among the few significant markets outside Europe have been Canada and Japan. Until 1982 the Soviet Union was also an important customer, but this trade appears to have stopped. It is understood that the Soviet Union brought these skins to auction in Leningrad rather than for domestic consumption. Eurostat data indicate that Norway has consistently supplied around 50 per cent of EC imports of dressed skins. This was still the case in 1986.

As previously indicated, Norway uses considerable quantities of blubber which is turned into seal oil. A few thousand Kroners worth of seal oil used to be exported to Western Europe, but since 1981 no exports have been recorded in the Norwegian statistics. Neither, as far as can be determined, does Norway export seal meat.

The G.C. Rieber Company

The G.C. Rieber Company based at Bergen occupies a key position in the Norwegian sealing industry and in the international trade in sealskins. Rieber owns some of the sealing ships, the deblubbering plant at Tromsoe, and the skin processing facilities at Bergen. The Rieber subsidiary, Carino, operates the largest deblubbering plant in Canada. Rieber handles the whole Norwegian catch and the greater part of the Canadian catch, as well as importing sealskins from other sources.

Before the start of the 1983 sealing season, Rieber announced that it was closing the Carino plant and would not accept any seals in Canada that year. Also that it would cease to handle whitecoats or bluebacks from any source. As a result the "large ship" hunt in Canada by both Norwegian and Canadian ships and the Norwegian commercial hunt on the West Ice ceased. The catch in the Canadian Atlantic coast fell from 182,000 in 1982 to 57,000 in 1983, while the West Ice catch fell from 23,000 to just over 3,000, and no whitecoats or bluebacks were taken in either area.

The direct result of the Rieber decision therefore was that the number of commercially available seals fell by about 35 per cent in 1983 compared to 1982. Rieber took this decision for both commercial and political reasons. Demand for sealskins was already beginning to decline and the anticipated EC ban on whitecoats and bluebacks would virtually kill the market for these products which were the basis of the Canadian large ship and the West Ice hunts. Also Rieber had been under severe pressure from the anti-sealing movement.

Subsequently Rieber reduced its processing facilities in Bergen. This plant which previously both dressed skins for garment purposes and tanned for the footwear industry now only tans skins. According to Mr Levitan, Rieber supplies about 90 per cent of European requirements of tanned skins for footwear purposes.

Although Norwegian sealers have been absent from Canada since 1982, Rieber has bought a large part of the Canadian catch in the period 1983-1986. Canadian statistics show that Norway imported over 90,000 skins (64,000 skins in 1983 and 29,000 in 1985) from Canada in this period representing 97 per cent of Canadian exports and about 70 per cent of the Canadian catch. In 1987, the Carino plant was reopened on a reduced scale.

Rieber also bought a proportion of the stocks of the old Royal Greenland Trade Department, and has come to an agreement with the new authorities in Greenland whereby skins from Greenland will be marketed by Rieber. This is described in more detail in the section on Greenland.

The "Invasion" of Seals in Norway

Since 1982 a growing number of harp seals have been accidently trapped in fishermen's nets along the coast of Norway. At first the numbers were quite small but they increased sharply in 1986 and then dramatically in 1987 to what is generally agreed to be catastrophic proportions. Moreover the "invasion" has spread further and further south and in 1987 some seals even appeared in the Oslo Fjord. Official statistics are based on the compensation paid to fishermen for damage to their year. Since the fisherman has to produce the seal to obtain the compensation the official figures underestimate the number of seals caught in this way. It is not always worth the fisherman's trouble to manhandle a large animal for the sake of the compensation which is now Nkr 400.

Table 16

Norway: The Seal "Invasion", 1982-1987

Year	Number of seals	Total compensation paid (Nkr)
1982	517	180,950
1983	855	299,250
1984	1,236	494,400
1985	1,225	490,000
1986	4,049	1,649,530
1987	60,000+ (a)	18,778,100 (b)

(a) forecast
(b) paid to end June 1987

Source: Fisheries Directorate

There does not appear to be any clear explanation of this invasion. Tagged seals from both the East and West Ice have been found. Because of damage to their skins and the cost of collecting them these seals have absolutely no commercial value.

Both the Norwegian government, and people with a commercial interest in sealing such as Rieber, or in the sealskin trade, see this invasion as an argument for lifting the EC ban. Any Norwegian cull to reduce the harp seal population would presumably have to take place on the West Ice, unless they could persuade the Soviets to increase their West Ice quota. Large numbers of seals can only be killed when they congregate on the ice during the breeding season. According to Mr Rieber, depending on whether the bodies were abandoned, or whether they were recuperated, and given favourable ice conditions, up to 50,000 harp seals could be taken on the West Ice by Norwegian sealers. Most of these would have to be pups. It would not be possible to take such a large quantity of adults.

The Domestic Market

Norwegian statistics, because they show exports of dressed skins in value only, not in units, do not allow calculations of domestic consumption of sealskins to be made.

There is not now, and never has been, a large market for sealskin garments in Norway. A few sealskin garments were found on sale in Oslo during a check in the summer of 1987. Small quantities of sealskin garments are produced and there are a number of small manufacturers of sealskin footwear, souvenir items and leather goods.

One of the largest of these, a company in Bergen, told us that in 1986 his production amounted to 8,000 pairs of footwear equivalent to 1,000 to 2,000 skins. This was about one third of the level of its peak year in 1980 before the anti-sealing campaign took effect. The manager specifically blamed the campaign against the pup seal hunt for the decline in demand and especially the loss of export markets, although pup skins are not used for footwear. According to him, the best export market for sealskin footwear is France. He sees some signs that the market is improving.

We estimate that the Norwegian sealskin garment footwear, souvenir items and leather goods industry, which depends considerably on the tourist trade may be using 10,000 sealskins a year. Most, if not all, of these skins are provided by Rieber.

Table 17

Norway: Catch by Norwegian Sealers by Region and Species, 1979-1987
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986	1987 p
Total	75,088	60,746	68,745	68,211	21,493	11,436	19,902	21,929	38,238
Newfoundland	28,594	25,920	27,749	28,800	-	-	-	-	-
Harp	20,288	20,213	22,382	24,238	-	-	-	-	-
of which:									
. whitecoat	20,137	20,121	14,816	23,444	-	-	-	-	-
Hooded	8,306	5,707	5,367	4,562	-	-	-	-	-
of which:									
. blueback	6,731	4,987	4,084	3,329	-	-	-	-	-
West Ice	32,963	19,624	23,521	23,155	3,404	2,560	895	2,912	19,238
Harp	12,780	9,874	11,782	9,692	3,318	1,978	557	13	11,444
of which:									
. whitecoat	4,406	-	6,669	3,458	-	11	25	4	n.a.
Hooded	20,181	9,749	11,738	13,463	86	582	338	2,899	7,794
of which:									
. blueback	16,098	8,391	10,569	11,069	-	99	254	2,738	n.a.
East Ice	13,531	15,202	17,465	17,456	18,089	8,876	19,007	19,017	19,000
Harp	13,531	15,202	17,465	17,456	18,089	8,876	19,007	19,017	19,000
of which:									
. whitecoat	113	35	11	-	-	-	-	-	n.a.
Total whitecoat	24,656	20,156	21,496	26,902	-	11	25	4	n.a.
Total blueback	22,829	18,378	14,653	14,399	-	99	254	2,738	n.a.

p provisional

Source: Fisheries Directorate

Table 18

Value of the Norwegian Catch, 1979-1986

	1979	1980	1981	1982	1983	1984	1985	1986
No. of seals caught(a)	75,088	60,746	68,745	68,211	21,493	11,436	19,902	21,929
First hand value of catch (Nkr '000)								
Total	14,272	11,796	13,604	13,524	3,005	1,287	1,548	1,840
of which:								
. furs	11,334	8,832	9,867	10,628	1,591	859	772	1,318
. blubber	2,938	2,964	3,737	2,896	1,414	428	776	522
. blubber subsidy	1,463	1,502	1,983	1,480	690	-	-	-
. blubber excluding subsidy	1,475	1,462	1,754	1,416	724	428	776	582
. furs + blubber excluding subsidy	12,809	10,294	11,621	12,044	2,315	1,287	1,548	1,840
Average first hand value (Nkr per seal)								
Total	170.6	194.6	197.6	198.3	139.8	112.5	77.8	83.9
of which:								
. furs	150.9	145.4	143.5	155.8	74.0	75.1	38.8	60.1
. blubber	39.1	48.8	54.3	42.5	65.8	37.4	39.0	23.8
. blubber excluding subsidy	19.6	24.1	25.5	20.8	33.7	37.4	39.0	23.8
. furs + blubber excluding subsidy	170.6	169.5	169.1	176.6	107.7	112.5	77.8	83.9

(a) Commercial hunt, excluding seals caught for scientific purposes or accidently in gillnets.

Source: Fisheries Directorate

Table 19

Norway: Imports of Sealskins, 1979-1986

	1979	1980	1981	1982	1983	1984	1985	1986
Raw skins								
Total Volume (number)	197,795	115,834	250,802	130,494	108,342	38,357	66,375	15,656
of which from:								
. Canada	110,327	85,645	159,302	112,279	77,769	-	28,926	-
. Greenland	-	79	17,595	6,269	27,958	21,897	34,018	11,380
. Denmark	15,998	21,568	6,510	3,269	-	-	-	3,856
. South Africa/ Namibia	61,493	-	57,297	6,700	-	-	-	-
Total Value (Nkr '000)	17,156	13,353	24,269	15,143	10,650	1,425	3,788	668
Dressed skins (a)								
Total Value (Nkr '000)	1,046	564	544	1,826	1,393	1,027	127	-
Raw and Dressed skins								
Total Value (Nkr '000)	18,202	13,917	24,813	16,969	12,043	2,452	3,915	668

(a) Norway does not provide statistics on the number of dressed skins

Source: Central Bureau of Statistics

Table 20

Norway: Exports of Sealskins, 1979-1986
(Nkr '000)

	1979	1980	1981	1982	1983	1984	1985	1986
Total	46,274	52,993	51,581	46,004	25,955	12,027	10,578	16,655
of which:								
.Raw skins								
- of which:								
. Whitecoats	547	1,596	463	1,856	279	-	-	-
. Bluebacks	662	3	78	141	31	-	-	-
. Others	1,330	1,008	1,549	1,630	254	254	472	222
.Dressed skins	44,350	50,386	49,491	42,377	25,391	11,773	10,100	16,433

Source: Central Bureau of Statistics

CANADA

Canada has two distinct sealing industries: the Atlantic Coast Hunt which is conducted during a two month period in the spring, and which is mainly for harp and hooded seals, and the Arctic hunt carried out all round the year and which is mainly for ring seals.

Atlantic Coast Hunt

Until 1982 the Canadian Atlantic Coast Hunt was by far the largest in the world. Up to 200,000 seals, ie. nearly half the total world supply were caught each year. The hunt was subject to quota restrictions on both harp and hooded seals and part of the quota was allocated to the Norwegians. The hunt was conducted by a combination of "large ships" operated by commercial organisations, and by local hunters operating on foot, "landsmen", or in small ships, "longliners". Some of the large ships were owned by Norwegians.

About three-quarters of the catch was for whitecoats and bluebacks. The large ships in particular which took over half the catch were almost entirely dependent on the whitecoat and blueback hunt. It may be noted that the quantities taken by the large ships were fairly constant from year to year whereas the landsman and longliner hunt which is more affected by ice and weather conditions, fluctuated from year to year. The skins were deblubbered at two deblubbering stations, one owned by the Carino Company, a subsidiary of Rieber, and one owned by the Karlsen Shipping Company, a Canadian company founded by Norwegian interests in 1940. The deblubbered skins and the oil were shipped to Europe. A considerable proportion of the meat was consumed locally, and some was used by a small cannery.

In 1983, in anticipation of the fact that there would be no market for whitecoat and blueback skins as a result of an EC ban, the large ships did not participate in the hunt with the exception of one ship taking seals for scientific purposes, and both the Carino and Karlsen deblubbering plants were closed. As a result the hunt fell to 57,000 in 1983 compared to 182,000 in 1982. It is understood that most of the skins were abandoned for lack of deblubbering facilities, although some deblubbering was done by hand. In the three following years the hunt fell to even lower levels. In 1984 the Canadian government paid C$ 630,000 in compensation to the 3,000 sealers in respect of lost revenues from the 1983 hunt. In 1985 compensation of C$ 200,000 was paid in respect of the 1984 hunt. It seems that the motive for the hunt in these years was to obtain the meat since the skins were virtually worthless. None of the seals taken were whitecoats or bluebacks as the Canadian government had prohibited the taking of pups.

In 1986 a deblubbering facility with the help of public funds was opened at Fleur de Lys. In 1987 the Carino plant also opened again although at a much reduced capacity compared to former years, and the hunt increased to over 40,000. A few thousand of these were taken by two large ships which had been licensed to seal by the government. Although these ships were not allowed to take pups, and had little success, the permission given to them was received with dismay by the Canadian Sealers' Association representing the landsmen and longliners. The Sealers' Association feel that a revival of the sealing industry which they are attempting to bring about with government support will be jeapordised if big ships operate, and if anti-sealing campaigns are renewed.

The Arctic Hunt

The Canadian Arctic hunt is very similar to that of Greenland in that it is conducted by Inuits all the year round, is mainly for ring seals, and the skins are cleaned and dried by the hunters (or their wives), rather than in industrial deblubbering plants. The critical difference is that the Canadian Inuits, unlike the Greenlanders, do not benefit from guaranteed prices. No reliable data are available on the catch, but information is available on sales of skins by the hunters. These sales are mainly made to the Hudson's Bay Company. Statistics show that sales, which in some years reached 40,000, began to decline in 1982 and have since almost totally collapsed. The price of about C$ 10 obviously does not justify the effort of preparing the skins for market.

The Canadian government paid C$ 50,000 in compensation for loss of revenues in 1984 and a further C$ 40,000 in 1985, and has instituted a subsidy of C$ 5 per skin. It is probable that the Canadian Arctic catch has declined since the Canadians are more dependent on mechanical transport such as snowmobiles than the Greenlanders, and the loss of revenues means that they are not able to afford to hunt. This in turn has had unfortunate consequences for their food supplies and has made them more dependent on imported products.

The Royal Commission on Seals and the Sealing Industry recommended that the government distribute up to C$ 4 million annually to enable the Inuits to continue subsistence hunting. It is also suggested that they might wish to establish an indigenous industry to produce garments and footwear. At the time of writing we do not know whether these suggestions have been followed up.

In a separate move representatives of the indigenous hunters of Canada, Alaska and Greenland have set up "Indigenous Survival Internationale" to "protect aboriginal harvesting rights and to maintain an international market for fur resources".

Foreign Trade

Almost all the seals caught in Canada used to be exported. Norway, via the Rieber company took the greatest part of the Atlantic catch which had been processed by Carino. Much of the Arctic catch was sent via the Hudson's Bay Company to London for auction. A considerable part of the Atlantic catch processed by Karlsen was sent to Finland or Sweden for dressing. The other markets were Germany, Switzerland and France.

Since 1983 the main customer has been Norway. In 1983, 64,000 skins, presumably held over from the 1982 hunt were shipped to Rieber. There were no significant exports in 1984. In 1985 another batch of 29,000 skins were shipped to Rieber, and in 1986, again, there were no significant exports.

The Domestic Market

Consumption of sealskins within Canada has been estimated at around 20,000 skins a year, all or nearly all of which have been dressed or tanned abroad. Foreign trade statistics indicate that 5-10,000 of these skins have been Pacific fur sealskins imported from the United States and used in the fur garment industry. We have also found evidence of a few thousand tanned skins without the fur being imported each year from the United Kingdom for the footwear industry. At least one Canadian company in Newfoundland makes footwear with the fur on.

Canada is now looking at the possibility of creating an indigenous industry. A first step has already been taken with the opening of the Fleur de Lys processing plant. The Royal Commission report notes that "an Ontario manufacturer has expressed some interest in receiving 30,000-50,000 pelts a year to make waterproof leather products for the national market". Feasibility studies on small scale production of items such as hats, gloves and slippers in the sealing areas are being carried out. We understand that the Sealers' Association is thinking in terms of a hunt of about 50,000 seals a year and which would not take pup seals. The evidence is that the landsmen and longliners would be capable of achieving these numbers, and it is possible that in the longer term the domestic market could absorb such numbers.

Table 21

Catch on Canadian Atlantic Coast (a), 1979-1987
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986	1987(p)
Total	179,028	192,415	213,848	182,336	56,925	33,337	21,476	25,714	42,269
of which:									
. Harp	160,541	171,929	200,162	166,739	55,914	30,900	17,723	25,357	38,824
of which:									
. whitecoat	120,134	104,735	151,161	114,445	-	-	-	-	-
. Hooded	15,125	13,053	13,686	10,393	129	444	452	6	1,437
of which:									
. blueback	11,948	11,098	10,671	7,757	-	-	-	1	-
. Others	3,362	6,552	n.a.	5,204	882	1,993	3,301	351	2,008
of which by:									
. Large ships	112,668	105,285	116,939	109,109	2,966	1,015	n.a.	n.a.	n.a.

(a) including catch by Norwegian sealers up to and including 1982
(p) provisional

Source: NAFO and Fisheries and Oceans

Table 22

Sales of Sealskins in the North West Territories, 1979-1986
(Number)

1979	1980	1981	1982	1983	1984	1985	1986
29,352	30,860	42,120	24,512	14,837	7,689	5,419	n.a.

Source: Government of the North West Territories

Table 23

Canada: Exports of Sealskins, 1979-1986

	1979	1980	1981	1982	1983	1984	1985	1986
Value (C$'000)	4,680	3,191	6,007	3,689	1,442	38	658	7
Volume (number)	165,082	170,748	224,115	137,164	65,629	838	29,519	100
of which to:								
. Germany	11,064	13,294	9,725	563	-	170	-	-
. Switzerland	29	5,275	1,369	1,855	-	118	-	-
. Norway	106,032	93,443	156,243	103,614	63,836	-	29,296	-
. Finland	22,984	17,819	33,712	14,243	-	-	-	-
. U.K.	16,473	22,748	19,565	15,817	1,025	-	-	-
. France	1,593	3,649	3,252	612	-	-	-	-
. Sweden	7,561	5,403	14,520	1,369	1,855	-	-	-

Source: Statistics Canada

GREENLAND

Sealing

About 90,000 seals are taken in Greenland each year. The exact figure is not known because of the partial breakdown of the reporting system.

About 70 per cent of the catch is of ring seals, 20 per cent harp seals, 5 per cent hooded seals, and the remainder harbour and bearded seals. For reasons which are not fully understood the proportion of harp seals taken has been increasing in recent years. None of the harp seals taken are whitecoats, but some of the hooded seals are bluebacks. The number of hunters is believed to be around 3,000, although again this figure is not known accurately because of the breakdown of the reporting system.

In small settlements in the seal hunting areas, hunting seals and other game is a full time occupation for some people. In larger settlements and in the cod fishing areas hunting is mainly a part time occupation. If the figures are accepted on their face value the average is 30 seals per year per hunter. However a man whose livelihood largely depends on sealing, needs to catch between 100 and 200 seals a year to support his family. It is therefore likely that full time hunters account for a large proportion of the catch. According to Finn Kapel of the Greenland Fisheries and Environment Research Institute, "the main impulse to hunt seals in Greenland is apparently still the desire to meet subsistence need". Seal meat forms a major part of the diet of the hunters and is the main food of the sledge dogs.

There are few restrictions on hunting seals in Greenland. No quotas are applied even on harp and hooded seals. Hunting takes place throughout the year. Methods vary depending on the time of year, the district and the species of seal being hunted. The methods used are netting and shooting, either on the ice or in the water. Small boats with outboard motors or dog sledges or a combination of both depending on circumstances are used to approach the seals and to recuperate the carcasses. No accurate information is available on the relative importance of different hunting methods. It is known that a considerable proportion of ring seals are netted, while harp and hooded seals are only taken by shooting.

Although the main motive for hunting seals is to obtain the meat, cash income from the sale of skins is necessary to buy the equipment, ammunition, etc. to be able to continue the hunt. If this cash income was not forthcoming, the hunt, at least by full time hunters, would cease and, according to the Greenland Home Rule Administration, it would probably be necessary to move the hunters to the "towns" and support them by social security payments.

The skins are bought by the Greenland authorities at guaranteed prices which depend on the size, species and quality of the skin. Each year about 50,000 skins representing around 55 per cent of the catch are bought. The other skins are kept by the hunters for various reasons. They may want them for their own use, a skin may command such a low price

that it does not justify the time and effort of preparing it for sale. According to Finn Kapel the hunters' interest in preparing the skins for sale has declined in recent years because of unfavourable prices.

The Greenlanders deblubber the skins by hand and dry them before selling them. This is unlike the situation for the Norwegian and Canadian Atlantic hunt where the skins are processed industrially. In Greenland the skins are processed by women, who are showing an increasing reluctance to do this job. The low prices for skins are also affecting hunting practices. Whereas in the past nets would be checked once a day, they may now be checked only two or three times a week. As a consequence the skins are more likely to be damaged by crabs and other predators.

In an attempt to overcome these problems which are resulting in a decline in the quality of the skins, the guaranteed price structure has been changed to favour high quality skins, and to penalize low quality skins. Plastic containers are also being supplied by Rieber (see below) in which the skins can be preserved in salt before deblubbering. The guaranteed prices work out at an average of over Dkr 200 per skin, which is now far above the market price. However cash payments to sealers have remained at about Dkr 10 million a year for a number of years which implies a declining income in real terms. Moreover the hunters no longer benefit from the profits of the sales of skins in Europe which used to be distributed as a bonus. There are now no profits.

Marketing

Until 1985 the skins were purchased from the hunters by an agency of the Danish government, the Royal Greenland Trade Department (RGTD) according to a published schedule of prices. The RGTD shipped the skins to Denmark where most were sold at auction in Copenhagen. Others were sold by "private treaty". Around 80 per cent of the skins sold were of ring seals which were used by Danish and German manufacturers for the production of fur coats. A large number of ring sealskins were also used by the German footwear industry. A number of companies in Finland and Sweden specialised in dressing ring sealskins.

As from 1982 the prices obtained at auction began to decline sharply and by 1985 reached a record low level of Dkr 36 per skin, a price which probably did not even cover the cost of shipping the skins from Greenland. It was therefore decided to stop selling at auction, although the RGTD continued to sell privately at very low prices.

In 1985 following the transfer of responsibility from the Danish government to the Greenland Home Rule Administration, the functions of the RGTD were handed over to Greenland, and its activities were split. A new organisation, KTU became responsible for purchasing within Greenland, while Greenland Trading, as it was renamed, became responsible for overseas sales of Greenland produce. KTU continued paying hunters guaranteed prices for their sealskins, but as mentioned above the price structure was changed to encourage higher quality. The cost of paying what are now heavily subsidised prices now comes out of the budget of the Home Rule Administration rather than that of the Danish government. At

the same time the Greenland Assembly decided, in the words of the Home Rule Administration, "to take over a private tannery and by investments over a five year period enable this Home Rule company to purchase, prepare and sell products from most of the yearly harvest of skins". This tannery, called KNA or "Greenland Tannery", has received technical assistance from the Norwegian company Rieber which has given training to tannery workers in Bergen. Rieber has also agreed to tan and market any Greenland skins which KNA does not need for its own purposes. The Greenland Home Rule Administration is expecting 50,000 skins a year to become available during the coming years.

In 1986 Greenland Trading liquidated its stocks of sealskins, which had been held at Alborg, at give-away prices. The purchasers were Danish and German. It is understood that the Germans sent many of the skins to Greece and Malta to be made up into garments for sale to Eastern Europe and the Soviet Union. As from January 1 1987, Greenland Trading no longer deals in sealskins, for which KNA is now solely responsible.

According to the Home Rule Administration, KNA is planning to manufacture 1,000 sealskin fur coats in 1987 for sale in Europe, and will be participating in fur trade exhibitions in Denmark, France and Germany. The Greenlanders have concluded that they must concentrate their marketing efforts on the traditional markets of Western Europe. They also accept the fact that KNA must continue to be heavily subsidised. 1,000 fur coats would need 5,000-6,000 skins, or about 10 per cent of the total number available. Skins will also be used to manufacture items for local consumption. According to Mr Rieber, KNA faces numerous problems including those of transporting and sorting the skins, developing the necessary skills to dress skins and manufacture garments and developing markets before the financial resources are exhausted. People in the Danish fur trade to whom we have spoken are sceptical about KNA's chances of success.

A very small proportion of the meat and blubber is sold commercially. In 1985, 79 tonnes were sold whereas the catch would have produced several thousand tonnes. Income from these sales in 1985 amounted to Dkr 236,000, or about 2 per cent of the seal hunters' cash income.

Table 24

Greenland: Catches of Seals, 1979-1983
(Number)

	1979	1980	1981	1982	1983
Total	111,027	94,324	97,962	96,453	92,794
of which:					
. Ring seals	97,326	74,543	76,989	71,491	67,182
. Harbour/Common seals	38	44	37	64	56
. Bearded seals	784	698	658	888	918
. Harp seals	12,963	12,623	14,081	17,561	19,153
. Hooded seals	5,916	6,416	6,197	6,449	5,485

Source: Home Rule Administration

Table 25

Greenland: Purchase of Seal Skins by the RGTD, 1979-1985

	1979	1980	1981	1982	1983	1984	1985 (a)
Volume (Number)							
Total	82,543	63,373	55,593	54,945	47,820	52,492	50,526
of which:							
. Ringed Seals	72,124	54,035	47,997	45,152	39,070	43,594	38,692
. Harp Seals	6,977	6,790	5,641	7,319	7,240	7,505	9,419
. Other Seals	3,442	2,548	1,955	2,474	1,510	1,393	2,415
Value (Dkr '000)							
Total	9,949	8,416	7,734	8,706	8,454	9,585	10,860
of which:							
. Ringed Seals	8,343	6,825	6,505	6,777	6,603	7,651	7,926
. Harp Seals	1,140	1,161	1,025	1,476	1,559	1,629	2,309
. Other Seals	466	430	204	453	292	305	625
Plus bonus	102	860	63	17	-	-	-
Total including bonus	10,051	9,276	7,797	8,723	8,454	9,585	10,860

(a) KTU as from January 1 1985

Source: Ministry for Greenland

Table 26

Cash(a) Income of Greenland Sealers, 1979-1985
(Dkr '000)

	1979	1980	1981	1982	1983	1984	1985
Sales of:							
. skins(b)	10,051	9,276	7,797	8,723	8,454	9,585	10,860
. meat and blubber	621	1,061	1,206	773	1,022	410	236
Total	10,672	10,337	9,003	9,496	9,476	9,995	11,096

(a) ie. sales to RGTD (KTU as from January 1 1985), and private customers
(b) including bonus

Source: Ministry for Greenland and MIA calculations

Table 27

Greenland: Sales Volume of RGTD Auctions, 1979-1985

(Number)

	1979	1980	1981	1982	1983	1984	1985
Ringed	60,016	65,510	61,230	39,195	11,249	35,260	14,316
Harp							
Beater/Bedlamer	4,556	6,112	5,349	4,842	4,480	4,729	)
Adult	588	775	1,034	942	1,040	691	)4,882
Hooded	2,721	2,383	2,461	1,319	-	1,181	-
Total	67,881	74,780	70,074	46,298	16,769	41,861	19,198

Source: Royal Greenland Trade Department

Table 28

Greenland: Average Prices at RGTD Auctions, 1979-1985

(Dkr per skin)

		1979	1980	1981	1982	1983	1984		1985
Ringed	1.	133	174	127	93	56	62	)	
	2.	129	144	101	83	-	46	)	
								)	
Harp									36
Beater/bedlamer		267	315	289	217	79	56	)	
Adult		261	301	341	224	86	59	)	
Hooded		308	388	309	354	-	121		-

1. Spring auction
2. Autumn auction

Source: Royal Greenland Trade Department

Table 29

Greenland: EC Imports of Sealskins, 1979-1986

Imports from Greenland	1979	1980	1981	1982	1983	1984	1985	1986
Total	116,389	120,770	107,680	104,808	59,391	62,036	50,811	84,211
of which to:								
. Denmark	116,104	113,491	99,417	87,810	53,281	62,036	49,676	52,365
. Germany	-	-	2,197	7,996	2,062	-	1,135	31,846
. France	375	7,279	6,066	9,002	4,048	-	-	-
Re-Exports to Greenland	24,899	31,760	11,701	39,553	4,493	1,478	2,009	406
Net Imports from Greenland	91,490	89,010	95,979	65,255	54,898	60,588	48,802	83,805

Source: Eurostat

UNITED STATES

There is now no commercial hunt for seals in the United States. Up to 1984 a commercial hunt was conducted under the Interim Convention on the Conservation of North Pacific Fur Seals between the United States, the Soviet Union, Canada and Japan. Under this Convention the United States had been taking about 25,000 seals a year on the Pribilof Islands, and the Soviet Union, 5,000 seals a year. The two countries shared 15 per cent of their catch with each of Canada and Japan. The United States Senate refused to renew the Convention in 1985, partly because of fears about the seal stocks, and partly also because of protests by animal rights movements.

The local inhabitants in the United States-owned islands have, however, been permitted to continue sealing for subsistence purposes and for the production of "traditional" handicrafts. They have shown little interest in this activity and the catch fell to under 2,000 in 1986.

Previously all the skins from the United States hunt were dressed by the Fouke Company of Greenville, North Carolina, which had a monopoly, and sold at auctions by Fouke. The proceeds from the sales were used by the United States government to pay local people to conduct the hunt. Japan and Canada received their share of the profits. However the collapse in the price of sealskins and the decline in the volume of sales, meant that from 1982 the cost of the hunt and of dressing was not covered by the value of sales. Revenues of the Fouke Company also declined.

The existing stocks of undressed skins carried over from previous years were given, in 1984, by the United States government to the Tanadusix Corporation, the local cooperative set up to handle sealing on the Pribilofs. These stocks could be traded commercially, but skins obtained from seals caught since then can only be used for traditional purposes, as under the Marine Mammals Protection Act of 1972, trade in sealskins in the United States is prohibited. The North Pacific Fur Seal hunt had been carried out under an international treaty, now lapsed, which overrode domestic legislation.

Most of the skins were exported from the United States, the main markets being Western Europe and Canada, with some going to Japan, for the manufacture of fur coats. Exports continued at a significant level until the end of 1986 but are now understood to have tailed off.

We also understand that the US Department of Commerce is prosecuting the Fouke Company and the native cooperative for illegal trade in skins caught since 1984, and further that the Fouke Company has filed for bankruptcy.

Although the United States has expressed interest in signing a new treaty to protect the species, there is no likelihood of the commercial hunt being renewed. Nor, on present evidence, is there much likelihood of the Pribilof Islands becoming a source of native sealskin handicrafts for the world market.

Table 30

United States Catch, 1979-1986

1979	1980	1981	1982	1983	1984	1985	1986
25,767	24,327	23,928	24,828	25,768	22,066	3,713	1,423

Table 31

United States: Fouke Company Auctions of Dressed Skins on Behalf of US Government 1979-1983

	1979	1980	1981	1982	1983
Number of skins	15,591	18,145	17,364	21,709	9,571
Total proceeds (US$ '000)	1714.1	2028.8	1569.6	1391.8	647.3
Average price per skin (US$)	109.94	111.81	90.44	64.11	67.63

Table 32

United States: Exports of Sealskins, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Total	23,422	21,592	14,834	31,123	7,870	14,589	13,029	10,837
- of which to: Canada	10,691	4,484	6,121	28,592	5,530	10,182	12,468	10,807
EC	7,204	9,911	4,056	1,693	1,137	3,914	128	30

Source (above tables): United States Department of Commerce

SOUTH AFRICA

The South African hunt 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 mainly for the purpose of wildlife management.

The 1985 hunt amounted to 33,890 compared to 90,000 in previous years. But according to some reports many of the seals were left to rot on the beach. We understand there was no hunt in 1986, but our letter to the South African authorities asking for information has not been answered.

Table 33

South Africa/Namibia: Fur Seal Catch, 1979-1985
(Number)

	1979	1980	1981	1982	1983	1984[a]	1985
Total	75,470	66,521	68,605	91,425	45,969	72,500	33,890
of which:							
. South Africa	n.a.	n.a.	n.a.	n.a.	-	19,500	10,196
. Namibia	n.a.	n.a.	n.a.	n.a.	45,969	53,000	23,694

a quota

Source: South African Department of Environment Affairs

Table 34

Imports of Sealskins from South Africa by the EC and Norway, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Norway	61,493	-	57,297	6,700	-	-	-	-
EC	441	20,232	38,304	31,175	58,219	4,355	14,596	1,960
of which:								
. Germany	-	18,130	38,018	28,875	57,219	4,355	14,595	1,960

Source: Fisheries Directorate, Norway and Eurostat

THE SEALSKIN INDUSTRY

As sealing throughout the world, and consumer demand for sealskin products, have declined, the sealskin industry, which is composed of traders, processors, and manufacturers of sealskin items, has also declined.

TRADERS

The Royal Greenland Trade Department, which handled the total Greenland catch, held its last auction in 1985, and since January 1987 no longer handles sealskins. It had previously disposed of its entire stock at give-away prices. Hudson's Bay Company in Canada has virtually ceased buying sealskins from the Canadian Arctic. Hudson's Bay & Annings, which held regular auctions and McMillan & Moore, both in London, appear to be no longer handling sealskins. In the United States, the auctions organised by the Fouke Company ceased in 1983 and Fouke has filed for bankruptcy. The fact that public auctions are no longer being held is considered as a serious disadvantage in the trade since it makes it difficult for traders and buyers to deal. All other types of furskins are sold at auctions. One trader told us that the market cannot revive until the auctions are reintroduced. Other traders have seen their sealskin business drop considerably. There is now no longer an effective world market in sealskins. The Rieber company controls the Norwegian catch, and has an interest in the Greenland catch, and both the Greenlanders and the Canadians are trying to set up industries in which hunter, processors and manufacturers are closely linked.

PROCESSORS

The Rieber company which previously dressed and tanned up to 250,000 skins a year including many whitecoats, has severely reduced its operations and now confines itself to tanning, mainly for the footwear industry. A small number of companies in Europe still dress or tan sealskins, but on a much reduced scale, and for all of them, sealskins are only a small part of their business. Dressing for garment purposes is still carried out by a company in Sweden, which is specialised in ring seals, by one or two companies in Finland and by two companies in Germany. In the United Kingdom, one company still tans small quantities of seal leather. We are not aware of any other companies in Europe dressing or tanning sealskins. According to Rieber the decline in skills implied, especially for dressing for garment purposes, jeopardises any revival in the market, although a Danish specialist believes that many dressers of fur skins could readapt to sealskins if the occasion arose.

In Greenland a facility has been set up to tan and dress sealskins, but several people we have spoken to doubt the ability of the Greenlanders to dress to fur garment quality. In Canada, which used to reimport dressed and tanned skins from Europe, efforts are also being made to set up dressing and tanning facilities. But again some European exporters doubt the ability of the Canadians to meet European standards. European manufacturers would probably prefer to have their skins dressed or tanned in Europe, not only for a question of quality, but to avoid the higher import duties which apply to dressed and tanned skins.

MANUFACTURERS

Garments

A few companies in Europe are still manufacturing sealskin garments. There are about six in Denmark, a few in Norway, at least one in Greece, and one or two in Germany. For most of these companies, if not for all, sealskins are now no longer a major part of their production. In the case of companies in Germany and Greece, sealskin garments are now produced as and when orders are received and are not part of their on-going production. For the Danish manufacturers an assured market is important since sealskin garments are still included in their on-going production range. The technique of manufacturing sealskin garments appears to be somewhat different from that of other fur garments and a minimum level of production is necessary to be worthwhile. Companies marketing sealskin garments, as distinct from producing to order, also need a minimum volume to cover marketing costs. There is the possibility that, if demand fell much further, production would cease altogether. The Greenlanders and Canadians are attempting to set up garment production. A very small number of sealskin garments are produced in Hong Kong and Japan, but we have found no evidence of production elsewhere in the Far East.

Footwear

Several companies in Europe still manufacture sealskin footwear, including three in Germany,three in France and several in Norway. Their production is of sealskin boots and slippers with the fur on. In the United Kingdom, one company produces very small quantities of sealskin leather shoes. Several of these companies told us that their sales, after dropping by 50-70 per cent in the early 1980's, have started increasing again and most are confident of continuing improvement. The sales of most of these companies appear to be confined to their home markets. All these companies, with the exception of one, probably get their tanned sealskins from Rieber which now has an effective monopoly of this market. A few companies in Canada manufacture sealskin footwear, one of which obtains its leather from a tanner in the United Kingdom. There is also some production in Japan.

Leather items

As with footwear a distinction has to be made between items made "with the fur on" and pure leather items. Apart from Norway we know of no production in Europe of sealskin items with the fur on. There is however some production of very expensive fine seal leather products in Europe. This trade traditionally depended mainly on whitecoat skins, but beater skins can also be used. The quantities of skins used was always small, and now seems to be insignificant.

We have identified two companies in Germany, still producing seal leather items, and one in France. We have not been able to identify any producers in Italy, the other European country most likely to be manufacturing. The Italian leather goods trade association Aimpes believes production has virtually ceased. There are a few companies in Japan manufacturing souvenir items including handbags and wallets of sealskin with the fur on. In Canada it is reported that an Ontario manufacturer is testing the feasibility of using quite large quantities of sealskins to make leather items, but we have no further information on this subject.

COUNTRY BY COUNTRY REVIEW OF THE MARKET FOR SEALSKINS

This section analyses in detail the markets for sealskins in consuming countries.

EUROPEAN COMMUNITY OVERVIEW

The European Community has traditionally represented up to 80 per cent of the world market for sealskins, and remains the major market at present, as shown in the table below. However the EC is not a single market for sealskins. The situation varies widely from country to country.

Table 35

EC: Foreign Trade in Sealskins, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Extra EC Imports								
Total	408,939	458,029	462,988	398,395	255,148	118,608	101,098	179,190
of which:								
. Raw	170,678	148,225	160,897	145,487	125,792	62,604	54,263	107,145
. Dressed	238,261	309,804	302,091	252,908	129,356	56,004	46,715	72,045
Extra EC Exports								
Total	116,644	112,104	83,735	107,491	71,944	104,909	58,926	56,663
of which:								
. Raw	74,189	75,659	66,052	71,218	44,674	59,849	43,533	39,469
. Dressed	42,455	36,445	17,683	36,273	27,270	45,060	15,388	17,194
Net Imports								
Total	292,295	345,925	379,253	290,905	183,204	13,699	42,172	122,527
of which:								
. Raw	96,489	72,566	94,845	74,269	81,118	2,755	10,725	67,676
. Dressed	195,806	273,359	284,408	216,635	102,086	10,944	31,477	54,851

Source: Eurostat

DENMARK

Denmark has been an important country in the market for sealskins, both as a trading centre for the Greenland seals and as a producer and consumer of sealskin coats. There has never been a large market for sealskin footwear in Denmark, neither is there a sealskin tanning or dressing industry.

The trading relations between Greenland and Denmark are described in the section on Greenland in this report. Traditionally, raw skins were imported from Greenland into Denmark. They were sent for dressing, mainly to Sweden and Finland and reimported into Denmark for the production of fur coats. The greater part of this trade was in ring seals.

According to Eurostat foreign trade figures, Danish net imports of sealskins were running at the rate of over 100,000 a year until 1981 and then began to decline. In 1986 Denmark was a net exporter of sealskins due to the shipment of a large part of the Royal Greenland Trading Department's stock to Germany. In the five year period 1982-1986 Danish net imports amounted to 95,596, an average of only 19,000 a year.

It is thought that at least half Danish production of sealskin coats was exported, mainly to Germany. This market has now collapsed. We have been told for example, that Denmark's second largest producer of sealskin coats has not received any orders from Germany this year. The largest producer on the the other hand, claims to detect some improvement on the German market. There is still a reduced market for sealskin coats in Denmark itself, and numerous shops in Copenhagen for example, are displaying them. Denmark appears to be the only remaining significant market for sealskin coats in Europe, indeed in the world. There are about 6 manufacturers in Denmark.

The market in Denmark has held up to some extent because of the low price of sealskins. Sealskin coats sell at about Dkr 7,000 in the shops. At much above this price, it is feared that consumers will tend to switch to other types of fur. Manufacturers can produce a sealskin coat at this price provided the cost of a dressed skin, of which five to six are required for a coat, is not more than Dkr 250. The cost of dressing is Dkr 100 so the raw skin price cannot be above Dkr 150. Since transport costs from Greenland are around Dkr 50 per skin, the maximum price for a good quality skin which can be economically paid to the hunter is about Dkr 100.

As shown in the section on Greenland the average price paid to hunters is more than twice this, and is on average for all skins of both good and bad quality. While in present conditions the Danish market for sealskin coats may continue, and even grow somewhat now that the anti-sealing campaign has subsided, specialists see little possibility of demand increasing to the point that a truly economic price can be paid to sealers. The Danish fur manufacturers are rather sceptical about a revival of the German market.

The existence of a market for sealskin coats in Denmark is partly explained by the close ties with Greenland. Danish fur manufacturers have never used whitecoats although they may have used some bluebacks. The basis of the Danish sealskin garment industry has always been the ring seal.

Leading figures in the Danish sealskin trade are trying to persuade fur traders in other countries to come out publicly in favour of sealing. For this purpose a Sealing Committee has been formed in collaboration with the International Fur Trade Federation.

Table 36

Denmark: Foreign Trade in Sealskins, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Imports								
Raw	110,267	68,003	60,346	56,476	47,967	61,028	49,915	52,321
Dressed	76,220	147,719	94,651	66,885	29,950	21,647	10,414	38,527
Total	186,487	215,722	154,997	123,361	77,917	82,675	60,329	90,848
Exports								
Raw	77,928	79,690	55,362	70,420	48,081	37,874	49,073	94,232
Dressed	6,077	4,151	5,722	10,862	6,118	5,981	6,499	10,391
Total	84,005	83,841	61,084	81,282	54,199	43,855	55,572	104,623
Net Imports	102,482	131,881	93,913	42,079	23,718	38,820	4,757	-13,770

Source: Eurostat

Table 37

Denmark: Imports of Sealskins by Country of Origin, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Raw Skins								
Total	110,267	68,003	60,346	56,476	47,967	61,028	49,915	52,321
of which from:								
. Greenland	101,246	66,976	58,423	56,476	45,672	60,742	49,408	52,321
Dressed Skins								
Total	76,220	147,719	94,651	66,885	29,950	21,647	10,414	38,527
of which from:								
. Greenland	14,226	46,115	40,985	31,334	7,609	1,294	268	47
. Sweden	40,457	46,110	37,185	14,235	7,876	12,214	464	2,014
. Norway	16,015	44,797	12,836	19,690	9,327	6,125	9,516	13,734
. Germany	2,569	2,603	1,520	265	4,734	1,689	-	100
. Finland	2,167	6,073	1,396	1,225	273	270	93	22,608

Source: Eurostat

GERMANY

Germany together with Denmark was the largest market in the world for sealskins. The German fur garment industry was the main market for South African fur sealskins, and the footwear industry used large quantities of ring seals. The fine leather industry used whitecoat skins, which were also used for trimming garments and footwear.

Many of the dressed skins for the footwear industry were supplied by Rieber, while the skins for the garment and leather industry were mainly dressed within Germany. Skins were also dressed in Germany for re-export to Greece where garments were manufactured on behalf of German companies. Gefu, a leading trader in hides and skins, once handled a large volume of sealskins and has seen its activity in sealskins decline considerably in recent years. It nevertheless appears to be still selling small quantities.

The German market for sealskin garments was the largest in the world. In the mid 1970's about 6,000 coats were produced in Germany and similar numbers were imported from Denmark and Greece. Sales began to decline from Denmark and Greece. Sales began to decline from 1980 onwards, and prices also fell under the influence of the anti-sealing campaign. By 1984 prices of garments were reported to have fallen by 40 per cent compared to 1980 levels, and sales fell to about 1,500 coats. Also under the influence of the campaign, retailers stopped offering sealskin garments. The decline has continued and the German sealskin garment market is now considered to be dead. One company, which dealt in Cape fur seal is reported to have gone bankrupt, and the largest company, has dropped the word "Seal" from its name.

Nevertheless there have recently been some signs of revival of the sealskin garment industry based on exports to Eastern Europe and the Soviet Union. One German manufacturer says he has recently received an order for 12,000 sealskin caps for the USSR and a Greek company reports an order for coats from a German company which may also be destined to Eastern Europe. The purchase by Germans of 30,000 Greenland sealskins in 1986 at very low prices is also believed to be connected with the export trade.

There are two companies in Germany still dressing sealskins, who supply garment manufacturers, footwear manufacturers and the fine leather trade.

The German footwear industry is believed to be producing about 60,000 pairs of sealskin footwear at present, about one third of the level of ten years ago. The industry blames the changing fashions and the introduction of new products such as the "Moon Boot" as much as the anti-sealing campaign for the decline in consumer demand for sealskin boots. It is also said that modern production methods are not easily adapted to sealskin, and as a result prices of sealskin footwear are high. Nevertheless anti-sealing propaganda has inhibited the industry from advertising its products, and this has tended to depress sales.

There are now three manufacturers of sealskin footwear remaining in Germany. They have reported some up-turn in sales in the last year or so, possibly because the anti-sealing campaign has subsided. But they see little prospect of the market recovering to previous levels.

The leather articles industry was always a relatively small user of sealskins. The main items produced were high quality wallets which appealed to a fairly select clientèle. The anti-sealing campaign has meant that it is now impossible to promote sealskin as such and sales have dwindled. Two companies, are still believed to manufacture sealskin leather items, but in very small quantities.

In 1986 we estimated that Germany used around 20,000 sealskins, the great majority of which in the footwear industry.

Table 38

Germany: Foreign Trade in Sealskins, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Imports								
Raw	54,596	42,647	65,687	67,410	69,896	470	5,678	52,421
Dressed	108,041	80,361	97,313	88,360	33,928	12,372	22,827	20,420
Total	162,637	123,008	163,000	155,770	103,824	12,842	28,505	72,841
Exports								
Raw	2,446	12,300	600	1,523	2,950	-	-	-
Dressed	47,239	50,498	59,778	77,225	45,064	28,578	22,597	19,659
Total	49,685	62,799	60,378	78,748	48,014	28,578	22,597	19,659
Net Imports	112,952	60,209	102,622	77,022	55,910	15,736	5,908	52,882

Source: Eurostat

Table 39

Germany: Imports of Sealskins by Country of Origin, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Raw Skins								
Total	54,596	42,647	65,687	67,410	69,896	470	5,678	52,421
of which from:								
. S. Africa	-	18,130	38,081	28,875	57,219	-	1,000	1,960
. Canada	31,534	6,440	14,452	18,883	8,042	-	-	4,732
. Denmark	11,326	18,253	3,837	-	2,363	470	3,199	9,801
. Greenland	-	-	2,197	1,705	2,062	-	1,135	30,896
Dressed Skins								
Total	108,041	80,361	97,313	88,360	33,928	12,372	22,827	20,420
of which from:								
. Norway	86,644	51,805	69,221	53,140	24,140	6,253	3,751	18,231
. UK	8,952	14,686	10,152	17,548	4,947	-	-	8
. Finland	-	-	2,321	-	-	-	-	-
. S. Africa	-	1,950	-	-	1,000	4,355	13,595	-

Source: Eurostat

UNITED KINGDOM

The United Kingdom has been an important centre for the trade in sealskins through two companies: Hudson's Bay and Annings, which handled a proportion of the Canadian Arctic catch, and McMillan & Moore which also handled part of the Canadian Arctic catch, and, according to the company, the "entire production" of Karlsen in Canada. Both companies claim they now no longer handle sealskins. Hudson's Bay & Annings incidently is now owned by Finnish Fur Sales and has no financial connection with Hudson's Bay Company in Canada. Foreign trade data show that United Kingdom imports of sealskins declined sharply in 1983 and have remained at low levels ever since.

United Kingdom traders have been discouraged by low demand, low prices and adverse publicity, as well as by what they sometimes consider to be administrative harassement due to the requirement for certificates of origin.

Domestic demand for sealskins in the United Kingdom has always been low. In fact foreign trade statistics show net exports of sealskins since 1979, but since there is no domestic production of sealskins these figures must be treated with some caution. Demand has been for footwear, and possibly fine leather, rather than for fur coats.

As far as we can determine there is only one company in the United Kingdom tanning sealskin leather, but only in very small quantities. A leading shoe manufacturer produces small numbers of expensive sealskin shoes for the domestic market and export. Otherwise we have found no trace of production of sealskin items in the United Kingdom.

Table 40

United Kingdom: Foreign Trade in Sealskins, 1979-1986

(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Imports								
Raw	19,781	36,904	23,693	18,158	1,763	4,201	1,253	2,586
Dressed	24,461	29,904	32,755	38,371	9,228	3,471	545	8,317
Total	44,242	66,875	56,448	56,529	10,991	7,672	1,798	10,903
Exports								
Raw	19,715	32,037	25,250	15,406	5,732	97,975	20,934	8,409
Dressed	25,265	30,149	47,029	42,308	32,909	29,923	6,783	8,632
Total	44,980	62,186	72,279	57,714	38,641	127,898	27,717	17,041
Net Imports	-738	4,689	-15,831	-1,185	-27,650	-120,226	-25,919	-6,138

Source: Eurostat

ITALY

Italy together with France is thought to have been the biggest market for whitecoats. Before 1983 imports of sealskins averaged about 50,000 a year, many of which would have been whitecoats. The increase of imports in 1983 to 72,000 skins could be taken as a move to forestall the EC ban. The ministerial decree of June 1978 forbidding the import of sealskins of "less than 50 cm in length" obviously had little effect especially as even whitecoats are longer than this.

Italian imports had traditionally been of dressed or tanned skins, the main suppliers of which were Norway and Germany. Italy has also recorded imports from France, the United Kingdom and the Soviet Union.

A large proportion of the pup skins were used in the fine leather trade, and they were also used for trimming fur coats. According to trade sources production of sealskin leather items and sealskin garments has now virtually ceased in Italy. Nevertheless Italy has recorded significant imports of sealskins since 1983. The 1986 statistics showing imports of 18,844 raw sealskins are curious since Italy has never previously imported such a quantity of raw skins and because 16,062 of those were reported to have come from Cameroon, a country which has never previously figured in either Italian statistics or those of any other EC country. If the imports from the Cameroon are discounted as an error in reporting, Italian net imports of sealskins in the three years 1984-86 have averaged 13,000 skins. Another noticeable feature of the situation since 1983 is that Italy has begun to re-export sealskins in some quantities whereas previously there were almost no re-exports.

Table 41

Italy: Foreign Trade in Sealskins, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Imports								
Raw	4,600	-	492	657	-	-	7,335	18,844(a)
Dressed	32,324	49,109	56,895	50,838	71,693	33,843	13,536	5,349
Total	36,924	49,109	57,387	51,495	71,693	33,843	20,871	24,228
Exports								
Raw	-	-	-	-	-	-	573	2,620
Dressed	266	1,055	748	524	2,381	4,253	9,336	6,045
Total	266	1,055	748	524	2,381	4,253	9,909	8,665
Net Imports	36,658	48,054	56,639	50,971	69,312	29,590	10,962	15,563

(a) of which 16,062 from Cameroon

Source: Eurostat

FRANCE

The French market for sealskins which used to be about 50,000 a year has now declined to about 10,000 a year.

France was one of the major markets for whitecoats which were used for trimming garments. Following a campaign lead by Brigitte Bardot, the French fur trade introduced a "Charte de la Fourrure" in 1976 banning the use of pupseal skins. Nevertheless it is believed that whitecoat skins continued to be imported until 1983. Since then it is believed that the only use of sealskins in France is for footwear and possibly for leather items.

There are three manufacturers of sealskin footwear in France, producing an estimated 50,000 pairs a year. A fourth company closed in 1985. We estimate that production is now running at about half the level of the early 1980's, partly because export markets, especially in Switzerland, are now closed. Decline in demand within France is blamed on a number of factors including high prices, competition from more "modern" products, and the anti-sealing campaign. However respondents in the industry have told us that they are confident of a continuing, and possibly expanding market.

Use of sealskin for leather goods now appears to be insignificant. Two companies used to produce luxury seal leather items, presumably using whitecoat skins. One of these is still producing tiny quantities of seal leather items while the second says it is no longer doing so. It is no longer possible to advertise seal leather products and there is difficulty in obtaining suitable skins. The main source of supply of sealskins for the footwear industry is Rieber. Sealskins used to be tanned in France, but the last seal leather tanner is said to have gone out of business several years ago.

Table 42

France: Foreign Trade in Sealskins, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Imports								
Raw	14,388	23,153	19,973	14,914	9,629	1,856	1,772	400
Dressed	26,290	44,160	61,364	55,580	29,014	19,014	6,252	5,214
Total	40,678	67,313	81,337	70,494	38,899	20,870	8,024	5,614
Exports								
Raw	952	975	-	-	-	-	-	93
Dressed	5,518	1,817	2,905	23,156	4,168	19,531	1,530	477
Total	6,470	2,792	2,905	23,156	4,168	19,531	1,530	570
Net Imports	34,208	64,521	78,432	47,338	34,731	1,339	6,494	5,044

Source: Eurostat

Table 43

France: Imports of Sealskins by Country of Origin, 1979-1986
(Number)

	1979	1980	1981	1982	1983	1984	1985	1986
Raw Skins								
Total	14,388	23,153	19,973	14,914	9,629	1,856	1,772	400
of which from:								
. Norway	3,900	46,000	4,210	5,300	6,000	1,856	1,060	400
. Italy	-	-	-	-	-	-	712	-
. Denmark	7,482	2,110	70	-	-	-	-	-
. Canada	1,443	3,420	7,851	612	-	-	-	-
. Greenland	-	7,279	6,066	9,082	-	-	-	-
Dressed Skins								
Total	26,290	44,160	61,364	55,580	29,270	19,014	6,252	5,214
of which from:								
. Norway	22,753	39,490	46,273	45,472	22,817	8,348	5,053	5,190
. Germany	1,588	597	88	2,073	1,192	441	-	24
. USA	-	231	-	-	313	6	734	-
. Denmark	-	1,524	3,768	2,261	-	1,737	276	-
. Italy	-	190	-	-	3,808	6,855	-	-
. UK	1,087	-	1,271	2,073	40	1,455	-	-

Source: Eurostat

GREECE

Greece has a large export based fur garment manufacturing industry centred on the town of Kastoria and employing 35,000 people in 4,000 enterprises. This industry has close connections with the German industry.

In the past Greece imported considerable numbers of sealskins which had been dressed in Germany and made them up into garments on behalf of German companies. The garments were then mostly exported back to Germany. Offcuts were used to produce garments for sale in Greece mainly to tourists. There is little or no market in Greece itself for sealskin items such as footwear or leather goods.

Imports of dressed skins from Germany declined sharply in 1983 but have since increased again. It is almost certain that these skins have been provided by German garment manufacturers because the level of import duties on dressed skins into Greece is such that Greek manufacturers will not import skins without a guaranteed export market for the finished garments. We have direct knowledge of one contract at the end of 1986 between a Greek and a German company involving up to 2,500 sealskins. What is not known is the ultimate destination of the garments. Some may well have been re-exported from Germany to Eastern Europe or the Soviet Union. As described elsewhere in this report, Eurostat data showing large exports of articles of pup sealskins in 1986 must be treated with extreme scepticism.

Table 44

Exports of Dressed Sealskins from Germany to Greece, 1979-1986
(Number)

1979	1980	1981	1982	1983	1984	1985	1986
26,388	18,716	24,748	34,488	9,517	11,350	37,363	13,483

Source: Eurostat

OTHER EC COUNTRIES

Foreign trade data show no significant trade in sealskins in Belgium/Luxembourg or the Netherlands, at least since 1979. And Eurostat records no trade in either Spain or Portugal for 1986. The lack of a market in these countries has been confirmed by the relevant trade associations.

OTHER EUROPEAN COUNTRIES

Sweden has been important in the sealskin business because one company, dressed a large number of Greenland ringseal skins. This company is still handling several thousand sealskins a year but much fewer than previously. Another company used to manufacture sealskin garments for the domestic and export markets, but says it is no longer doing so. Finland also has several dressing companies which handle sealskins. Statistics show that in 1986 Denmark imported 20,000 dressed sealskins from Finland. However a leading fur trader informed us that there is no production of sealskin garments in Finland, although some are still being imported, probably from Denmark. In Switzerland there appears to be still a small market for sealskins. Eurostat data show exports of a few thousand skins a year to Switzerland from the European Community. On the other hand a leading Swiss furrier told us that the anti-sealing campaign had virtually killed the market. Austria used to be a small market for sealskin garments produced in Denmark and Germany, but according to German and Danish manufacturers this market is also dead. We have had reports from various sources that East European countries and the Soviet Union have been in the market for sealskin hats and garments produced in Germany, Greece and Malta, but evidence on this subject is difficult to obtain.

NON EUROPEAN COUNTRIES

The United States market, since the lapse of the Interim Convention (see elsewhere) is now completely prohibited to sealskin or sealskin products. Attempts are being made to build up local markets, using local supplies of sealskin in Canada and Greenland as described elsewhere. The Japanese market absorbs about 10,000 sealskins for the production of garments, footwear, leather goods and souvenir items. This small market is one the few which seem not have been affected by the anti-sealing movement. On the other hand there is no evidence that it is growing. Hong Kong is probably using a few hundred sealskins a year for the production of garments for the tourist trade, but we have found no evidence that the large South Korean fur garment industry is using sealskin.

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C. Personal Communications

During the course of the study, MIA had personal communications with individuals in the following organisations. Contact was also made with manufacturers of sealskin articles, traders and dressers.

Greenland
- Home Rule Administration, Denmark Office
- Greenland Trade Department
- Greenland Fisheries and Environment Research Institute

Norway
- Fisheries Directorate
- G. C. Rieber & Company

Canada
- Fisheries and Oceans

United States
- Department of Commerce
- International Fund for Animal Welfare
- Fouke Company

Denmark
- International Fur Trade Federation
- Danish Fur Sales
- Sealing Committee

United Kingdom
- Hudson's Bay & Annings
- McMillan & Moore
- British Leather Confederation

Germany
- Verband der Deutschen Rauchwaren-und Pelzwirtschaft
- Verband der Lederwaren und Koffer Industrie
- Hauptverband der Deutschen Schuhindustrie

France
- Federation Nationale de la Fourrure
- Federation de l'Industrie de la Chaussure

Italy
- AIMPES (Association of manufacturers of leather articles)
- ANCI (Association of manufacturers of footwear)

Greece
- Kastoria Furriers (Trade Association)