

## PART B: SCIENTIFIC COUNCIL MEETING, 22-26 SEPTEMBER 2008

### Contents

I. Plenary sessions.....	227
II. Review of Scientific Council Recommendations.....	227
III. Research Coordination.....	228
IV. Fisheries Science .....	228
V. Special Requests from the Fisheries Commission .....	229
1. From September 2007 .....	229
a) Update on Advice for Northern Shrimp in Div. 3M.....	229
b) Update on Advice for Northern Shrimp in Div. 3LNO.....	229
2. From Fisheries Commission Intersessional Meeting, May 2008.....	229
a) Shrimp biomass distribution in Div. 3LNO .....	229
b) Review of Existing Fishing Areas.....	232
3. <i>Ad hoc</i> requests from current meeting .....	232
a) Scientific Council Response to Fisheries Commission requests on Div. 3LNO Shrimp .....	232
VI. Review of Future Meeting Arrangements .....	234
1. Scientific Council Meeting, October – November 2008 .....	234
2. Scientific Council Meeting, June 2009.....	234
3. Annual Meeting and Special Session, September/November 2009.....	234
4. Scientific Council and NIPAG (Shrimp) Meetings, October – November 2009.....	234
5. Working Group on the Ecosystem Approach to Fisheries Management .....	234
6. Scientific Council meeting, June 2010 .....	234
7. Cooperation with ICES.....	234
a) NIPAG, October/November 2008.....	234
b) WGFTFB, May 2009 .....	234
c) WGHARP .....	235
d) WGDEC, 2009.....	235
e) NIPAG, October/November 2009.....	235
VII. Future Special Sessions.....	235
1. Progress Report on Special Session in 2009 entitled “Rebuilding Depleted Fish Stocks – Biology, Ecology, Social Science and Management Strategies.” .....	235
2. Topics for Future Special Sessions.....	235
VIII. Scientific Council Working Procedures and Protocol .....	235
1. Elections of Chairs .....	235
2. Timetable and Frequency of Assessments.....	235
3. Rules of Procedure .....	236
a) Voting Procedures.....	236
b) Observer Application Process .....	237
c) General Review.....	237
4. Review of Structure of Scientific Council.....	238
IX. Other Matters.....	238
1. Other Business.....	238

a) Scientific Merit Awards .....	238
b) <i>Ad hoc</i> Working Group of Fisheries Managers and Scientists on Vulnerable Marine Ecosystems .....	238
c) Bottom Fishing Footprint .....	238
X. Adoption of Reports .....	239
1. Committee Reports of STACREC and STACFIS .....	239
2. Report of Scientific Council .....	239
XI. Adjournment.....	239
Appendix I. Report of the Standing Committee on Research Coordination (STACREC) .....	240
1. Opening .....	240
2. Fisheries Statistics .....	240
3. Research Activities .....	240
4. FAO Cooperation .....	240
5. Other Matters.....	241
Appendix II. Report of the Standing Committee on Fisheries Science (STACFIS) .....	242
I. Opening .....	242
II. Stock Assessments .....	242
1. Northern Shrimp ( <i>Pandalus borealis</i> ) in Div. 3M.....	242
2. Northern Shrimp ( <i>Pandalus borealis</i> ) in Div. 3LNO .....	243
III. Nomination of Designated Experts .....	244
IV. Others Matters .....	245
1. Review of SCR and SCS Documents .....	245
2. FIRMS Classification .....	245
3. Other Business.....	245



Left to right: Silver Sirp, Toomas Saat, Vladimir Babyan, Ilya Skryabin, Antonio Avila de Melo, Jean-Claude Mahé, Bill Brodie, Fred Serchuk, Michael Kingsley, Fenando Gonzalez, Ricardo Alpoim, Don Power, Enrique deCardenas, Anthony Thompson, Antontio Vázquez



Rciardo Alpoim (STACREC Chair), Don Power (SC Chair), Michael Kingsley (STACFIS Chair) and Anthony Thompson (SC Coordinator)



## Report of Scientific Council Meeting

22 – 26 September 2008

Chair: Don Power

Rapporteur: Anthony Thompson

### I. PLENARY SESSIONS

The Scientific Council met at the Maritime Station, Vigo, Spain, during 22 – 26 September 2008, 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 and Spain), Russian Federation, and United States of America. The Scientific Council Coordinator was 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 0950 hours on 22 September 2008.

The Chair welcomed participants to the 30<sup>th</sup> annual meeting. The Chair, with deepest regrets, then informed Scientific Council of the very sad news regarding the sudden passing of Alexander Vaskov. On 18 July 2008, Alexander Vaskov died in Murmansk from a brain edema. Alexander was a long standing and valuable member of the NAFO Scientific Council. Alexander first attended the NAFO Scientific Council meeting in 1994 and has contributed greatly to the success of Scientific Council. He was the Designated Expert for Div. 3NO capelin and always generously shared his knowledge and experience with his colleagues and young scientists. In addition to his basic scientific activities with PINRO, Murmansk, Alexander was responsible for the training of NAFO observers for Russian fishing vessels and lent his aid and advice to fishermen in matters of fisheries in the NAFO Regulatory Area.

The Provisional Agenda was adopted with minor additions. The Council appointed Anthony Thompson, the Scientific Council Coordinator, as rapporteur.

The Chair, on behalf of Scientific Council, welcomed Robert Rangely from WWF-Canada and Susanna Fuller from Ecology Action Centre, as observers to the meeting.

The Council and its Standing Committees met through 22 – 26 September 2008 to address various items in its agenda. The Council considered and **adopted** the reports of the STACFIS and STACREC Standing Committees. The final session was called to order at 1000 hours on 26 September 2008. The Scientific Council then considered and **adopted** its report of this meeting. The meeting was adjourned at 1330 hours on 26 September 2008.

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

The Council noted recommendations made in June 2008 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:

#### From Scientific Council Meeting, 5 – 19 June 2008

1. Scientific Council **recommended** that *the collection protocol be reviewed and re-drafted, possibly at the Fisheries Commission ad hoc Working Group of Managers and Scientists on VME to take in to account the above issues.*

STATUS: This was undertaken by the Working Group of Fisheries Managers and Scientists on Vulnerable Marine Ecosystems (WGFMS) and is included as Annex 6 in their report (FC Doc. 08/08).

2. Discussion was made of the possible entry into a formal relationship between NAFO and COST/FRESH. It was **recommended** that *the two groups maintain an informal working relationship as this type of relationship is adequate to develop the collaborations among scientists that would be beneficial towards addressing the ToRs.*

STATUS: No further action necessary.

3. Scientific Council **recommended** that *the following changes be made to the Scientific Council Rules of Procedure Rule 1 Representation: "1.3 The Scientific Council may invite any non-Member Government and any ~~international~~, public or private, organization to be represented at meetings of the Scientific Council or its subsidiary bodies by an observer or observers."*

In addition, Scientific Council would like to formalize the position of invited experts by the addition of a new rule and **recommended** that *the following rule be added under Representation Rule 1: "1.4 The Scientific Council Chair may invite one or more "guest experts" to meetings of Scientific Council and its subsidiary bodies. 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."*

STATUS: Implemented upon adoption of June 2008 report and will be included in the published Rules of Procedure in the next amendment.

4. Scientific Council **recommended** that *the FIRMS Stock classification is:*

*next considered and updated by STACFIS in June 2008[sic] (should have been 2009);*

*not included in the summary sheets, the Scientific Council report, or any other published documentation, and;*

*managed by the Secretariat and present to FIRMS for use for search engine purposes only.*

STATUS: No action necessary at this meeting.

#### **From Scientific Council Meeting, 7 – 21 June 2007**

1. Scientific Council **recommended** that *boundaries of Divisions 3M and 3L be re-defined so that 3M includes that small rectangle currently in 3L.*

STATUS: This item was presented to General Council by the Scientific Council Chair (GC WP 08/3). The matter was deferred to the 2009 Annual Meeting pending a fuller understanding of the implications of these changes on catch reporting.

2. Scientific Council also **recommended** that *the boundaries of the seamount areas be modified to include any peaks close to the current boundaries, and that General Council discuss with WECAFC the issue of seamounts which straddle or are adjacent to the southern boundary of the NAFO Convention Area.*

STATUS: No action has been taken on this to date.

### **III. RESEARCH COORDINATION**

The Council **adopted** the Report of the Standing Committee on Research Coordination (STACREC) as presented by the Chair, Ricardo Alpoim. 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, Michael Kingsley. The full report of STACFIS is in Appendix II.

## V. SPECIAL REQUESTS FROM THE FISHERIES COMMISSION

### 1. From September 2007

Scientific Council reviewed its advice on Div. 3M and Div. 3LNO shrimp given during its October/November 2007 meeting.

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

A preliminary analysis of the results of the EU bottom-trawl survey from July 2008 was presented to Scientific Council and indicated no significant change in the status of the stock. Scientific Council noted that further analysis of this survey will be reviewed at the next Scientific Council meeting in October. Scientific Council reiterates its recommendation that the TAC for 2009 should not exceed the 2005 and 2006 exploitation levels (17 000 to 32 000 t).

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

A preliminary analysis of the results of the Canadian surveys from autumn 2007 and spring 2008 was presented to Scientific Council and indicated no significant change in the status of the stock. Scientific Council noted that further analysis of these two surveys will be reviewed at the next Scientific Council meeting in October. Scientific Council reiterates its recommendation that the TAC for 2009 be maintained at the 2008 level (25 000 t) in order to monitor the impact on the stock.

### 2. From Fisheries Commission Intersessional Meeting, May 2008

#### a) Shrimp biomass distribution in Div. 3LNO

The Scientific Council is requested to provide advice in September 2008 on: *the current distribution of shrimp in Divisions 3LNO including the relative distribution inside and outside the Canadian EEZ* (FC Doc. 08/04, item 10, p. 5).

The Scientific Council responded:

All Canadian spring and autumn surveys from 1995 to 2008 indicate that over 90% of the shrimp biomass index in Div. 3LNO is found in Div. 3L, increasing to over 95% when considering only the surveys from 1999 to 2008.

When Scientific Council first provided advice to Fisheries Commission on Div. 3L shrimp distribution, in 1999, available data from autumn surveys in 1995 – 1998 showed that 17.6% of the shrimp biomass in Div. 3L, on average, was located in the NAFO Regulatory Area (NRA). This figure is 15.1% when biomass estimates are updated with a new methodology. The data presented in SCR Doc. 08/54 shows that the average percentage of biomass in the NRA in Div. 3L, from the entire time series of autumn surveys (1995 – 2007), is still very similar, at 16.4% (range 11.8 to 20.9 %).

Data from spring surveys in Div. 3L, from 1999 – 2008, showed that, on average, 20.7% (range 10.7 to 27.7%) of shrimp biomass in Div. 3L was in the NRA. When data from all available spring and autumn surveys are examined together, they indicate that, on average, 18.3% of shrimp biomass in Div. 3L was in the NRA.

Shrimp are distributed mainly along the northern and northeastern slopes of Div. 3L (see Figures 1 and 2 below taken from SCR Doc. 08/54).

Data from both spring and autumn time series show variation, but no long-term trends in the percentage of shrimp biomass in the NRA in Div. 3L. Scientific Council concludes that there has been no meaningful change in the shrimp distribution in Div. 3LNO since 1995.

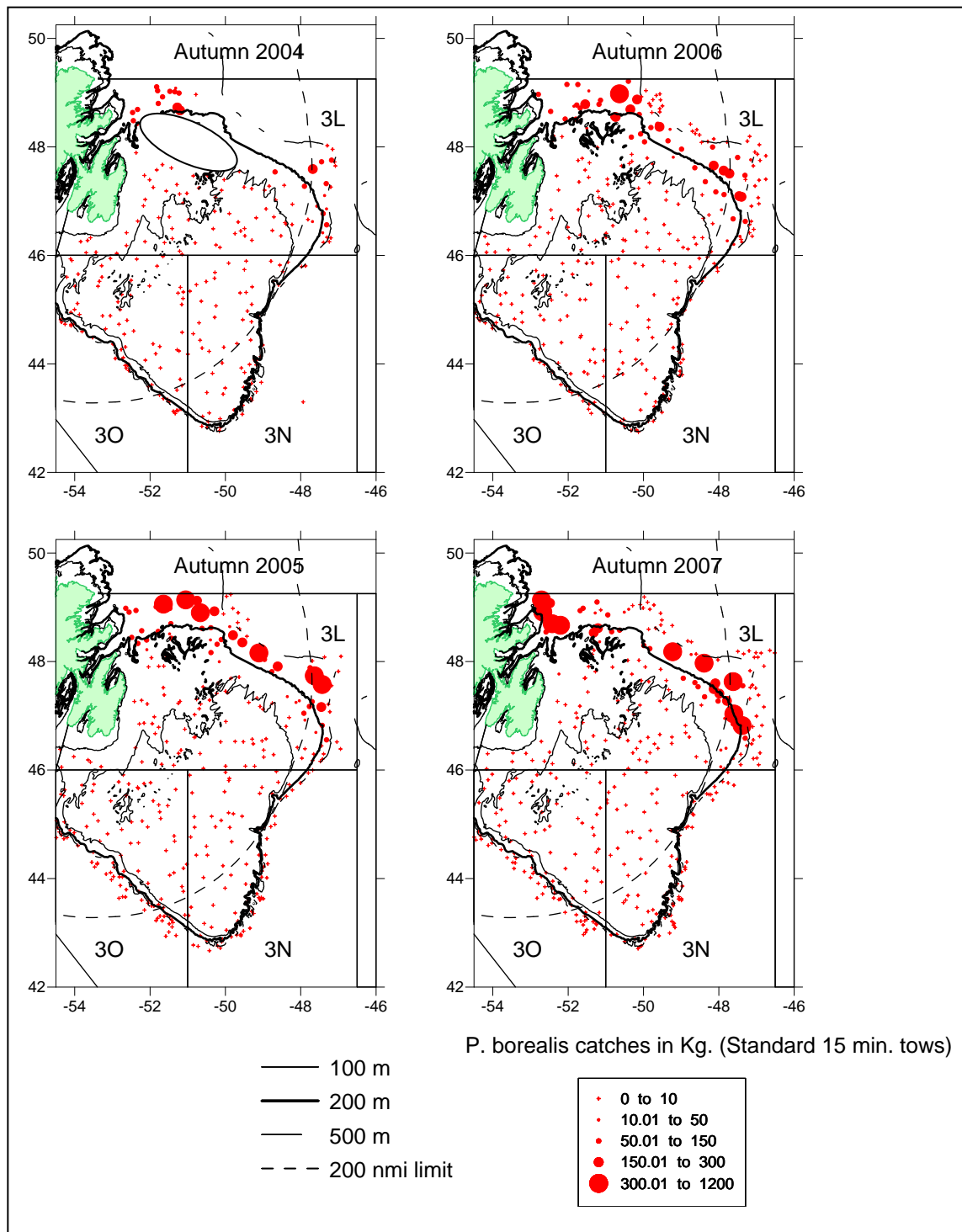


Figure 1. Distribution of NAFO Div. 3LNO northern shrimp (*Pandalus borealis*) catches kg/tow as obtained from autumn research bottom trawl surveys conducted over the period 2004-2007. The ellipse within the 2004 map indicates the missing area that was missed during the 2004 autumn survey.



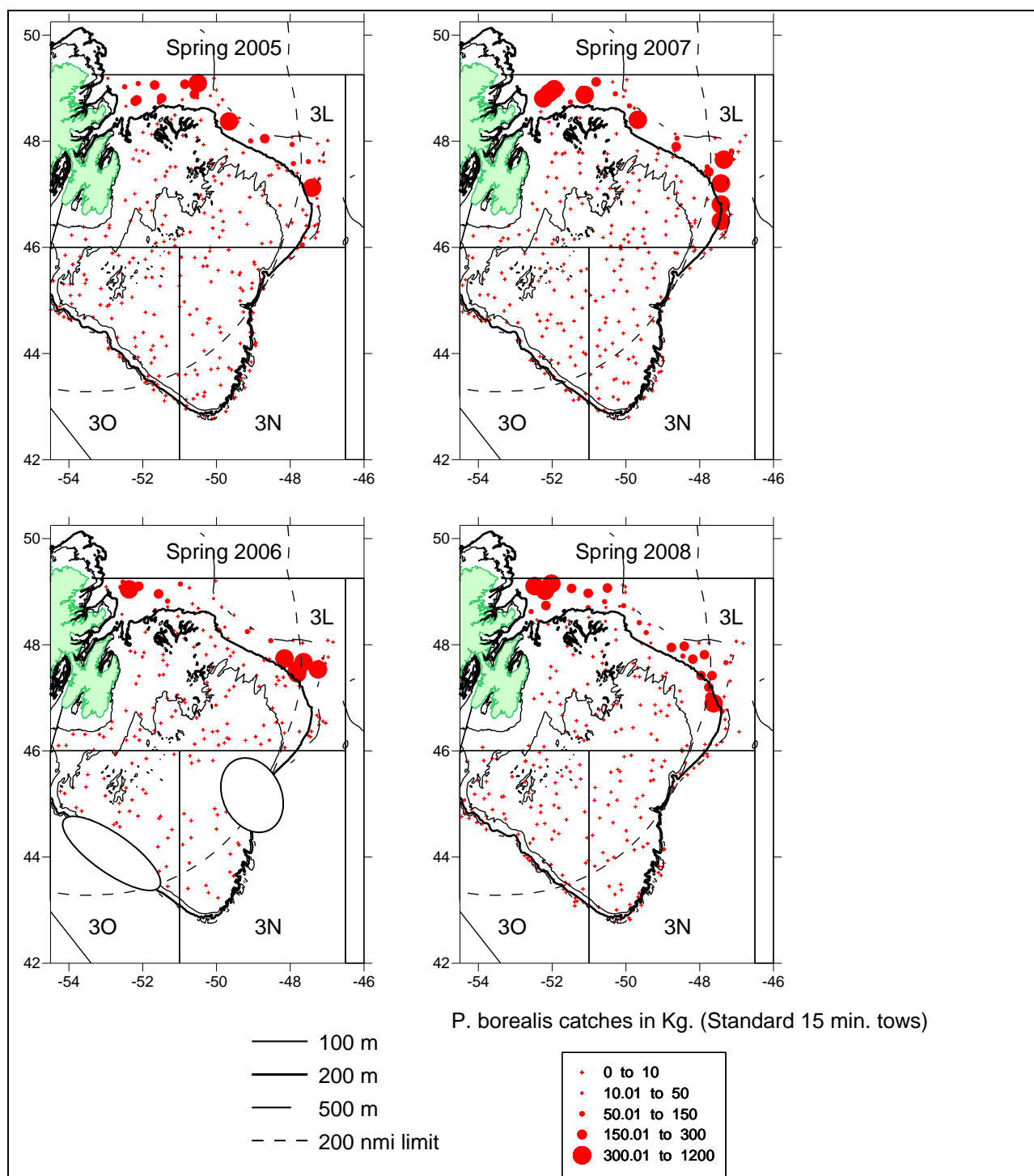


Figure 2. Distribution of NAFO Div. 3LNO northern shrimp (*Pandalus borealis*) catches kg/tow as obtained from spring research bottom trawl surveys conducted over the period 2005-2008. Ellipses indicate strata not surveyed during spring 2006.

## **b) Review of Existing Fishing Areas**

The Council noted the following request from the Fisheries Commission embedded within Article 2 paragraph 3 of the new Chapter 1bis of the Conservation and Enforcement Measures (FC Doc. 08/3):

### ***Article 2 - Identification of existing bottom fishing areas (footprint)***

- 1. In 2008, NAFO shall proceed to map existing bottom fishing areas within the Regulatory Area for bottom fishing activities. Mapping of trawling activity shall be given priority.*
- 2. Contracting Parties with vessels involved in bottom fishing activities in the period of 1987-2007 shall, for the purpose of paragraph 1, submit during 2008 comprehensive maps of existing fishing areas to the Executive Secretary. Maps shall be based on VMS data and/or other available geo-reference data and expressed in as precise spatial and temporal resolution as possible. Contracting Parties may, in the future, consider the possibility of refining these maps on the basis of haul by haul information, if available.*
- 3. The Executive Secretary shall compile maps submitted by Contracting Parties pursuant to paragraph 2. The Executive Secretary shall on that basis, as well as on any data available to it, produce a comprehensive map of existing fishing areas. The Executive Secretary shall forward this map to the Scientific Council for review and comment at its meeting in September 2008 and thereafter to the Fisheries Commission.*
- 4. The comprehensive map of existing bottom fishing areas referred to in paragraph 3 shall be revised regularly to incorporate any new relevant information.*

The Secretariat submitted the following documents FC WP 08/25 (including the two addenda) and FC WP 08/29. These documents contained maps of fishing activity within the NRA for Canada, Estonia, Faroe Islands, Greenland, Iceland, Portugal, Spain and Russia.

The Council had considerable discussion as to what was intended of the request to ‘review and comment’ on the maps (see Article 2.3 above). There were no specifics provided as to the purpose of the review but the Council agreed that, as stated, it could be wide-ranging.

The Council concluded the composite map, based on the submissions of Contracting Parties, was difficult to interpret because the base maps were not constructed with the same resolution. The Council also noted the following observations on various maps:

The presence of anomalous bottom fishing locations likely due to errors in the data;

The presence of bottom fishing activity beyond 2 000 meters which, by Fisheries Commission definition (Chapter 1bis Article 1 paragraph 4), was considered “new bottom fishing areas”.

The Council considers that, for a number of reasons, the value of these maps would be much greater if there were separate footprints provided for bottom trawling, and for fishing with other kinds of bottom contact gears.

## **3. Ad hoc requests from current meeting**

### **a) Scientific Council Response to Fisheries Commission requests on Div. 3LNO Shrimp**

*(1) What would be the recommended TAC level for 2009 and 2010 with a yearly exploitation rate of 20% of the last two surveys?*

Scientific Council Response: Scientific Council does not yet have the fishable biomass estimates from the last two surveys, which would be needed for such a TAC calculation. A preliminary analysis of the results of the Canadian surveys from autumn 2007 and spring 2008 was presented to Scientific Council and indicated no significant change in the status of the stock. Based on the average fishable biomass index from the surveys from autumn 2005 to spring 2007, which is 184 000 t, a 20% exploitation rate equates to a catch of 36 800 t. Scientific Council does not recommend this as a TAC for 2009 or 2010. Scientific Council noted that an update of the 2009 TAC calculation,

using the most recent survey information as requested, will be possible at the October 2008 Scientific Council meeting.

*(2) Elaborate on the rationale of setting TAC at 25 000 t.*

Scientific Council Response: In Scientific Council's response to a Fisheries Commission request in September 2007 (FC WP 07/18), Scientific Council noted that a catch of 25 000 t in 2008 would correspond to an exploitation rate of 12% (of a preliminary estimate of fishable biomass that was available at that time). Fisheries Commission set the TAC for 2008 at 25 000 t. In October 2007, Scientific Council noted that a catch of 25 000 t in 2008 would correspond to an exploitation rate of 13.6% (the estimate of fishable biomass having been revised). Scientific Council advised "that the most recently implemented TAC at 25 000 t be maintained for 2008 and 2009 in order to monitor the impact on the stock."

*(3) What is the current distribution of Div. 3LNO shrimp inside and outside the NRA based on the average of the last four years?*

Scientific Council Response: In framing its response to this question, Scientific Council draws the attention of Fisheries Commission to the fact that the fishery on this stock is restricted to Div. 3L, and all surveys since 1999 show that over 95% of the total survey biomass index in Div. 3LNO is found in Div. 3L. Spring surveys in Div. 3L, from 2005 – 2008, showed that, on average, 19.3% (range 10.7 to 27.7%) of the total survey biomass index in Div. 3L was in the NRA. Autumn surveys in Div. 3L, from 2005 – 2007, showed that, on average, 14.6% (range 11.8 to 19.3%) of the total survey biomass index in Div. 3L was in the NRA. When all available spring and autumn surveys from 2005 to 2008 are examined together, they indicate that, on average, 17.3% of total survey biomass index in Div. 3L was in the NRA.

In Div. 3LNO combined, 16.4% of the total survey biomass index was found in the NRA, on average over the last four years. Data from spring 2006 was not included in this averaging because the survey in Div. 3NO was incomplete, therefore this number is not comparable with that for Div. 3L given above. Excluding 2006 spring data from the calculation for Div. 3L results in a value of 16.2% of the total survey biomass index in the NRA.

Both spring and autumn time series show variation, but no long-term trends in the percentage of shrimp biomass in the NRA (see Table 1 summarized from SCR Doc. 08/54).

Year	Autumn		Spring	
	3L	3LNO	3L	3LNO
1995	14.29	20.00		
1996	17.47	19.03		
1997	12.67	13.64		
1998	15.89	17.96		
1999	14.68	15.12	21.47	24.04
2000	20.89	21.03	21.90	23.83
2001	19.09	19.50	13.78	13.94
2002	18.74	19.87	26.78	28.38
2003	19.05	20.15	18.08	20.28
2004	is	is	27.24	27.55
2005	11.79	12.03	10.66	11.24
2006	12.68	13.05	24.08	is
2007	19.30	19.31	27.72	27.93
2008			14.81	14.90

is = incomplete survey

Table 1. Percentage of shrimp biomass in the NRA.

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

### **1. Scientific Council Meeting, October – November 2008**

Scientific Council decided in 2007 to change the dates for the 2008 NIPAG meeting that were agreed in 2006 and hold the meeting a week earlier (*NAFO Sci. Coun. Rep.* 2007, p. 218). This was because of the tight deadline for informing ICES ACFM of the NIPAG advice for shrimp stocks. The dates and venue of the next Scientific Council and NIPAG meetings will be 22 –30 October 2008 at the ICES HQ, Copenhagen, Denmark.

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

Scientific Council agreed that its June meeting will be held on 4 – 18 June 2009. The meeting will be held at the Alderney Landing, Dartmouth, Nova Scotia, Canada.

### **3. Annual Meeting and Special Session, September/November 2009**

Scientific Council noted that the Annual Meeting will be held 21 – 25 September 2009. The Special Session of Scientific Council will be the ICES/PICES/UNCOVER symposium entitled “Rebuilding Depleted Fish Stocks – Biology, Ecology, Social Science and Management Strategies” to be held on 3 – 6 November 2009 in Warnemünde, Rostock, Germany. Upon invitation from ICES, Scientific Council agreed to become a co-sponsor of this symposium. Dr F. Serchuk will act as the NAFO representative on the Symposium Steering committee and Dr P. Shelton has accepted to be the Co-convenor that represents NAFO. Scientific Council further noted that STACFAD has approved funding to support the attendance of Dr F. Serchuk and one keynote speaker.

### **4. Scientific Council and NIPAG (Shrimp) Meetings, October – November 2009**

The dates and venue of the Scientific Council meeting in conjunction with the NIPAG meeting will be decided at the October 2008 Scientific Council and NIPAG meetings. Provisional dates and venue are 21 – 29 October 2009 at the NAFO Secretariat, Dartmouth, NS, Canada (*NAFO Sci. Coun. Rep.*, 2007, p. 218). However, the reason for moving the meeting one week forward was due to an ACFM requirement. With the dissolution of the ACFM it may now be possible to move the meeting dates back to better accommodate NAFO survey analyses requirements.

### **5. Working Group on the Ecosystem Approach to Fisheries Management**

The WG will next meet in November 2009 but a venue and specific dates have not been decided. The WG will also consider an intersessional meeting by correspondence to deal with any matters referred to it by Scientific Council in regard to requests from Fisheries Commission coming from this meeting that may require a response before their November 2009 meeting.

### **6. Scientific Council meeting, June 2010**

The Council agreed to the tentative dates of 3 – 17 June 2010 for this meeting to be held at the Alderney Landing, Dartmouth, Nova Scotia, Canada.

### **7. Cooperation with ICES**

#### **a) NIPAG, October/November 2008**

See item 1 above.

#### **b) WGFTFB, May 2009**

A ToR was submitted to the ICES/FAO WGFTFB on the use of gear modification to reduce cod bycatch (see Fisheries Commission Request for Advice 2007 Item 9 (FC Doc. 07/21) and Scientific Council Report June 2008 Item VII.1.e.v (SCS Doc. 08/19)). The group will meet in Ancona, Italy from 18 – 22 May 2009.

**c) WGHARP**

No ToRs have been submitted by NAFO to the next meeting of ICES/NAFO WGHARP.

**d) WGDEC, 2009**

The next meeting of ICES/NAFO WGDEC will be held in Copenhagen, Denmark in 2009. No ToRs have been submitted by NAFO.

**e) NIPAG, October/November 2009**

See item 4 above.

**VII. FUTURE SPECIAL SESSIONS****1. Progress Report on Special Session in 2009 entitled “Rebuilding Depleted Fish Stocks – Biology, Ecology, Social Science and Management Strategies.”**

See Item VI.3 above.

**2. Topics for Future Special Sessions**

Scientific Council discussed various possibilities for future special sessions in 2010 and again decided that the special session should take the form of a work shop. There was strong support for a workshop on new assessments methods and an understanding of those used by other assessment groups including those working in the Pacific and Antarctic. The STACFIS Chair, Michael Kingsley, offered to produce a working paper providing further details for presentation at the June 2009 meeting.

Other possible topics presented in June 2008 were (1) a meeting on assessment methods to develop a standard suite of programs and to provide a manual that will improve consistency in the application of methods and also serve to assist incoming Designated Experts; and (2) development of a workshop to help facilitate the transfer of techniques developed by the Working Group on Reproductive Potential, in particular, on completion of its ToR 3 (see Agenda Item X.1 of June Scientific Council report (SCS Doc. 08/19) for further information on ToR 3) as well as those noted from the October 2007 Scientific Council meeting (new assessment methods including FLR, the Ecosystem Approach, and that consideration also be given to advances in the application of limit reference points to stocks where no analytical model exists).

**VIII. SCIENTIFIC COUNCIL WORKING PROCEDURES AND PROTOCOL****1. Elections of Chairs**

The position for the Chair of the STACFEN Standing Committee is currently vacant. No nominations for the position have been received to date. The Scientific Council Chair will identify potential candidates for this position for consideration at the Scientific Council meeting in October – November 2008 in Copenhagen.

**2. Timetable and Frequency of Assessments**

The frequency of assessments agreed in the September 2006 Scientific Council meeting (*NAFO Sci. Coun. Rep.*, 2006, p. 189) has remained unchanged. However, the following changes in the type of assessment were noted: (1) a full assessment was conducted in 2008 for Div. 3LN redbfish in an interim monitoring year at the request of Fisheries Commission, and (2) an interim monitoring report was produced in 2008 for Northern Shortfin Squid in SA 3+4 in a full assessment year because of difficulties in appointing a designated expert. It was reiterated that an interim monitoring of a stock could be upgraded to a full assessment upon request from Fisheries Commission, Coastal States or by Scientific Council on its own accord. It was noted that the Sept 2008 Fisheries Commission request calls for a full assessment of Yellowtail flounder in Div. 3LNO and Cod in Div. 3M at the June 2009 Scientific Council meeting whereas the schedule called for an interim monitoring report. For ease of reference, the assessment timetable agreed in September 2006 is reproduced in Table 2 annotated with any exceptions noted to date.

Table 2. Assessment frequencies within a full assessment and interim monitoring schedule, as agreed in September 2006. Advice by the Fisheries Commission and Coastal State is requested annually, bi-annually or tri-annually as indicated beginning in 2007(+ is full assessment year, *i* is interim monitor, - no assessment undertaken or currently planned).

Stock	Frequency (pre-2006)	Frequency (from 2006)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Multi-year Assessments</b>												
American plaice in Div. 3LNO	2	2	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>
Cod in Div. 3NO	2	3	+	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>
Redfish in Div. 3LN	2	3	+	<i>i</i>	+	<i>i</i> (+)	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>
Witch flounder in Div. 2J + 3KL	2	3	+	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>
Redfish in Div. 3M	2	2	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>
Roughhead grenadier in SA 2+3	2	3	+	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>
Redfish in Div. 3O	2	3	+	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>
Redfish in SA 1	2	3	+	<i>i</i>	+	<i>i</i> (+)	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>
Other finfish in SA 1	2	3	+	<i>i</i>	+	<i>i</i> (+)	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>
Cod in Div. 3M	2	3	<i>i</i>	+	<i>i</i>	+	<i>i</i> (+)	<i>i</i>	+	<i>i</i>	<i>i</i>	+
American plaice in Div. 3M	2	3	<i>i</i>	+	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+
Witch flounder in Div. 3NO	2	3	<i>i</i>	+	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+
Yellowtail flounder in Div. 3LNO	2	2	<i>i</i>	+	<i>i</i>	+	<i>i</i> (+)	+	<i>i</i>	+	<i>i</i>	+
Squid ( <i>Illex</i> ) in SA 3+4	2	3	<i>i</i>	+	<i>i</i>	+( <i>i</i> )	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+
Capelin in Div. 3NO	2	2	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>
Thorny skate in Div. 3LNOPs	2	2	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+
White hake in Div. 3NOPs	2	2	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>	+	<i>i</i>
Roundnose grenadier in SA 0+1	3	3	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+	<i>i</i>	<i>i</i>	+
Roundnose grenadier in SA 2+3	-	3	-	-	-	-	-	-	-	-	-	-
<b>Annual Assessments</b>												
Greenland halibut in SA 2 + Div. 3KLMNO	1	1	+	+	+	+	+	+	+	+	+	+
Greenland halibut in SA0+1 offshore & Div. 1B-F	1	1	+	+	+	+	+	+	+	+	+	+
Greenland halibut in Div. 1A inshore	1	1 or 2	+	+	+	? (+)	+	?	+	?	+	?
Northern shrimp in Div. 3M	1	1	+	+	+	+	+	+	+	+	+	+
Northern shrimp in Div. 3LNO	1	1	+	+	+	+	+	+	+	+	+	+
Northern shrimp in SA 0+1	1	1	+	+	+	+	+	+	+	+	+	+
Northern shrimp in Denmark Strait	1	1	+	+	+	+	+	+	+	+	+	+

### 3. Rules of Procedure

#### a) Voting Procedures

Scientific Council requested the Secretariat to review the background to the current rules of procedure regarding “voting” and to present their findings at the June 2008 meeting. The item was deferred to this September 2008 meeting.

This request arose from a confusion regarding the meaning of the “authority representing that Contracting Party” in rule 2.5 under voting in the Rules of Procedure for the Scientific Council. The rule states:

*2.5. When a vote is taken by mail or by other means of tele-documentation, the Executive Secretary shall address the request for the vote from each Contracting Party to the authority representing that Contracting Party at his or her official address with copies addressed to each representative on the Scientific Council of that Contracting Party at his or her corresponding official address.*

It is noted that the equivalent rules in General Council and Fisheries Commission are identical to the rule in Scientific Council, except that the expression “respective Head of Delegation” replaces “authority representing that Contracting Party”. It was ascertained that, during 1986 – 1988, General Council was formulating a common voting procedure among all constituent bodies, and that Scientific Council decided to accept the main body of the wording

but only after making the above change. So, for whatever reason, it appears that Scientific Council did not accept that mail votes needed to be sent to Heads of Delegation. Scientific Council hereby clarifies that, for the purpose of rule 2.5, the “authority representing that Contracting Party” does not need to be the Head of Delegation for that Contracting Party.

For information purposes, the following articles of the NAFO Convention (2004) were also brought to the attention of the members present:

*Article X*

*1. Scientific advice to be provided by the Scientific Council pursuant to this Convention shall be determined by consensus. Where consensus cannot be achieved, the Council shall set out in its report all views advanced on the matter under consideration.*

*2. Decisions of the Scientific Council with respect to the election of officers, the adoption and the amendment of rules and other matters pertaining to the organization of its work shall be taken by a majority of the votes of all Contracting Parties present and casting affirmative or negative votes, and for these purposes each Contracting Party shall have one vote. No vote shall be taken unless there is a quorum of at least two-thirds of the Contracting Parties.*

**b) Observer Application Process**

Scientific Council, at its June 2008 meeting, accepted the concept of permanent observers subject to the conditions described, and made several suggestions regarding the development of a common application process among the three constituent bodies of NAFO. This matter was presented to STACFAD by the Secretariat in STACFAD WP 08/4 Rev. who recommended revising the General Council rules of procedure to give permanent accreditation to observers, subject to various conditions, and to harmonize the rules for observers among the three constituent bodies. General Council deferred decisions on this matter to the 2009 Annual Meeting. Scientific Council accepted the principle of having a common observer application process that would apply equally to all three constituent bodies and asked the Secretariat to coordinate a joint proposal with General Council and Fisheries Commission for submission to the constituent bodies for further consideration.

**c) General Review**

A general review of Scientific Council’s Rules of Procedure was proposed in the light of the anticipated ratification of a new convention and because of general issues of clarity and consistency. This agenda item was not discussed in detail, with the exception that the Delegation from Russia wanted to specifically identify and suggest two issues for consideration. Firstly, rule 1.3 (as amended by Scientific Council in June 2008, Item XI.2a, by the deletion of the word “international”), reads:

*1.3 The Scientific Council may invite any non-Member Government and any ~~international~~, public or private, organization to be represented at meetings of the Scientific Council or its subsidiary bodies by an observer or observers.*

Russia would like the meaning of “public or private” to be discussed and amended as necessary at a future meeting.

Secondly, in the newly adopted rule 1.4 (Scientific Council, June 2008, Item XI.2a):

*1.4 The Scientific Council Chair may invite one or more “guest experts” to meetings of Scientific Council and its subsidiary bodies. 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.*

Russia requested that the wording “advice and guidance” may not convey its intended meaning. Scientific Council suggested that “expertise” may more accurately reflect the intended contribution that a guest expert would make to Scientific Council.

It was decided to note the changes suggested above and ask the Scientific Council Coordinator to present a general review of Scientific Council’s Rules of Procedure to Scientific Council at a future meeting ensuring that suggested

modifications were consistent with the rules of procedures for other constituent bodies. A similar proposal was made to STACFAD at this annual meeting for a review of General Council's and Fisheries Commission's Rules of Procedure and this was also deferred.

#### **4. Review of Structure of Scientific Council**

The Chair has been working intersessionally with members of Scientific Council and the Scientific Council Coordinator to explore changes that would shorten the June meeting. It has generally been accepted that the June meeting, at 15 days, is too long. It is also felt that the various tasks assigned to Scientific Council and the standing committees are each dealt with efficiently and that it is not possible to shorten these without compromising standards. Further, it is realized that the workloads arising from the ecosystem approach will only increase in the future and soon it will become impossible to finish the work within the 15 day meeting period without some change. Also, with the development of an amended Convention, it is timely to review the terms of reference for the four standing committees to ensure they are meeting the current needs of Scientific Council. The Chair presented summary results from responses he received intersessionally from six Scientific Council members to proposed changes tabled in June 2008. There was no unanimity on any one of the proposals and discussion continued on various issues. It was proposed and agreed that the Scientific Council Chair should form an *ad hoc* working group with the Standing Committee chairs to discuss the proposals further in June 2009 and bring any resolutions for the change into effect for the 2010 meeting.

### **IX. OTHER MATTERS**

#### **1. Other Business**

##### **a) Scientific Merit Awards**

The Chair asked members to nominate scientists from Scientific Council for the Scientific Merit Awards. No nominations were received for consideration at this meeting. The Chair asked for members to suggest nominations for consideration at the June 2009 meeting.

##### **b) *Ad hoc* Working Group of Fisheries Managers and Scientists on Vulnerable Marine Ecosystems**

The *Ad hoc* Working Group of Fisheries Managers and Scientists on Vulnerable Marine Ecosystems (WG FMS) met in Montreal, Canada, on 8 – 12 September 2008. The Chair of WG FMS, Bill Brodie, presented the report of meeting to Scientific Council and highlighted aspects relevant to the work of Scientific Council. Members of Scientific Council were grateful for the informative presentation. It was noted that the WG FMS is a Fisheries Commission working group and that any requests for advice to Scientific Council would come directly from the Fisheries Commission.

##### **c) Bottom Fishing Footprint**

The Council pointed out during its review of fishing footprints (item V.2b) that the footprint maps reviewed may not describe 'the history of the bottom fishing in the areas proposed' in enough detail to allow the Council to take into account in determining if 'such activities would have significant adverse impacts on VMEs' as required by Article 4.2 of Chapter 1*bis* (FC Doc. 08/03), but also points out that it has not yet reached conclusions on what level of detail would allow it to do so.

Therefore, the Council considers it likely that a future request may have to be sent to Contracting Parties, *via* the Secretariat, for the submission of fishing data requiring, for example: a) differentiation of bottom trawl fishing from fishing with other bottom-contact gears, b) disaggregated set-by-set information, with start and end positions, c) a measure of effort, and d) the finest geo-referenced resolution possible. The Council refers this matter to the WGEAFM to ensure any additional information that may be required is added to the request.



## 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 2008 considered and **adopted** its own report.

## XI. ADJOURNMENT

The Scientific Council Chair thanks the Chairs of STACFIS and STACREC, the Designated Experts, and the members of Scientific Council, and members of the Secretariat, for their hard work and valuable contributions to the meeting. The Chair and Scientific Council Coordinator wishes to particularly thank Barbara Marshall, NAFO Secretariat, for her contribution and high level of support to the meetings and to the organization of the coming marine mammal symposium in Dartmouth. The Chair also noted that the Scientific Council Special Session is the symposium entitled “The Role of Marine Mammals in the 21<sup>st</sup> Century” to be held next week in Dartmouth, Nova Scotia, and thanked the two Co-Conveners, the members of the Steering Committee, and Secretariat for their hard work in organizing the symposium.

There being no other business, the meeting was adjourned at 1330 hours on 26 September 2008.

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

Chair: Ricardo Alpoim

Rapporteur: Bill Brodie

The Committee met at the Maritime Station, Vigo, Spain on 24 September 2008 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 and Spain), Russian Federation, and United States of America.

### **1. Opening**

The Chair opened the meeting by welcoming the participants and appointed Bill Brodie (Canada) as rapporteur. The Agenda was adopted with the inclusion of the item 3b Tagging Activities.

### **2. Fisheries Statistics**

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

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

No update was made since last June's meeting, any update will be made available on the web page. Participants are encouraged to provide feedback to the Secretariat on ways to improve data extraction from STATLANT 21A and 21B databases.

### **3. Research Activities**

#### **a) Surveys Planned for 2008 and Early-2009**

The planned surveys are outlined in SCS Doc. 08/21. Participants were asked to check the document for completeness and accuracy.

#### **b) Tagging Activities**

The tagging activities are outlined in SCS Doc. 08/16. Participants were asked to check the document for completeness and accuracy.

### **4. FAO Cooperation**

#### **a) Report of the Fisheries Resources Monitoring System (FIRMS) Steering Committee, July 2008**

This item was deferred to June 2009.

#### **b) Report of the Coordinating Working Party on Fishery Statistics Intersessional meeting, July 2008**

This item was deferred to June 2009.

#### **c) ICES-FAO Working Group on Fishing Technology and Fish Behaviour – update of gear manual**

The following text is taken from the *Report of the ICES-FAO Working Group on Fish Technology and Fish Behaviour (WGFTFB) 21 – 25 April 2008* Tórshavn, Faroe Islands. (<http://www.ices.dk/reports/FTC/2008/WGFTFB08.pdf>, item 8, p. 21).

“The Chair gave an update of the current position regarding the production of a new gear classification manual as a replacement of the existing 1971 FAO Technical Paper 222. The development of this manual had been a ToR for WGFTFB in 2006 and 2007 and significant progress has been made in completing a final draft. However, a number of factors since the last WGFTFB meeting in 2007 had meant that the process had now stalled. This was due to the fact that the original conveners of this ToR have either retired or have taken up positions in the private sector. Also the individual who had been identified to produce the drawings for the manual had indicated that they were not now

willing to complete this task. The text therefore remains about 90% complete but no alternative illustrator has been identified. FAO indicated that they remain committed to the completion of the manual and reported to WGFTFB on a proposed way forward. This would entail identifying an individual to finishing drafting text and an alternative illustrator to complete the diagrams. This was agreed by FTFB as the best way forward. No financial commitment has been made towards publication costs at this stage.”

## 5. Other Matters

### a) Review of SCR and SCS Documents

**SCR Doc. 08/52.** Concepción González, Xabier Paz and Angeles Arnesto. Daily ration and energy content obtained from the diet of American plaice (*Hippoglossoides platessoides*) in the Grand Bank and the Flemish Cap

The energy content obtained from the diets of American plaice (*Hippoglossoides platessoides*) in the Grand Bank and the Flemish Cap was estimated from the feeding composition of 6570 and 1290 individuals, respectively, sampled in spring-summer in the 2002 – 2006 period. This was related to the reported growth and longevity of this fish species in each area. To estimate energy values of food components, the daily ration for American plaice in the Grand Bank was calculated using Elliot and Persson, Eggers, and Swenson and Smith models. Results showed differences among models, the values obtained with the first two models were the closest; the third model gave higher values. Daily ration was higher in females and it increased with length. The values ranged between 1.61 to 2.24% BW/d (%BW = grams of prey per 100 grams of predator weight) in females and 0.54 to 4.18% BW/d in males with the Elliot & Persson model.

Results showed that the Flemish Cap diet had higher energy, and that the female diet was richer in energy in both areas. Differences in the energy component of the diet between areas decreased with increasing length for both sexes; it was linked to a diet change of the individuals in the Grand Bank from a length of 34 cm in males and 51 cm in females. This result agrees with the differences in growth and longevity observed in each area for both sexes. The influence of feeding on populational differences could be reflected. The observed trend of diminishing energy differences between areas where the individuals are >30 cm is even more marked in the biggest individuals. This would agree with the superior growth rate in the Flemish Cap, at the same time as a smaller *Lmax* and longevity. The sizes where the growth pattern changes are close to those where the feeding pattern also changes.

**SCR Doc. 08/53.** Diana González-Troncoso and Xabier Paz. Growth features of American plaice *Hippoglossoides platessoides* in Northwest Atlantic.

The growth pattern for American plaice (*Hippoglossoides platessoides*) for two different populations in the Northwest Atlantic, the Grand Bank (Div. 3NO) population and the Flemish Cap (Div. 3M) population is modelled. Two non linear models are used from the Von Bertalanffy model in order to know the parameters involved in the equation. Results show that the youngest individuals of Div. 3M growth faster than the Div. 3NO individuals, although there is an intersection point between the two populations, around 38 cm for males and 51 cm in females, in which the growth of the Div. 3NO American plaice is higher in both sexes. This population reaches higher lengths for both sexes. We discuss the possibility that the ontogenic changes in the feeding and the variations in the energy allocation for different reproductive needs could better explain the growth changes than the differences of temperature.

### 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)

Chairman: Michael Kingsley

Rapporteurs: Various

The Committee met at the Maritime Centre, Vigo, Spain from 22 – 26 September 2008, to consider matters referred to it by Scientific Council. Representatives attended from Canada, Denmark (in respect of Faroe Islands and Greenland), European Union (Estonia, France, Latvia, Portugal and Spain), Russian Federation, and United States of America. The Scientific Council Coordinator was in attendance.

### I. OPENING

The Chairman, Michael Kingsley, opened the meeting by welcoming participants. The provisional agenda was reviewed and adopted, and a plan of work developed for the meeting.

### II. STOCK ASSESSMENTS

STACFIS was asked to update the assessments of northern shrimp in Div. 3M and northern shrimp in Div. 3LNO that had been reviewed at the meeting of NIPAG in Oct – Nov 2007.

#### 1. Northern Shrimp (*Pandalus borealis*) in Div. 3M

(SCR Doc. 08/55)

#### Interim Monitoring Report

##### a) Introduction

The fishery on this stock is managed by effort regulation. No analytical assessment is available for this stock; full assessments are based on the review of series of indices of survey biomass, CPUE, recruitment potential (numbers at age 2), and catch. Scientific Council has in the past had difficulty in estimating the potential yield from the stock, but at its meeting in Oct – Nov 2007 expressed concern about the possible future state of the stock owing to poor recruitment indices in recent years, although at the same time it noted that biomass indices were still at high levels. Scientific Council recommended in 2007 that catches in 2008 – 2009 should not exceed those of 2005 – 2006, *i.e.* 17 000 – 32 000 t.

##### b) Data

The interim monitoring report was based on updates of survey biomass index series with 2008 values for total and female survey biomasses, and of the recruitment index series, and on catch-to-date information for the current year. Surveys use a Lofoten trawl with 35-mm codend mesh, but fitted with a juvenile bag with 6-mm mesh.

##### c) Results

Catches to early Sep in 2008 of 8 000 t were higher than the corresponding value, 6 000 t, in Sep 2007, but both were among the lowest values ever observed; in the absence of an effort measure these values cannot be interpreted. While still higher than the low levels of the mid-1990s, both total and female survey biomass indices for 2008 were the lowest since 1997; there had, however, been considerable variation in both series since 1997. The index of potential recruitment, estimated numbers of age-2 shrimps, remained at the low level seen in 2005 and since.

STACFIS concluded that the information available did not show any significant change in the state of the stock since the most recent full assessment.

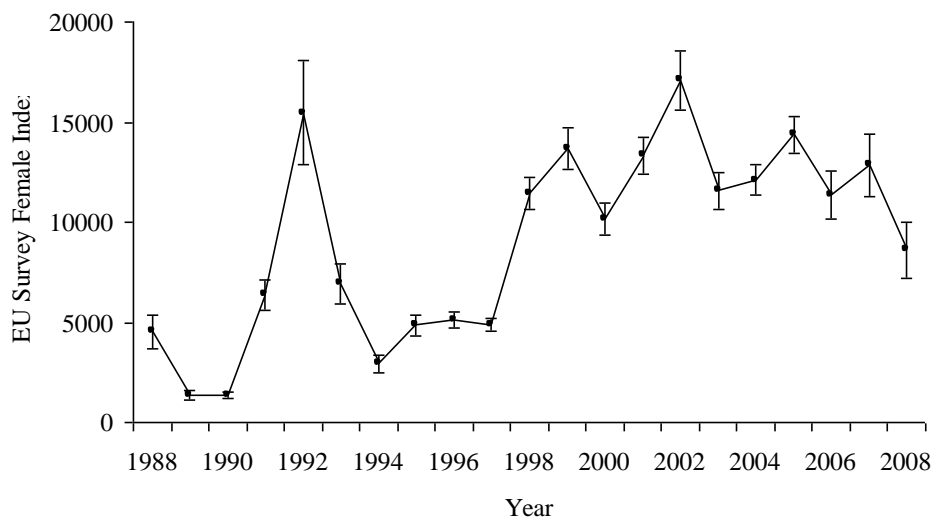


Figure 3. Northern Shrimp in Division 3M; EU Survey index of female biomass, 1988 – 2008.

## 2. Northern Shrimp (*Pandalus borealis*) in Div. 3LNO

(SCR Doc. 08/54)

### Interim Monitoring Report

#### a) Introduction

The fishery on this stock is restricted to Div. 3L, where over 95% of the total survey biomass in these Divisions is found. Since 2000 it has been managed by TAC, 83% of which is allocated to Canada. In 2004 Scientific Council recommended for 2006 a TAC of 22 000 t, which was 12% of the most recent value of an index of fishable biomass. After Fisheries Commission raised the TAC for 2008 to 25 000 t, Scientific Council in subsequent advice recommended keeping that level constant for 2009 as well so that it would be easier to evaluate the effect on the stock of a constant fishery.

No analytical assessment is available for this stock; full assessments are based on the review of series of indices of biomass from 3 research trawl surveys, a standardized CPUE index series from the Canadian large-vessel fleet, catches, and size distributions in samples from surveys and from commercial catches by some fleets.

#### b) Data

The interim monitoring report was based on updates of the Canadian survey biomass index series with autumn 2007 and spring 2008 values for total survey biomass. These surveys use a Campelen shrimp trawl, with a 12.7-mm-mesh (*i.e.* half-inch) liner in a 44-mm-mesh codend. Biomass estimates were calculated using ogive mapping.

#### c) Results

A provisional estimate of catches to early September in 2008 was 22 223 t, and it was expected that the 2008 TAC of 25 000 t would be taken. The autumn 2007 total survey biomass estimate was the highest in the autumn series, more than 25% higher than the next highest, in 2005. The spring 2008 index was the second highest in the series and more than 30% higher than the next lower value (from 2006), but was also almost 20% lower than the value from

spring 2007. While recent values of biomass indices were high, they had also been variable, and STACFIS concluded that the information available did not demonstrate any significant change in the state of the stock since the most recent full assessment.

### III. NOMINATION OF DESIGNATED EXPERTS

The Chairman noted the need for Experts to be designated for two stocks, Northern Shrimp in East Greenland and Denmark Strait and Capelin in 3NO.

Nanette Hammeken Arboe (Denmark for Greenland) was proposed for designation as Expert on Northern Shrimp in East Greenland and Denmark Strait. STACFIS reviewed a brief summary of her experience and confirmed her designation. Ilya Skryabin (Russian Federation) was proposed for designation as Expert on Capelin in Divisions 3NO.

The persisting vacancy in the position of DE for Northern Shortfin Squid in SA3&4 was noted; the Chairman of Scientific Council was unable to tell the Standing Committee that any Contracting Party had offered to designate an expert for this stock. The Committee was not informed of the withdrawal of any other DEs, and the list therefore otherwise stood as before.

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: +1 709-772-2261	joanne.morgan@dfo-mpo.gc.ca
Redfish Div. 3O	Joanne Morgan	Tel: +1 709-772-2261	joanne.morgan@dfo-mpo.gc.ca
American Plaice in Div. 3LNO	Karen Dwyer	Tel: +1 709-772-0573	karen.dwyer@dfo-mpo.gc.ca
Witch flounder in Div. 3NO	Karen Dwyer	Tel: +1 709-772-0573	karen.dwyer@dfo-mpo.gc.ca
Witch flounder in Div. 2J+3KL	Dawn Maddock Parsons	Tel: +1 709-772-2495	dawn.parsons@dfo-mpo.gc.ca
Yellowtail flounder in Div. 3LNO	Dawn Maddock Parsons	Tel: +1 709-772-2495	dawn.parsons@dfo-mpo.gc.ca
Greenland halibut in SA 2+3KLMNO	Brian Healey	Tel: +1 709-772-8674	brian.healey@dfo-mpo.gc.ca
Northern shrimp in Div. 3LNO	David Orr	Tel: +1 709-772-7343	david.orr@dfo-mpo.gc.ca
Thorny skate in Div. 3LNO	Mark Simpson	Tel: +1 709-772-4148	mark.r.simpson@dfo-mpo.gc.ca
White hake in Div. 3NO	Mark Simpson	Tel: +1 709-772-4148	mark.r.simpson@dfo-mpo.gc.ca

From the Instituto Español de Oceanografía, Aptdo 1552, E-36200 Vigo (Pontevedra), Spain (Fax: +34 986 49 2351)

Roughhead grenadier in SA 2+3	Fernando Gonzalez-Costas	Tel: +34 986 49 2111	fernando.gonzalez@vi.ieo.es
Roundnose grenadier in SA 2+3	Fernando Gonzalez-Costas	Tel: +34 986 49 2111	fernando.gonzalez@vi.ieo.es
Cod in Div. 3M	Carmen Fernandez	Tel: +34 986 49 2111	carmen.Fernandez@vi.ieo.es
Shrimp in Div. 3M	Jose Miguel Casas Sanchez	Tel: +34 986 49 2111	mikel.casas@vi.ieo.es

From the Instituto Nacional de Recursos Biológicos (INRB/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	ralpoim@ipimar.pt
Redfish in Div. 3M	Antonio Avila de Melo	Tel: +351 21 302 7000	amelo@ipimar.pt
Redfish in Div. 3LN	Antonio Avila de Melo	Tel: +351 21 302 7000	amelo@ipimar.pt

From the Greenland Institute of Natural Resources, P. O. Box 570, DK-3900 Nuuk, Greenland (Fax: +299 36 1212)

Redfish in SA1	Rasmus Nygaard	Tel: +299 36 1200	rany@natur.gl
Other Finfish in SA1	Rasmus Nygaard	Tel: +299 36 1200	rany@natur.gl
Greenland halibut in Div. 1A	Bjarne Lyberth	Tel: +299 36 1200	bjly@natur.gl
Northern shrimp in SA 0+1	Helle Siegstad	Tel: +299 36 1200	helle@natur.gl
Northern shrimp in Denmark Strait	Nanette Hammeken	Tel: +299 36 1200	nanette@natur.gl

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	olj@dfu.min.dk
Greenland halibut in SA 0+1	Ole Jørgensen	Tel: +45 33 96 33 00	olj@dfu.min.dk

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	Ilya Skryabin	Tel: +7 8152 450568	skryabin@pinro.ru
---------------------	---------------	---------------------	-------------------

Vacant

Northern Shortfin Squid in SA 3 & 4    vacant

#### **IV. OTHERS MATTERS**

##### **1. Review of SCR and SCS Documents**

Two biological papers were to be presented; both were taken under item 5(a) of the STACREC agenda.

##### **2. FIRMS Classification**

The Chairman tabled a proposal to assemble FIRMS classifications of stocks as a single table, separated from stock assessments. It was observed that Scientific Council had decided in June 2008 not to include these classifications in its reports.

##### **3. Other Business**

There was no other business.

