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by

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This report presents information on catch statistics from the commercial Greenland fishery and on research carried out in 1998 by the Greenland Institute of Natural Resources.

WEST GREENLAND (NAFO SUBAREA 1)

A. STATUS OF THE FISHERIES

1. General trends

Provisional statistics for the fisheries in 1997 and 1998 are presented in Table 1.

Total nominal catches in Greenland waters increased from 94,097 tons in 1997 to about 103,000 tons in 1998. Landings of shrimp increased by 8% to 65,169 tons, the catch of Greenland halibut increased by 16% to about 26,000 tons. The cod fishery decreased by 64% to 326 tons and the catch of redfish decreased by 4% to 929 tons.

Catches of lumpsucker and scallops increased while catches of arctic char, Atlantic salmon, capelin, Greenland cod, redfish, grenadiers and wolffishes decreased.

2. Shrimp

a) The fisheries

The preliminary catch statistics of shrimp by Greenland vessels in Subarea 1 in 1998 is 65,169 tons. As normally ice cover hampered the access to the main fishing grounds in Division 1A, 1B and 1C early in the year. In general the fishery took place in the same areas as in earlier years. Most effort was spent in Div. 1B, 1C and 1D. A considerable restructuring of the offshore fleet has taken place in recent years. 15 vessels (above 75 GRT) participated in the offshore fishery in 1998.

A Standardized combined catch rate index based on logbook data from SA 0+1 showed that the biomass of shrimp in 1989-98 fluctuated without trend, but at a lower level than in 1976-88. The decrease from 1987 to 1989 was coincident with a substantial increase in effort.

b) Forecast for 1999

Results from a stratified-random trawl survey in the offshore area of Subarea 0+1 in 1998 showed no indication of a significant change in the total stock biomass. Overall size composition of the biomass in 1998 indicates an abundant year class of large males at 20mm CL. Abundance of the female stock component appears stable in recent years.

Scientific Council advised that 1999 catches in Subarea 1+0 be no higher the average of 1997 and 1998 at about 65,000 tons.

3. Greenland halibut

a) The fisheries

The total catches of Greenland halibut by Greenland vessels in NAFO Subarea 1 amounted in 1998 to about 27 000 tons. This is an increase on almost 5 000 tons compared to 1997. The increase took mainly place in the inshore area.

Offshore catches by Greenland amounted to 2 289 tons and were mainly taken by trawlers. Additionally 2 232 tons were taken by foreign vessels offshore (EU, Norway, Faroe Island and Russia). The total catch offshore in NAFO Subarea 1 was thus 4 521 tons.

The inshore fishery in Div. 1A was concentrated in three areas Disko Bay (10 671 tons), Uummannaq (6 912 tons) and Upernavik (7 012 tons), or a total of 22 222 tons inshore in 1A. The fishery was conducted by long lines and gill nets which accounts for 69% and 31% respectively.

b) Assessment

No analytical assessment has been made for either inshore or offshore stock components.

4. Cod

a) The fisheries

Catches have decreased very significantly over the last five years, with yields of 68,000 tons in 1990, the catches declined to 6,250 t in 1992. The decline was mainly caused by a reduction in effort in the offshore groundfish fishery. Catches in 1994 and 1995 amounted to 2,115 and 1,710 tons only. In 1996 and 1997 the catch decreased further to 945 tons and 904. In 1998 only 326 tons were caught. The low inshore catch was due to decreasing catch rates and a general decline in the local inshore fishing effort directed to cod.

The large fishery in recent years was sustained by the very strong 1984 year-class, which according to tag returns and the distribution of young fish is believed to be of Iceland origin. Due to migration and fishery induced mortality this year-class is no longer present in West Greenland waters. The year-classes now dominating the inshore catches are supposedly of local fjord origin.

b) Assessment

No assessment or forecast is given here but reference is made to the Northwestern Working Group report by ICES, April 1998. Greenland offshore trawl survey, conducted in July-September 1998, showed an extremely low biomass of cod off West Greenland. These low values are consistent with the findings in the German survey, conducted in the same area, and are also in line with last years estimate. Probability of stock recovery depends only on future recruitment. In view of the severely depleted spawning stock and rare event of drift from Iceland, substantial stock recovery must be considered as very unlikely.

5. Salmon

After a steady decline of the abundance of the salmon stock of both European and North American origin during the last decade the estimated pre-fishery abundance reached a historical minimum in 1996. The ICES Working Group on North Atlantic Salmon estimated that the abundance in 1998 would fall below the preliminary set conservation limit in both regions. At its annual meeting in 1998 the West Greenland Commission of NASCO agreed that in 1998 the fishery for salmon in Greenland should be restricted to that amount used for internal consumption in Greenland. This amount has in the past been estimated at 20 tons.

The fishery was initiated on August 17, and the season was open to the end of the year. The total nominal catches amounted to 11 tons. Due to the closure of the commercial fishery and thus closing of landing to the factories all handling and trade have been made privately or via the open markets. As the fishery and landings have been more scattered than in earlier years some unreported fishery is expected to have taken place.

In recent years only minor catches have been taken in the northern part (Div. 1A and 1B), while Div. 1C 1E have been the most important areas. In 1998 the major part of the reported catches was taken in Div. 1D.

6. Capelin

The capelin fishery in West Greenland is carried out inshore and in the spawning season only (May-July). The main part of the catches is produced as whole frozen fish for bait and local consumption, while a smaller part is dried and stored as food for sledge dogs in the winter season. The majority of the catches were taken in Div. 1A.

7. Redfish

Redfish is mainly taken as bycatch by trawlers in the offshore shrimp trawlers. Smaller vessels take a minor part inshore.

8. Grenadiers

There are two species of grenadiers of commercial interest in Greenland: roundnose grenadier and rougthead grenadier. All catches are however reported as roundnose grenadier. The catch reported is taken as by-catch in the Greenland halibut fishery. The total catch in 1998 was 19 tons, which is a decrease of 87 % compared to the previous year.

9. Snow Crab

a) The fisheries

The total catch of snow crab by Greenland vessels conducted by traps in Subarea 1 in 1998 was about 3,000 tons, of which approximately 2,000 tons were taken in the inshore area. The total catch in 1998 increase with 26% compared to 1997. The inshore fishery in Div. 1A was concentrated in two areas Qeqertarsuaq and Aasiaat. In Div. 1B was the fishery mainly concentrated in the inshore area around Sisimiut, in 1C/1D around Nuuk and in 1E around Paamiut.

b) Assessment

No analytical assessment has been made for either inshore or offshore stock components.

10. Scallops

a) The fisheries

The total catches of Icelandic scallops in NAFO Subarea 1 amounted in 1998 to 2,200 tons. This is a 17% increase compared to 1997. All catches were taken in inshore areas in Div. 1A, 1 B, 1C 1D in 1998. The fishery in Division 1A is concentrated along the Disko Island, and the area around Sønder Upernavik. Other areas a found at Attu (1B) and Nuuk (1D).

b) Assessment for 1998

There is an advised TAC for the major scallop areas (Nuuk, Attu and Disko) at West Greenland of 1.800 tons.

B. SPECIAL RESEARCH STUDIES

I. BIOLOGICAL STUDIES

1. Shrimp

The series of annual stratified-random trawl surveys initiated in 1988 was continued in 1998. In July-September about 170 research trawl hauls were made in the major parts of the distribution area of the West Greenland shrimp stock, including areas in Subarea 0 and the inshore areas in Disko Bay and Vaigat.

2. Greenland halibut

A Greenland offshore trawl survey for Greenland halibut was initiated in 1997. The survey is a continuing of the joint Japanese / Greenland survey carried out in the period 1987-95. The survey covered NAFO Div. 1C and 1D between the 3 nm line and the 200 nm line. The survey was a stratified random bottom trawl survey. A total of 58 hauls were made in the period 23.September to 7.October 1998.

A longline survey for Greenland halibut in the inshore areas of Disko Bay, Uummannaq, and Upernavik was initiated in 1993. In 1998 42 settings were carried out in Uummannaq and Upernavik areas.

3. Young Cod survey

The series of annual gill-net surveys initiated in 1985 was continued in 1998. Results from this work are presented in the ICES Report of the North - Western Working Group in 1999.

4. Snow crab

Trapping surveys were first conducted in 1992 in the inshore areas around Nuuk (Div. 1C), Sisimiut (Div. 1B) and Disko Bay (Div. 1A). In 1997 the survey were conducted in Sisimiut (Div. 1B), Disko Bay (Div. 1A) in May/June and in Maniitsoq (Div. 1C) in September/October with the research vessel "Adolf Jensen". The survey used baited traps with large and small mesh. All snow crabs were enumerated by sex, the carapace length, carapace width, chela height, weight and carapace condition was determined.

The objective of the monitoring program is to assess the abundance and distribution of snow crab in inshore areas of Greenland. Results from this survey are presented in the Technical Report Series of the Greenland Institute of Natural Resources.

5. Marine mammals

a) Small cetaceans

Studies of white whale and narwhal continued in 1998. Details are being reported to JCCM and NAMMCO.

b) Large cetaceans

Studies of minke whale, fin whale and humpback whale continued in 1998. Details are being reported to IWC.

c) Seals

Studies of harp and hooded seals are being reported to the Joint ICES/NAFO Working Group on Harp and Hooded Seals

GREENLAND FISHERY IN OTHER NAFO SUBAREAS

A. STATUS OF THE FISHERIES

In 1998 two Greenland vessels were engaged in the Flemish Cap shrimp fishery (NAFO Div. 3M). Total nominal catches amounted to 865 tons of shrimp.

EAST GREENLAND (ICES SUBAREA VA, XII AND XIV)

A. STATUS OF THE FISHERIES

1. General trends

Table 1 shows provisional figures for the Greenland fisheries in ICES Subareas Va, XII and XIV. The nominal catch increased by 29% from 17,691 tons in 1997 to 22,854 in 1998. The increase was mainly caused by an increase in landings of capelin and pelagic redfish.

2. Shrimp

a) The fisheries

The catches by Greenland vessels amounted to 3,630 tons in 1998. The geographical pattern of this fishery has changed drastically in recent years. Traditionally the fishery took place primarily between 65°N and 67°30'N, and 26°W and 34°W. Since 1993 new grounds further south have been included.

b) Forecast for 1999

No trawl survey was conducted in the Denmark Strait in 1998. Standardized CPUE data indicate a general increasing trend in biomass since 1993. The changes in fishing patterns make interpretation of catch rate indices difficult.

Scientific Council advised that catches should not exceed the average catch from 1993 to 1998 of 9,600 tons. The effective TAC in Greenland waters in 1998 has been set to 10,600 tons, of which 4,925 tons is reserved for Greenlandic vessels (no effective TAC is set for the Icelandic side of the midline).

3. Capelin

The capelin fishery in East Greenland in 1998 was carried out inshore in the spawning season (May-July), and offshore in the summer-autumn period by vessels from Greenland, EU, Faroes, Iceland and Norway. The total nominal catch by Greenland increased from 12,121 tons in 1997 to 16,896 tons in 1998.

Table 1. Nominal catches (tons) by Greenland vessels at West Greenland (NAFO Subarea 1) and East Greenland (ICES Subarea Va, XII and XIV) in 1997 and 1998 and the relative changes from 1997 to 1998. (*Provisional data).

The nominal catches in NAFO SA for Greenland halibut and Crabs is underestimated by about 5.000 t and 1.000 t respectively, as the data set does not include catches from some private companies. The total nominal catches are expected to be as listed in the column "Estimates" under NAFO SA.

	NAFO SA					ICES SA		
	Div. 1A, B, C, D, E, F				Div 3M	Va, XII, XIV		
Species	Nominal catch 1997*	Nominal catch 1998*	Estimates	% change 1997-98	Nominal catch 1998*	Nominal catch 1997*	Nominal catch 1998*	% change 1997-98
Arctic char	79	68	68	-14				
Atlantic halibut	22	22	22	0		4	10	150
Atlantic salmon	43	11	11	-74		1		
Capelin	42	21	21	-50		12.121	16.896	39
Cod	904	326	326	-64		33	37	12
Crabs	2.557	2.175	3.175	24				
Greenland cod	1.729	1.717	1.717	-1		1	2	100
Greenland halibut	23.146	21.908	26.908	16		1.258	747	-41
Grenadiers	144	19	19	-87		26		-100
Lumpsucker	1.158	2.143	2.143	85				
Polar cod								
Redfish	970	929	929	-4		193	1.477	665
Scallops	1.887	2.200	2.200	17				
Shark						6		-100
Shrimp	60.079	65.169	65.169	8	865	3.853	3.630	-6
Wolffishes	68	30	30	-56		6	8	33
Fish not specified	1.269	588	588	-54		189	47	-75
Sum total	93.083	94.097	103.326	10	865	17.691	22.854	29