

Northwest Atlantic



Fisheries Organization

Serial No. N2989

NAFO SCS Doc. 98/2

SCIENTIFIC COUNCIL MEETING - JUNE 1998-05-05

CANADIAN REQUEST FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 1999  
OF CERTAIN STOCKS IN SUBAREAS 0 TO 4

1. Canada requests that the Scientific Council, at its meeting in advance of the 1998 Annual Meeting, provide advice on the scientific basis for the management of the Roundnose grenadier in Subareas 2 and 3 in 1999.

It is also suggested that, subject to the concurrence of Denmark (Greenland), the Scientific Council, prior to the 1998 Annual Meeting of NAFO, provide advice on the scientific basis for management in 1999 of the following stocks:

Shrimp (Subareas 0 and 1)  
Greenland halibut (Subareas 0 and 1)  
Roundnose grenadier (Subareas 0 and 1)

The Scientific Council has noted previously there was no biological basis for making two separate assessments for the Greenland halibut throughout Subareas 0-3, but has advised that separate TACs be maintained for different areas of the distribution of Greenland halibut. The Council is asked therefore, subject to the concurrence of Denmark (Greenland) as regards Subarea 1, to provide an overall assessment of status and trends in the total stock throughout its range and comment on its management in Subareas 0+1 for 1999. In particular, the Council is asked to advise on appropriate TAC levels separately for SA 0+1, for SA 2 + Division 3K and for Divisions 3LMNO, and to make recommendations on the distribution of fishing effort within each of these three geographic areas. The Council is asked also to provide information on present harvest patterns in terms of yield per recruit and on distributional variation of the resource in recent years.

With respect to shrimp, it is recognized that the Council may, at its discretion, delay providing advice until later in the year, taking into account data availability, predictive capability, and the logistics of additional meetings.

2. Canada requests the Scientific Council to consider the following options in assessing and projecting future stock levels for those stocks listed above:
  - a) For those stocks subject to analytical dynamic-pool type assessments, the status of the stock should be reviewed and implications of fishing at  $F_{0.1}$  in 1999 and subsequent years should be evaluated. The present stock size should be described in relation to those observed historically and those to be expected at the  $F_{0.1}$  level in both the short and long term. In those cases where present spawning stock size is a matter of scientific concern in relation to the continuing productive potential of the stock, management options should be considered to rebuild the spawning stock. All results should be expressed in terms of stock sizes, catch rates and TACs implied for 1999 and the long term.
  - b) For those stocks subject to general production-type assessments, the status of the stock should be reviewed and management options evaluated in the way described above to the extent possible. In this case, the general reference point should be the level of fishing effort (F) which is two-thirds that calculated to be required to take the MSY catch in the long term.
  - c) For those resources on which only general biological and/or catch data are available, no standard criteria on which to base advice can be established. The evidence on stock status should, however, be weighed against a strategy of optimum yield management and maintenance of stock biomass at levels of about two-thirds that of the virgin stock.

In addition to the above, the Scientific Council should also provide information on the application the Precautionary Approach for those stocks, as determined during the special March 1998 meeting of the Scientific Council.

3. The Scientific Council is requested to review the status of the cod stock in Divisions 2J+3KL and to provide estimates of the current size of the total and spawning biomass, together with a description of recent trends.
4. Subject to the concurrence of Denmark (Greenland), the Scientific Council is requested to address the following questions related to Greenland halibut in Subareas 0 and 1:
  - a) The Scientific Council is requested to describe the spawning times and locations as well as nursery areas for Greenland halibut in Subareas 0 and 1 and the relationships with the Greenland halibut resources in southern areas.

- b) Concern has been expressed regarding the impact of shrimp fishing in Greenland halibut nursery areas with respect to discards of young Greenland halibut. The Scientific Council is therefore asked to quantify the by-catch of Greenland halibut (by size and age) from the shrimp fishery in the nursery areas of Davis Strait and describe the potential loss in both yield and contribution to the spawning stock. The Scientific Council is also asked to comment on the measures that could be taken to eliminate or reduce substantially these by-catches.
  - c) It is recognized that answers to these questions may be difficult to precisely quantify given the limitations of the existing database. Accordingly, the Scientific Council is asked to comment on the research required to adequately answer these and related questions regarding the status of the stock of Greenland halibut throughout the Davis Strait area.
5. For Roundnose grenadier in Subareas 0+1, the advice of the Scientific Council has been constrained by the lack of scientific information on this stock, as there are no recent estimates of biomass for the entire stock area. Subject to the concurrence of Denmark (Greenland), the Scientific Council is requested to comment on the research required to allow the Council to provide advice on TAC levels for that stock.

P. S. Chamut  
Assistant Deputy Minister  
Department of Fisheries and Oceans  
Ottawa, Canada