



Northwest Atlantic

Fisheries Organization

Serial No. N4043

NAFO SCS Doc. 99/1

SCIENTIFIC COUNCIL MEETING – JUNE 1999

**CANADIAN REQUEST FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 2000
OF CERTAIN STOCKS IN SUBAREAS 0 TO 4**

by

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1. Canada requests that the Scientific Council, at its meeting in advance of the 1999 Annual Meeting of NAFO, provide advice on the scientific basis for the management of the Roundnose grenadier in Subareas 2 and 3 in 2000.

It is also suggested that, subject to the concurrence of Denmark (Greenland), the Scientific Council, prior to the 1999 Annual Meeting of NAFO, provide advice on the scientific basis for management in 2000 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 is no biological basis for conducting separate assessments for 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 2000. 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 2000 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 2000 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 advise on any new information that may be available on the application the Precautionary Approach for those stocks.

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. In 1994, the Scientific Council noted that there was ongoing research which would allow the Scientific Council to review its opinion on the stock structure question pertaining to Greenland halibut in NAFO Subareas 0+1 (1994 Redbook, pg. 102). Therefore, the Scientific Council is requested to review this information and, in particular, any tagging studies which could be used to answer the following questions: 1) is there any evidence that the Greenland halibut in Division 1A contribute to the spawning stock in Div. 0+1 (offshore)? 2) Are the current management units for Greenland halibut in NAFO Subareas 0+1 (0+1 offshore, Division 1A) biologically appropriate?
5. For Greenland halibut in Subarea 2+Division 3K and Divisions 3LMNO, the Scientific Council is requested to evaluate the effects on yield and stock spawning biomass of the spatial distribution of recent annual catches in relation to the spatial distribution of the stock biomass. The Scientific Council is also requested to provide information on the distribution of fishing effort for Greenland halibut by Division and by depth.
6. The Scientific Council is requested to evaluate the impact of by-catches in the NAFO Regulatory Area on the recovery of stocks currently under moratorium. Specifically do the by-catches of these stocks in all other fisheries in the NAFO Regulatory Area impede their recovery?
7. The Scientific Council has been looking at the Precautionary Approach with respect to reference points for specific species. At the May 1998 Intersessional Meeting on the Precautionary Approach, other potential measures were also identified, such as mesh size, by-catch protocols, closures, etc. Could the Scientific Council discuss and recommend specific conservation measures (other than TACs based on reference points) that the Fisheries Commission could consider in the context of the Precautionary Approach framework?