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Present Catches of Harp and Hooded Seals in West Greenland, and a Note on the Level of Catches in Previous Periods

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Catches of Harp and Hooded Seals in Greenland, 1975-77

Table 1 presents revised figures for the catches of harp and hooded seals in West Greenland for 1975 and preliminary data for 1976 and 1977. The 1977 season was a rather successful one for the harp seal hunt in the northern and central regions of West Greenland (NW and CWw) and probably also in the eastern part of Central West Greenland (CWe) for which data are incomplete. In the southern regions (SW and S), the catches in 1977 were less than in 1975 and 1976.

The hooded seal catch in 1977 was about the same level as in 1976 in South Greenland (S) and in Central West Greenland (NW), and was less in South West Greenland (SW). With allowance for the preliminary nature of the data for 1976 and 1977, it seems reasonable to indicate that the hooded seal catch in West Greenland as a whole was about the same level as in 1975 (approximately 3,500 animals). However, the catch at East Greenland in 1977 was much higher than in 1975 and 1976.

Table 1. Catches of harp and hooded seals in Greenland, 1975-1977. (Data from Greenlanders' lists of game.)

Year			eaters and bedlamers	01d harps	Total harps	Total hooded
1975		NW	1,596	110	1,706	305
		CWe	896	281	1,177	320
		CWw	812	249	1,061	627
		SW	1,227	98	1,325	463
		S	431	61	492	1,834
		$Thule^2$	157	51	208	143
	W	Greenland	5,119	850	5,969	3,692
	E	Greenland	128	64	192	1,071
1976 ¹		NW	2,025	94	2,119	226
		CWe	73+	105+	178+	56 +
		CWw	629	223	852	258
		SW	1,342	100	1,442	1,104
		S	266	15	281	1,664
		Thule ²	21+	11+	32+	8+
	W	Greenland	4,356+	548 +	4,904+	3,316+
	E	Greenland	³ 60+	59+	119+	546+

^{*} Revision of ICNAF Working Paper 78/XI/64.

Table 1. (continued)

Year		Region F	eaters and bedlamers	01d harps	Total harps	Total hooded
1977 ¹		NW	2.802	237	3,039	571
		CWe	256	218+	474+	55+
		CWw	1,189	362	1,551	297
		SW	920	41	961	566
		S	149	41	190	1,679
		Thule 2	20+	22+	42+	2+
	W	Greenland	l 5,336+	921+	6,257+	3,170+
	E	Greenland	l ³ 56+	28+	84+	2,169+

Preliminary figures, as data are lacking for Jakobshavn district (in CWe) and some settlements in other districts.

Present Catch in Relation to Catches in Previous Years

Trends in the catches of seals for the main regions of West Greenland, as reported through the Greenlanders' list of game, are shown in Fig. 1 to 4. For the period 1862-1910, only the total numbers of seals were reported. For the period 1911-39, two categories of seals were mentioned: large seals (bearded, hooded and old harp seals), and small seals (ringed, harbour and young harp seals). For the period after 1939, the catches were reported by species with separation of young harps (spotted animals) and old harps (saddlebacks) since 1960. Thus, for the 1940-77 period, it is possible to study trends in the catches of the different species, and, using these data and other information, it is possible to estimate trends in the preceding periods.

Hooded seals

For the five main regions of West Greenland, the average catches per year since 1939 were as follows:

Year	NW	CWe	CWw	SW	S	Total
1940-49	120	100	1.20	50	780	1,10
1950-59	130	30	80	70	460	770
1960-69	230	90	130	140	790	380
1970-77	290	140	260	470	1,470	2,630

In South Greenland (S), hooded seals formed about 85% of the catch of "large scale" during 1960-75. Bearded seals were never taken in large numbers in this region of Greenland, but hat peals were more important in previous years (see below). Most of these, however, were young animals, and it is reasonable to assume that hooded seals accounted for at least 60% of the animals recorded as "large seals" in the 1916-39 period (Fig. 4). This gives average catches in South Greenland of at least 850 hooded seals in the 1930's, 2,000 in the 1920's, and more than 4,000 in the 1916-19 period. Information on the purchase of skins (Vibe, 1967) indicates that the catch of hooded seals peaked ground 1890 and declined to about half of that level in the first decades of the 20th century.

In recent years, 56-67% of the total West Greenland catch of hooded seals were taken in region S, 4-14% in region SW, 14-19% in region CW, and 10-17% in region NW. It appears therefore that the South Greenland region has always been the most important region, but other regions may sometimes have accounted for higher percentages of the total catch in previous periods. Assuming that 50% of the total catch was taken in the southern region (S) of West Greenland prior to 1940, the average annual catches of hooded seals in the West Greenland area as a whole were estimated as follows: about 15,000 during 1880-1900, 8,000 in 1916-20, 4,000 in 1920-29, and 1,700 in 1930-39.

Lists of game are incomplete for Thule district, and figures are estimated from numbers of skins purchased by the KGH (Greenland Trade Department).

³ Lists of game are incomplete for Anguagesalik and Scoresbysund districts.

Harp seals

The average catches per year since 1939 for the five main regions of West Greenland were as follows:

Year	NW	CWe	CWw	SW	S	Total
1940-49	5,500	6,300	3,900	3,600	2,800	22,100
1950-59	4,200	5,100	2,700	2,400	2,000	16,400
1960-69	2,400	3,400	1,400	1,000	700	8,900
1970-77	2,000	1,500	1,400	1,300	500	6,700

The catch statistics for regions NW and CWw (Fig. 1 and 2) give little information on harp seal catches prior to 1940 apart from the fact that the catches of "large seals" were approximately 2,000 animals per year in each region (or 2-3 times the present level). Some of these were bearded and hooded seals, but most were probably old harp seals.

For region CWe (Fig. 2), fluctuations in the total catches of all seals seem to follow fluctuations in the catches of harp seals more closely than they do in regions NW and CWw, the trends suggesting a decline in catches of harp seals since the turn of the century. The catches of "large seals" in region CWe between 1911 and 1939 were of the order of 1500-2000 animals, somewhat higher in the 1930's than in the preceding two decades.

Information on the purchase of skins (Vibe, 1967) indicates that the catches of harp seals in the above-mentioned three regions were at about the same level in the 1940's and 1930's but somewhat lower in the 1920's. From the same source it appears that harp seal catches in the northern part of West Greenland peaked early in the 19th century, decreased toward the 1960's and then increased to a maximum in the 1930's and 1940's.

For region SW (Fig. 3), the list of game indicates catches of "large seals" at the level of 3,900 animals per year during 1916-25 and 2,300 animals per year during 1926-37. Some of these were hooded seals, but most of them were likely to be old harps (probably about 2,700 and 1,700 respectively). In recent years old harp seals constituted only a small fraction of the total catch of harp seals in this region, but it is likely that they were relatively more important in previous periods. Reasonable estimates of the total catches of harp seals in region SW indicate a level of 5,000-6,000 animals around 1920, about half of that level in 1926, and an increase to a higher level during the 1930's. However, statistics on the purchase of skins in part of this region (Sukkertoppen district) (Vibe, 1967) do not support these estimates but rather show a general decline from a high catch level during 1830-50 to a very low level in the 1930's and 1940's.

As indicated above, hooded seals were the most important species in region S (Fig. 4) but harp seals were also caught in larger numbers in the previous periods than in recent years, and it is likely that fluctuations in catches followed those described for region SW.

In summary, the catch statistics, supplemented by other information indicate that the catch of harp seals in West Greenland reached a maximum of more than 20,000 per year in the 1930's and 1940's, but thereafter decreased to a level of less than 6,000 animals in the late 1960's and early 1970's.

Conclusions

The present level of catches of harp and hooded seals at West Greenland is much below the level of catches in previous periods. Catches of hooded seals about 1960 were less than 10% of previous level, but have since increased to 20-30% of the previous level. If the catches at South Fast Greenland are taken into account, the present level is about 33-50% of the previous level.

The catches of harp seals at West Greenland seem to show long-term fluctuations. Present catches are still less than 33% of the level of catch in the 1930's and 1940's. An increasing trend is evident in some regions but this is hardly noticeable for the West Greenland area as a whole, considering the large year-to-year fluctuations.

References

VIBE, C. 1967 Arctic animals in relation to climatic fluctuations. Medd. om Grønl. 170.

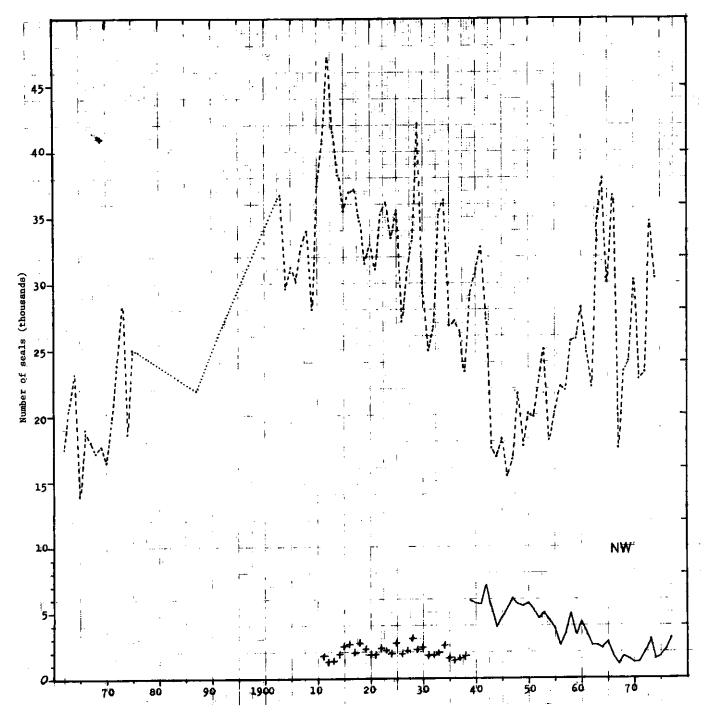


Fig. 1. Trends in seal catches in Upernavik and Umanak districts (NW) of West Greenland. (All species catch indicated by dot-and-dash lines, harp seals by full lines, and "large seals" by crosses.)

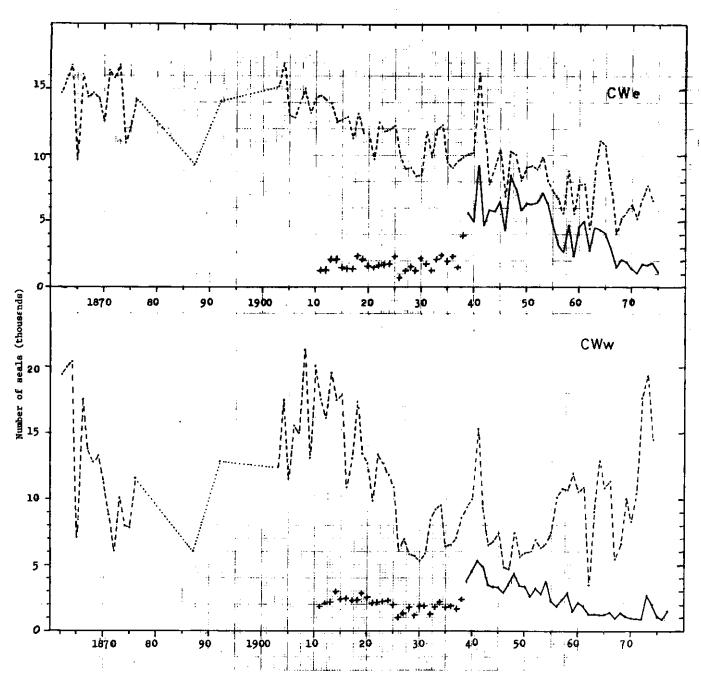


Fig. 2. Trends in seal catches in Inner Disko Bay region (CWe) and in the region just south of Disko Island (CWw) of West Greenland. (All species indicated by dot-and-dash lines, harp seals by full lines, and "large seals" by crosses.

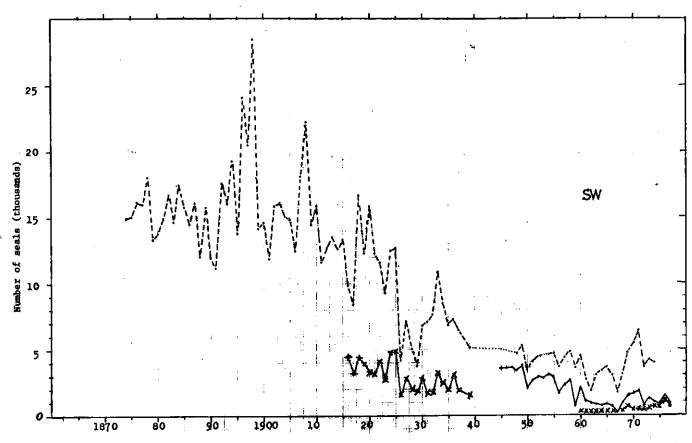


Fig. 3. Trends in seal catches in South West (SW) Greenland (61°-67°N latitude). (All species indicated by dot-and-dash lines, harp seals by full lines, and "large seals" by crosses.)

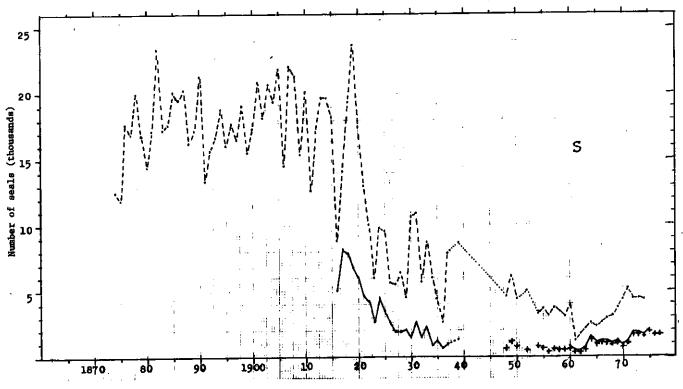


Fig. 4. Trends in seal catches in South Greenland (south of 61°N latitude). (All species indicated by dot-and-dash lines, "large seals" by full lines, and hooded seals by crosses.)