

## **PART B: SCIENTIFIC COUNCIL MEETING, 24–28 SEPTEMBER 2007**

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Back Row (from left): Konstantin Gorchinsky, Tony Thompson, Phil Large, Taro Ichii, Jean-Claude Mahé, Ricardo Alpoim, Michael Kingsley, Fernando Gonzalez, Toomas Saat

Front Row (from left): Bill Brodie, Sergiy Rebyk, Antonio Avila de Melo, Antonio Vazquez, Don Power, Fred Serchuk, Silver Sirp, Dave Orr, Eugene Colbourne, Maris Vitins



Fred Serchuk, Phil Large and Michael Kingsley with other Scientific Council colleagues.



Antonio Vázquez's last official duty as SC Chair at the NAFO/PICES/ICES Symposium 1-3 October, 2007

## REPORT OF SCIENTIFIC COUNCIL MEETING

24–28 SEPTEMBER 2007

Chair: Antonio Vázquez

Rapporteur: Anthony Thompson

### I. PLENARY SESSIONS

The Scientific Council met at the Altis Hotel, Lisbon, Portugal during 24-28 September 2007, to consider the various matters in its Agenda. Representatives attended from Canada, Denmark (in respect of Faroe Islands and Greenland), European Union (Estonia, France, Latvia, Portugal, Spain and United Kingdom), Japan, Russian Federation, and United States of America. Barbara Marshall and Anthony Thompson from the NAFO Secretariat were in attendance.

The Executive Committee met prior to the opening session of the Council to discuss the provisional agenda and plan of work.

The opening session of the Council was called to order at 0930 hours on 24 September 2007.

The Chair welcomed participants to the 29<sup>th</sup> Annual Scientific Council Meeting. He thanked the Portuguese hosts and complimented them on the facilities.

The Provisional Agenda was adopted with the inclusion of some points. As was the usual practice, Anthony Thompson, the Scientific Council Coordinator was appointed as rapporteur. Barbara Marshall acted as rapporteur, on his behalf, for the first two days of the meeting.

Applications for observer status were made by WWF-Canada – Atlantic Region and the Ecology Action Centre of Halifax. Having no objections, Robert Rangely and Marty King from WWF-Canada and Susanna Fuller from EAC were welcomed and invited as Observers to the meeting.

The Scientific Council was informed that Scientific Council Chair elect Konstantin Gorchinsky was unable to fulfill his mandate due to other work commitments. A Nominating Committee was struck, consisting of Antonio Avila de Melo (EU-Portugal), Bill Brodie (Canada), Konstantin Gorchinsky (Russia) and Fred Serchuk (USA). Their mandate was to propose a new Scientific Council Chair as well as other changes in Standing Committee Chairs if needed.

The Council and its Standing Committees met through 24-28 September 2007 to address various items in its agenda. The concluding session was called to order on 28 September 2007 when the Council considered and **adopted** the reports of the Standing Committees (STACFIS, STACREC). The Scientific Council then considered and **adopted** its report of this meeting. The meeting was adjourned at 1205 hours on 28 September.

The Reports of the Standing Committees as **adopted** by the Council are appended as follows: Appendix I– Report of Standing Committee on Research Coordination (STACREC), and Appendix II – Report of Standing Committee on Fisheries Science (STACFIS).

The Agenda, list of Research (SCR) and Summary (SCS) Documents, and the list of Representatives, Advisers and Experts, are given in Appendices III, IV and V, respectively.

### II. REVIEW OF SCIENTIFIC COUNCIL RECOMMENDATIONS FROM JUNE 2007

The Council noted recommendations made in June 2007 pertaining to the work of the Standing Committees were addressed directly by the Standing Committees, while recommendations pertaining specifically to the Council's work will be addressed under each relevant topic of the Council agenda:

- Scientific Council **recommended** that *the stock classification is included in the summary sheets and that clarification be added to the classification table to record if the stock has references points.*

STATUS: This recommendation is not relevant to the September Scientific Council meeting as no stocks are assessed.

- Scientific Council **recommended** that *position be reported at shorter intervals than the current 2 hours, and the NAF fields for speed (code SP) and course (code CO) be added to the POS reports transmitted to the Secretariat.*

STATUS: The change to a shorter reporting period was discussed by STACTIC and they decided to re-visit the issue at a later date. The inclusion of speed and course in the transmission was not discussed. The Scientific Council Coordinator, in conjunction with the Scientific Council Chair, will write a working paper on this and submit it to STACTIC at their next meeting.

### III. RESEARCH COORDINATION

The Council **adopted** the Report of the Standing Committee on Research Coordination (STACREC) as presented by the Chair, Konstantin Gorchinsky. The full report of STACREC is at Appendix I.

### IV. FISHERIES SCIENCE

The Council **adopted** the Report of the Standing Committee on Fisheries Science (STACFIS) as presented by the Chair, Don Power. The full report of STACFIS is in Appendix II.

### V. SPECIAL REQUESTS FROM THE FISHERIES COMMISSION

The concern expressed by Scientific Council in September 2000 - "During the course of the current meeting, concern was expressed by members of the Scientific Council regarding performing "on the spot" technical analyses in response to *ad hoc* requests from the Fisheries Commission. During the Annual Meetings a smaller complement of scientific expertise within the Scientific Council is in attendance, and this quite often presents considerable difficulty in the Council's ability to provide the best possible advice on many technical requests when the required experts are unavailable. The Council Chairman was asked to continue discussions with the Fisheries Commission Chairman on this matter." (*NAFO Sci. Coun. Rep.*, 2000: 191) was reiterated.

Therefore, in order to provide complete and timely advice, Scientific Council **recommended** that *for the Annual Meeting the Fisheries Commission submits, whenever possible, its questions for Scientific Council well in advance of the meeting. Scientific Council asks that the Secretariat includes this recommendation in the circulation of the Annual Meeting agenda.*

#### 1. Update on Advice for Northern Shrimp in Div. 3M

Updated interim monitoring report for Div. 3M northern shrimp (Annex 1, Item 1)

The figure below is an update of Figure 1.2 from the 2006 stock assessment of shrimp in Div. 3M (*NAFO Sci. Coun. Rep.*, 2006:228). While this figure indicates that the female biomass index has remained high since 1997, the current exploitation rate is unknown; therefore it is not possible to evaluate whether the perceived stability is due to decreased commercial catches or continued high production.

Scientific Council confirms its advice from the 2006 stock assessment, however, it is not in the position to be more precise. Status of this stock will be revised during the October Scientific Council assessment meeting. At that time Scientific Council expects to be able to provide advice on this stock for 2008 and 2009.

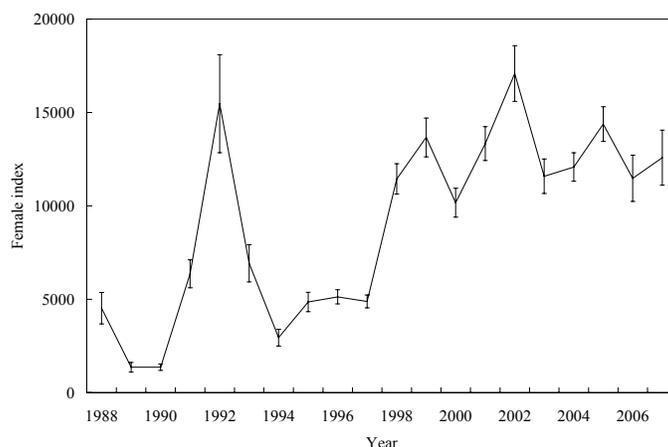


Fig. 1. Shrimp in Div. 3M: female biomass index from EU trawl surveys, 1988-2007

## 2. Update on Advice for Northern Shrimp in Div. 3LNO

Updated interim monitoring report for Div. 3LNO northern shrimp (Annex 1, Item 1)

Preliminary data indicate that 16 865 tons of shrimp had been taken in the Div. 3L shrimp fishery by September 2007 and it is anticipated that the entire 22 000 ton quota will be taken by the end of December 2007.

The autumn 2006 NAFO Div. 3LNO biomass index was 248 790 tons, the third highest in the survey time series. The spring 2007 Div. 3LNO biomass index was 280 372 tons, the highest in the survey time series; however the spring biomass indices are thought to be less precise. Based on the information available, no change is proposed for the Scientific Council advice for a TAC of 22 000 tons in 2008.

## 3. Special Request from the Fisheries Commission on Northern Shrimp in Div. 3LNO

The Scientific Council was requested: *Based on present indications of SSB levels in relation to fisheries, what would be the implication for the conservation status of Northern Shrimp in Divisions 3LNO of 26 000 or 30 000 tons?*

The Scientific Council responded:

Scientific Council used the same methodology employed in 2004 to calculate the 2008 TAC. The TAC in 2004 was set at an exploitation rate of 12%, similar to an adjacent Canadian stock (2J and 3K). If the 12% exploitation rate was maintained at the present stock levels then the 2008 TAC would be 25 000 tons. The 26 000 tons and 30 000 tons TACs correspond to 12.5 and 14.5% exploitation rates respectively. Given that current abundance is at a relatively high level and that there is little difference in the exploitation rates, the conservation implications of these TACs would only be marginally different as the exploitation rates are all relatively low.

## 4. Special Request from the Fisheries Commission on Ecosystem Proposals

Regarding the protection of corals, Scientific Council was asked:

*- to identify or confirm the existence of coral concentrations in the areas identified in the proposal or elsewhere;*

The Scientific Council responded:

At the Scientific Council meeting of June 2006, a presentation on corals was made by Dr. Evan Edinger of Memorial University. The following is from the 2006 report (*NAFO Sci. Coun. Rep.*, 2006:32): "Deep-sea corals in Newfoundland and Labrador waters are broadly distributed along the continental slope. At least 23 species of corals are present, including skeletal gorgonians (8 spp.), antipatharians (2+ spp.), sea pens (7-10 spp.), scleractinian cup corals (4+ spp.), and alcyonacean soft corals (3-4 species). Most coral species are found only on continental slopes

at depths greater than 150 m, except for the alcyonacean soft coral *Gersemia rubiformis*, which occurs at shelf depths. Cold water and lack of hard substrates probably limit most other corals from shelf depths. Major concentrations of all types of corals occur in the Davis Strait – Northern Labrador area, southeastern Labrador slope, the edge of the Northeast Newfoundland shelf, and the southwestern Grand Banks continental slope. Additional concentrations of soft corals, sea pens, and cup corals occur on the north side of the Flemish Cap, but the Flemish Cap data is derived exclusively from fisheries observer data and may be effort-biased. Areas where information on coral distributions are lacking include the south side of the Flemish Cap, the margins of the Orphan Basin, and waters deeper than 1400 m throughout the region."

Additional information was also available in the WWF report (Edinger *et al.*, 2007), but these data had not been reviewed by Scientific Council.

*- identify any historical fishing activity in the proposed zone over the last five years;*

Response: Scientific Council noted that information on the distribution of fishing effort in relation to coral concentrations had been considered in preparing the Canadian proposal (title). Additional information was also available in the WWF report (Edinger *et al.*, 2007), but these data had not been reviewed by Scientific Council. Scientific Council **recommended** that *appropriate observer and VMS data be made available*.

*- assess the adequacy of an observer protocol for masters and vessel captains;*

Scientific Council considered the proposed observer protocol to be adequate for the time being, subject to the following provisos:

- there is a need to collect consistent data on the amount of corals collected per tow or on some other basis; presence/absence data alone is not likely to be sufficient in the long run;
- further elaboration of the protocol may be needed in future to ensure that data collected by different Contracting Parties is, and remains, consistent or to standardize further treatment of the data collected;
- control of the quality of observer data may be needed to ensure that it is reliable;
- consideration is given to workloads of observers.

*- confirm the correctness of the 800-2000 meter depths as described in the proposal;*

Response: Scientific Council was not sure of the meaning of the term “correctness” in this request. It noted that the coral protection zone, as contained in the proposal, covered the slope area of Div. 3O, from 800 to 2 000 m, where some coral concentrations exist. Scientific Council also noted that significant coral concentrations were also found in depths shallower than 800 m in Division 3O.

*- assess the appropriateness of the timing of providing the information of data for the SC by 2009 and 2012;*

Response: Scientific Council stated that the timing appeared to be acceptable. To assist in its preparations, Scientific Council agreed to produce a timetable for this work.

Regarding deep sea management area the Scientific Council was requested to:

*- identify existing fishing activities in the Area and species caught;*

Response: Scientific Council noted that there appeared to be some activity by EU vessels in this area, based on VMS data, but that this was probably erroneous, as no EU bottom trawl fisheries operate at depths of 2 000 m or greater in the NRA. Further investigation of this point is required. No other fisheries are known to occur in the NRA in these depths. Scientific Council noted that this was related to Question 3, and that the depth contours of the defined area should be checked.

*- identify what current or potential fisheries are available in the deep sea area;*

Response: There is information from a long-line survey which took place in the spring of 1996 (Murua and de Cárdenas, 2005), which sampled depths from 700 to 3 000 m. Results of this survey indicate that the main commercial deepwater species, Greenland halibut and roughhead grenadier, did not appear in depths greater than 2 000 m. Species which were caught by longlines at these depths include armed grenadier (*Nematonurus armatus*), rabbitfish (*Hydrolagus affinis*), blue antimora (*Antimora rostrata*), and some skate (*Raja*) species. At depths greater than 2 000 m, longline catches declined by around 50%, and few commercial species were found.

- confirm that waters defined in the area are of depths greater than 2000 meters;

Response: Scientific Council noted that this was related to Question 1, and that the depth contours of the defined area should be checked.

- clarify if the proposal only refers to bottom fisheries or for all fisheries;

Response: Scientific Council interpreted the proposal to refer to bottom contact fishing

- assess the appropriateness of the timing for providing data to the SC.

Response: Scientific Council was unsure of the meaning of this request, as there did not appear to be a request for data in the Deep-Sea Management Area Proposal. Scientific Council noted that the area covered by the proposal has not been fished, is in pristine condition, and has not been investigated, and that therefore the conservation objectives of the Fisheries Commission would be well served by deferring exploratory fishing until the area has been investigated by scientific survey.

Scientific Council noted that it has referred some of these requests to ICES/NAFO WGDEC for further consideration.

Scientific Council during this meeting was also requested to answer questions concerning Vulnerable Marine Ecosystems:

*Can Scientific Council provide any information on major coral concentrations in the Northwest Atlantic? What additional data does Scientific Council need to further delineate these concentrations?*

Response: Answer to part 1 covered in response to FC question 1 above. Scientific Council noted that additional data on corals is being collected on EU and Canadian surveys, as well as commercial fisheries, and that these data will be reviewed by Scientific Council when available, to further delineate the coral concentrations.

*Can Scientific Council advise on criteria for identifying vulnerable marine ecosystems or other sensitive areas?*

Response: Scientific Council referred this question to ICES/NAFO WGDEC, scheduled to meet in March 2008. Scientific Council will identify some working group members to address this task.

## **5. Special Request from the Fisheries Commission on Redfish in Div. 3M and Div. 3LN**

Scientific Council was asked the following by Fisheries Commission:

*According to the NAFO Stock Classification of Redfish in Div. 3M, the stock abundance status is "A" (high abundance). The exploitation rate status is "1" (low fishing mortality). The 2007 advice in year 2008 and 2009 is that the TAC should not exceed 5 000 tons. The SC is requested to re-evaluate the advice which seems too restrictive considering the biomass and exploitation status of this fish stock.*

*According to the NAFO Stock Classification of Redfish in Div. 3LN, the stock abundance status is "B" intermediate abundance. The exploitation rate status is "1" (low fishing mortality). The 2007 advice in year 2008, 2009 and 2010 is no directed fishery. The SC is requested to re-evaluate the advice which seems too restrictive considering the biomass and exploitation of this fish stock.*

The Scientific Council responded to both these requests as follows:

The Stock Classification system noted in the June Scientific Council report was not intended as a means to convey the scientific advice to Fisheries Commission. Its purpose was in response to a request by FIRMS to provide such a classification for their purposes. It is clear that there are inconsistencies between the scientific advice and this Stock classification system which arise because the category choices do not fully describe the status of some stocks. The Scientific Council acknowledges some these classifications will require revision in the future.

The Scientific Council was also asked to: *provide a biomass figure for redfish in Div. 3M and Div. 3LN.*

The response was:

SC is unable to provide an estimation of the absolute values of redfish biomass in Div. 3M and Div. 3LN. Analytical assessments have been applied in both cases, but not accepted.

SC advises on the incorrectness of interpreting survey biomass estimates, usually calculated by the swept area method, as absolute figures. Such values may be considered indices of abundance and they are only indicative of trends.

## **VI. REVIEW OF FUTURE MEETING ARRANGEMENTS**

### **1. Scientific Council Meeting on Shrimp, October–November 2007**

Following discussions in November 2006, the Scientific Council reconfirmed the dates of 24 October – 1 November 2007 for this meeting to be held at the NAFO Headquarters, Dartmouth, NS, Canada. (*NAFO Sci. Coun. Rep.*, 2006: 22).

### **2. Scientific Council Meeting, June 2008**

Scientific Council agreed that its June meeting will be held in Dartmouth on 5-19 June 2008. It was decided not to shorten this meeting, as suggested earlier (*NAFO Sci. Coun. Rep.*, 2006: 188), owing to time constraints experienced in this and previous meetings.

### **3. Annual Meeting, September 2008**

Scientific Council noted that this Annual Meeting will be held on 22 September – 1 October 2008. The Commission and Scientific Council will meet in Spain on 22 – 26 September 2008. The Symposium will be held in Dartmouth, NS, Canada on 29 September – 1 October 2008.

### **4. Scientific Council Meeting and NIPAG (Shrimp), November 2008**

The dates and venue of the Scientific Council meeting will be decided at the October-November 2007 Meeting. Provisional dates and venue are 29 October – 6 November 2008 at the ICES HQ, Copenhagen, Denmark (*NAFO Sci. Coun. Rep.*, 2006: 222).

### **5. Scientific Council Meeting, June 2009**

The Council agreed to the tentative dates of 4-18 June 2009.

## **VII. FUTURE SPECIAL SESSIONS**

### **1. Progress Report on Special Session in 2008: Marine Mammals**

A special session entitled “The Role of Marine Mammals in the Ecosystem in the 21<sup>st</sup> Century” is planned to be held in Dartmouth during 29 September – 1 October 2008. This will follow the NAFO Scientific Council Meeting in Spain and the ICES Annual Science Conference in Halifax, that will be held on 22-26 September 2008. Provisional titles for the proposed four sessions are: Factors affecting life history traits, Foraging strategies and energetic considerations, and marine mammal-fisheries interactions, with the aim of presenting and discussion current advances since the successful 1995 NAFO/ICES marine mammal symposium. A draft poster has been produced,

with the suggestion that the abstract deadline be moved forward to 1 April 2008. The deadline for paper submissions will be 31 October 2008.

ICES, subject to approval from their Council, have agreed to be joint organizers and will provide travel and subsistence funds for one person. The two selected co-convenors are Garry Stenson (NAFO) and Tore Haug (ICES). NAFO is providing support before, during and after the symposia and the proceedings will be published in the *Journal of Northwest Atlantic Fishery Science*.

## **2. Topics for Future Special Sessions**

It was agreed that the 2009 Special Session would take the form of a 2-4 day workshop. Suggestions for topics were new assessment methods including FLR and the Ecosystem Approach. Topic selection will be further discussed in June. There will not be a NAFO Scientific Council Symposium in 2009.

## **VIII. SCIENTIFIC COUNCIL WORKING PROCEDURES AND PROTOCOL**

### **1. Timetable and Frequency of Assessments**

There are no planned changes to the frequencies of assessments agreed in the September 2006 Scientific Council meeting (*NAFO Sci. Coun. Rep.*, 2006:189).

### **2. Revision of Rules of Procedure – Observer Application Process**

The current guidelines for observers at Scientific Council meetings are given in rule 1.3 of the Scientific Council's Rules of Procedure. It was clarified that observers represent organizations. It was agreed to amend the observer rule as follows:

- That the word “international” be deleted so that national organizations can also apply for observer status.
- That observers to the Annual Meeting were observers to the NAFO organization and application would follow current GC/FC guidelines, being made 100 days in advance of the meeting, and would be circulated by the Secretariat to Scientific Council representatives in addition to Heads of Delegation.
- That observers to other Scientific Council meetings would follow the above guidelines, except that applications would only be circulated to Scientific Council representatives.
- That observer organizations would be granted a permanent status upon approval, that could be revoked upon unacceptable conduct or if there was a lapse in attendance of three years. Observers would then only be required to give notice of their attendance to the Secretariat 30 days in advance of any meeting.
- It was agreed to harmonize the Scientific Council rules for observer status with those of FC/GC and note would be made of any amendments to their rules in the near future.

It was agreed to introduce a new “Guest Expert” status to allow experts to attend Scientific Council meetings following an invitation from the Scientific Council Chair. The guest expert(s) would not represent a Party or Organization and would have no status at the meeting other than to provide specific advice and guidance to Scientific Council on particular issues.

The Scientific Council Coordinator will draft suitable text to amend the Rules of Procedure for discussion at the June 2008 meeting.

## **IX. OTHER MATTERS**

### **1. Working Group on Ecosystem Approach to Fisheries Management**

Knowing that the principles of Ecosystem Approach to Fisheries Management (EAFM) are embedded in the new Convention and will be used to guide the future work of the Scientific Council, the Scientific Council agreed at the June 2007 meeting that the Scientific Council Chair and Mariano Koen-Alonso would further investigate ToRs for

the Working Group and contact possible future members. Based on the proposal, Scientific Council decided to establish a Working Group on the EAFM with the following ToRs:

- 1 – To identify regional ecosystems in the NAFO Convention Area.
- 2 – To make an inventory of current knowledge on the components of each regional ecosystem (*i.e.* physical oceanography, primary production, zooplankton and secondary production, benthos and large invertebrates, fish and fish assemblages, seabirds, marine mammals, turtles, and fisheries).
- 3 – To explore the feasibility of different tools (*e.g.* ecosystem indicators, modelling, *etc.*) that could be used in management advice in the NAFO area.
- 4 – Data needs and sampling recommendations.
- 5 – To comment on necessary on the ICES/NAFO WG on Deep-water Ecology's report on its relation to the NAFO area.

Scientists that were proposed and already agreed to participate in the group are:

Name	Country
Ellen Kenchington	Canada
Andrew J. Kenny	UK
Mike Sinclair	Canada
Andrea Belgrano	Sweden
Mariano Koen-Alonso	Canada
Heino Fock	Germany
Eugene B. Colbourne	Canada
Garry Stenson	Canada
F. Javier Murillo	Spain
Phil Large	UK
Antonio Vázquez	Spain
Pablo Durán	Spain

Scientific Council welcomed all participants into the group and noted that still are several other scientists that will participate. Antonio Vázquez was nominated Chair for the first year period. The Chair position will be revisited with the Working Group's proposal.

Scientific Council wishes the best to the Working Group and entrust it to:

- Report each year to Scientific Council in advance to the June Meeting on progress against the TORs.
- Include a Working Group's page in the NAFO website to promote it and to allow participation of other scientists.

## **2. Study Group on Rebuilding Strategies for Greenland Halibut**

This group will meet in Vigo, Spain, on 21-23 February 2008. STACFAD have approved funding for three invited experts. The host has kindly offered their facilities for the meeting.

## **3. Placement of SCR and SCS Drafts on Members Page**

It was agreed to place draft SCS and SCR documents on the member's area of the NAFO website immediately after the conclusions of Scientific Council meetings. It is still intended that authors finalize their drafts within two weeks of the end of the meeting, at which time the draft will be removed from the member's area and the final version placed on the public area.

#### 4. Cooperation with COST/FRESH

The Scientific Council Chair introduced a proposal made by Dr. F. Saborido, Chair of the COST's Action "Fish Reproduction and Fisheries" (FRESH; FAO601), for NAFO to participate in that COST Action. COST is an intergovernmental framework for European COoperation in the field of Scientific and Technical Research, allowing the coordination of research on a European level. FRESH is an Action supported by COST and promoted by members of the NAFO Working Group on Reproductive Potential (WGRP) as a way to facilitate their work.

Scientific Council discussed various aspects of FRESH and the COST action, but noted that the full details of the proposal for NAFO participation in these endeavours have not been conveyed to the Scientific Council by the NAFO Working Group on Reproductive Potential.

The Scientific Council raised a number of questions and issues related to the benefits, responsibilities, and obligations of participation by NAFO in FRESH and COST. The WGRP has indicated that it will prepare a new set of TORs for its future work and present these at the June 2008 Scientific Council meeting.

As such, the Scientific Council decided to defer discussion – and a decision – on the appropriateness of NAFO participation's in COST Action FAO601 until the June 2008 Scientific Council meeting when (a) the new TORs for the WGRP are available for Scientific Council review; and (b) if a proposal from the WGRP itself for participation in FAO601 has been submitted to the Scientific Council for consideration and possible approval. Scientific Council requests that the WGRP provide clear guidelines as to the advantages of NAFO participating in the FRESH action.

#### 5. ICES/NAFO Working Group on Deep-water Ecology (WGDEC)

Scientific Council accepted the kind invitation from ICES to join WGDEC. ICES will lead this working group. NAFO will take an active role in the group, provide participants, submit requests (TORs), and assist in the answering of such requests. The next meeting is scheduled for March 2008. The following terms of reference have been referred to WGDEC for consideration:

- Define criteria for identifying vulnerable marine ecosystems or other sensitive areas.
- To identify or confirm the existence of coral concentrations in a specific area of NAFO Div. 3O, which roughly coincides with the zone between 400 and 2 000 m deep.
- To confirm that the above zone is the one with the highest coral concentration in NAFO Convention Area.
- To identify major coral concentrations in the Northwest Atlantic.

#### 6. Other Business

##### a) Oceanic (Pelagic) Redfish

It was noted that this is a straddling stock between NAFO and NEAFC areas, that is currently assessed by ICES and managed by NEAFC. A catch allocation is granted to NAFO Contracting Parties under a management agreement with NEAFC. Scientific Council **recommended** that *Scientific Council reviews the ICES evaluation of stock status and scientific advice on oceanic redfish, and provides its advice to Fisheries Commission as appropriate.*

##### b) Election of Chairs

A nominating committee was established at the beginning of this meeting, and consisting of Antonio Avila de Melo (EU-Portugal), Bill Brodie (Canada), Konstantin Gorchinsky (Russia) and Fred Serchuk (USA). Following their proposal, the incoming Vice-Chair of Scientific Council, Don Power (Canada), was elected as the Scientific Council Chair following this meeting. The nominating committee will continue to search for a STACREC Chair for election at the November meeting.

## **X. ADOPTION OF REPORTS**

### **1. Committee Reports of STACREC and STACFIS**

The Council reviewed the Reports of the Standing Committees (STACREC and STACFIS) and adopted the text of the reports.

### **2. Report of Scientific Council**

The Council at its concluding session on 28 September considered and **adopted** its own report.

## **XI. ADJOURNMENT**

The out-going Scientific Council Chair gave the following comments of appreciation. "I would like to thank Don Power (STACFIS) and Konstantin Gorchinsky (STACREC) for their untiring support and efficient work. We are all sorry to hear that Konstantin will be leaving Scientific Council. However, he will remain in our memories, and in our proceedings, forever. I would also like to thank all the Standing Committee Chairs, Scientific Council members, and the Scientific Council Coordinator and all at the Secretariat, for their support over the past two years. I wish good luck to Don Power and the other new Chairs, and hope that they will be given as much support as I have received."

Bill Brodie, Representative for Canada and on behalf of all Scientific Council members, thanked Antonio for his guidance and work, and echoed thanks to all the outgoing Chairs and best wishes for the incoming Chairs. He asked that the Scientific Council Coordinator conveys a message of thanks to the Secretariat for the support they give to Scientific Council during their June, September and October meetings, and also more generally throughout the year.

There being no other business, the meeting was adjourned at 1205 hours on 28 September 2007.

## **APPENDIX I. REPORT OF THE STANDING COMMITTEE ON RESEARCH COORDINATION (STACREC)**

Chair: Konstantin Gorchinsky

Rapporteur: Eugene B. Colbourne

The Committee met at the Hotel Altis, Lisbon, Portugal during 26-27 September 2007 to discuss matters pertaining to statistics and research referred to it by the Scientific Council. Representatives attended from Canada, Denmark (in respect of Faroe Islands and Greenland), European Union (Estonia, France, Latvia, Portugal, Spain and United Kingdom), Japan, Russian Federation and United States of America.

### **1. Opening**

The Chair opened the meeting by welcoming the participants and appointed Eugene B. Colbourne (Canada) as rapporteur.

The Agenda was adopted as presented.

### **2. Fisheries Statistics**

#### **a) Progress Reports on Secretariat Activities**

##### **i) Review of STATLANT 21**

The NAFO Secretariat presented plans to update the structure of the STATLANT 21 database. The details are outlined in SCS Doc. 07/21. It was noted that the intention was to meet Scientific Council requirements as well as other potential users. The Secretariat intends to review the database before the next June Scientific Council Meeting and requested the committee to provide comments and suggestions. The initiative received strong support from the committee.

### **3. Research Activities**

#### **a) Surveys Planned for 2007 and Early-2008**

The planned surveys are outlined in SCS Doc. 07/17. Participants were asked to check the document for completeness and accuracy.

#### **b) Consideration of a revised edition of the Manual of Groundfish Surveys in the Northwest Atlantic (Doubleday, 1981)**

A draft outline for a revised manual on groundfish and shellfish surveys in the Northwest Atlantic was presented to STACREC by W. Brodie. The outline for the new manual (SCS Doc. 07/22) was agreed to and adopted by the Committee.

### **4. Stock Assessment Database**

#### **a) Evaluation of the Assessment Data Submission Procedure**

The Secretariat generally sends out notice to Designated Experts in advance of the regular June Scientific Council meetings to submit their stock data. However it was noted that this was not always possible with current data. It was suggested that Designated Experts submit whatever data was available two months in advance of the June Scientific Council meeting and any outstanding data by the end of the meeting.

## 5. Other Matters

### a) Review of SCR and SCS Documents

**SCR Doc. 07/63.** Concepción González, Josefina Teruel, Eduardo López and Xabier Paz. Feeding Habits and Biological Features of Deep-Sea Species of the Northwest Atlantic: Large-eyed Rabbitfish (*Hydrolagus mirabilis*), Narrownose Chimaera (*Harriotta raleighana*) and Black Dogfish (*Centroscyllium fabricii*).

Feeding habits and biological features of three deep-water species - large-eyed rabbitfish (*Hydrolagus mirabilis*), narrownose chimaera (*Harriotta raleighana*) and black dogfish (*Centroscyllium fabricii*) - distributed in the Grand Bank and Flemish Cap (Northwest Atlantic) were analyzed. Both chimaeroid species fed on endo and epi-benthic organisms, but with different behaviour. Narrownose chimaera showed a closer relationship with the sea bed in the feeding habits, denoted mainly by the high polychaete and sediment presence; while in large-eyed rabbitfish, the great importance of pelagic prey (*Coryphaenoides rupestris* and cephalopods) would indicate wider feeding habits, increased with the predator size. Black dogfish preyed mostly on pelagic and benthopelagic prey (crustaceans, scyphozoans and fish).

High infestation of *Gyrocotyle* affected the chimaeroid species, increasing with depth. The parasites affected 67% of large-eyed rabbitfish, with higher percentage for smaller individuals; narrownose chimaera (84% with parasites) had a greater number of parasites per host, and bigger individuals were more affected. However, presence of *Gyrocotyle* did not seem to harm the well-being of the specimens. Length-weight relationship indicated bigger body weight for males in the small sizes of 108, 31.5 and 50 cm of large-eyed rabbitfish, narrownose chimaera and black dogfish respectively. However, the body-eviscerated weigh relationship did not show differences between sexes. The hepatosomatic index (HSI) was high in all species, mainly in narrownose chimaera (31.3%) and it reached in the other species a value around the fourth part of their eviscerated weight. Black dogfish showed a clear increase of HSI with the body weight, while chimaerids presented a bigger variation.

**SCR Doc. 07/65.** Diana González-Troncoso and Xabier Paz. Some Ecological Indices in Flemish Cap derived from the surveys conducted by EU between 1988 and 2006.

Some ecological indices were calculated from the data obtained in the research surveys conducted by EU (Spain and Portugal) in Flemish Cap between the years 1988 and 2006. These indices were calculated for individual populations (intrinsic population rate of growth and mean length of catch) and for all the community (ABC curves, indices about faunal diversity, proportion of non-commercial species, mean length in community and size spectra). Data on twenty seven species captured in the survey year by year were used including *Pandalus borealis*. The data on *Pandalus borealis* and *Sebastes* juveniles have a great influence in the value of the indices, as their abundance is very high in relation to their contribution to the biomass. The indices present a general stable pattern. Despite the moratorium of the principal commercial species of the bank of Flemish Cap, it seems not to be recovery of the general community.

### b) Other Business

There being no other business, the Chair thanked the rapporteur, all meeting participants, the NAFO Secretariat for their valuable support, and closed the meeting.

## APPENDIX II. REPORT OF THE STANDING COMMITTEE ON FISHERIES SCIENCE (STACFIS)

Chair: Don Power

Rapporteurs: Various

The Committee met at the Altis Hotel, Lisbon, Portugal during 24-28 September 2007, to consider the various matters in its Agenda. Representatives attended from Canada, Denmark (in respect of Faroe Islands and Greenland), European Union (Estonia, France, Latvia, Portugal, Spain and United Kingdom), Japan, Russian Federation, and United States of America. The Scientific Council Coordinator was in attendance.

### 1. Opening

The Chair, Don Power (Canada), opened the meeting by welcoming participants. The provisional agenda was reviewed and adopted, and a plan of work developed for the meeting.

### 2. Nomination of Designated Experts

The Chair noted the recent need to replace Designated Experts (DEs) for a number of stocks and discussed the lack of a formal procedure for the nomination and endorsement of candidates. STACFIS agreed that such matters could be referred to the Scientific Council Executive Committee.

STACFIS reviewed the list of Designated Experts for the stocks which would be assessed and for which management advice is requested by the Fisheries Commission and Coastal States. The final nomination of the Designated Experts will be conducted through the normal confirmation process between the various national institutes and Secretariat. The nominations to take effect after this meeting are:

From the Science Branch, Northwest Atlantic Fisheries Centre, Department of Fisheries and Oceans, P. O. Box 5667, St. John's, NL, Canada A1C 5X1, Canada (Fax: + 709-772-4188)

Cod in Div. 3NO	Joanne Morgan	Tel: +709-772-2261	<a href="mailto:morganj@dfo-mpo.gc.ca">morganj@dfo-mpo.gc.ca</a>
Redfish Div. 3O	DFO (Canada)		
American Plaice in Div. 3LNO	Karen Dwyer	Tel: +709-772-0573	<a href="mailto:dwyerk@dfo-mpo.gc.ca">dwyerk@dfo-mpo.gc.ca</a>
Witch flounder in Div. 3NO	DFO (Canada)		
Witch flounder in Div. 2J+3KL	Dawn Maddock Parsons	Tel: +709-772-2495	<a href="mailto:parsonsd@dfo-mpo.gc.ca">parsonsd@dfo-mpo.gc.ca</a>
Yellowtail flounder in Div. 3LNO	Dawn Maddock Parsons	Tel: +709-772-2495	<a href="mailto:parsonsd@dfo-mpo.gc.ca">parsonsd@dfo-mpo.gc.ca</a>
Greenland halibut in SA 2+3KLMNO	Brian Healey	Tel: + 709-772-8674	<a href="mailto:healeybp@dfo-mpo.gc.ca">healeybp@dfo-mpo.gc.ca</a>
Northern shrimp in Div. 3LNO	David Orr	Tel: +709-772-7343	<a href="mailto:orrd@dfo-mpo.gc.ca">orrd@dfo-mpo.gc.ca</a>
Thorny skate in Div. 3LNO	Mark Simpson	Tel: + 709-772-4148	<a href="mailto:simpsonmr@dfo-mpo.gc.ca">simpsonmr@dfo-mpo.gc.ca</a>
White hake in Div. 3NO	Mark Simpson	Tel: + 709-772-4148	<a href="mailto:simpsonmr@dfo-mpo.gc.ca">simpsonmr@dfo-mpo.gc.ca</a>
Northern Shortfin Squid in SA 3+4	DFO (Canada)		

From the Instituto Español de Oceanografía, Cabo Estay, Canido, Vigo 36200, Spain

Cod in Div. 3M	Carmen Fernandez	Tel: + 34 986 49 2111	<a href="mailto:carmen.fernandez@vi.ieo.es">carmen.fernandez@vi.ieo.es</a>
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From the Instituto Español de Oceanografía, Aptdo 1552, E-36280 Vigo (Pontevedra), Spain (Fax: +34 986 49 2351)

Roughhead grenadier in SA 2+3	Fernando Gonzalez-Costas	Tel: +34 986 49 2111	<a href="mailto:fernando.gonzalez@vi.ieo.es">fernando.gonzalez@vi.ieo.es</a>
Roundnose grenadier in SA 2+3	Fernando Gonzalez-Costas	Tel: +34 986 49 2111	<a href="mailto:fernando.gonzalez@vi.ieo.es">fernando.gonzalez@vi.ieo.es</a>

From the Instituto Nacional de Investigacao Agrária e das Pescas (INIAP/IPIMAR), Av. de Brasilia, 1449-006 Lisbon, Portugal (Fax: +351 21 301 5948)

American plaice in Div. 3M	Ricardo Alpoim	Tel: +351 21 302 7000	<a href="mailto:ralpoim@ipimar.pt">ralpoim@ipimar.pt</a>
Redfish in Div. 3M	Antonio Avila de Melo	Tel: +351 21 302 7000	<a href="mailto:amelo@ipimar.pt">amelo@ipimar.pt</a>
Redfish in Div. 3LN	Antonio Avila de Melo	Tel: +351 21 302 7000	<a href="mailto:amelo@ipimar.pt">amelo@ipimar.pt</a>

From the Greenland Institute of Natural Resources, P. O. Box 570, DK-3900 Nuuk, Greenland (Fax: +299 39 1200)

Redfish in SA1	Helle Siegstad	Tel: +299 36 1238	<a href="mailto:helle@natur.gl">helle@natur.gl</a>
Other Finfish in SA1	Helle Siegstad	Tel: +299 36 1238	<a href="mailto:helle@natur.gl">helle@natur.gl</a>
Greenland halibut in Div. 1A	Bjarne Lyberth	Tel: +299 36 1238	<a href="mailto:bjly@natur.gl">bjly@natur.gl</a>
Northern shrimp in SA 0+1	Helle Siegstad	Tel: +299 36 1238	<a href="mailto:helle@natur.gl">helle@natur.gl</a>
Northern shrimp in Denmark Strait	Bo Bergstrøm	Tel: +299 36 1238	<a href="mailto:bobe@natur.gl">bobe@natur.gl</a>

From the Danish Institute for Fisheries Research, Charlottenlund Slot, DK-2920, Charlottenlund, Denmark (Fax: +45 33 96 33 33)

Roundnose grenadier in SA 0+1	Ole Jørgensen	Tel: +45 33 96 33 00	<a href="mailto:olj@dfu.min.dk">olj@dfu.min.dk</a>
Greenland halibut in SA 0+1	Ole Jørgensen	Tel: +45 33 96 33 00	<a href="mailto:olj@dfu.min.dk">olj@dfu.min.dk</a>

From Instituto Español de Oceanografía, P.O. Box 1552, Vigo, Spain (Fax: +34 986 49 2351)

Shrimp in Div. 3M	Jose Miquel Casas Sanchez	Tel: +34 986 49 2111	<a href="mailto:mikel.casas@vi.ieo.es">mikel.casas@vi.ieo.es</a>
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From Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), 6 Knipovich Street, Murmansk, 183763, Russia (Fax: +7 8152 47 3331)

Capelin in Div. 3NO	Alexander Vaskov	Tel: 7 8152 45 0568	<a href="mailto:vaskov@pinro.ru">vaskov@pinro.ru</a>
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### 3. Other Matters

#### a) Review of SCR and SCS Documents

There were two biological papers presented at the meeting and both were taken under item 5(a) of the STACREC agenda.

#### b) Other Business

The Chair noted to the committee that David Kulka, Designated Expert for thorny skate in Div. 3LNOPs and white hake in Div. 3NOPs, would retire before the next June meeting of Scientific Council and thanked him in absentia for his contribution to assessments of these stocks and to the work of the Scientific Council for many years.

Their being no further business, the Chair thanked the committee and the Secretariat for their assistance and then adjourned the meeting.