

SCIENTIFIC COUNCIL MEETING – 15 – 19 SEPTEMBER 2025

I. Plenary Sessions	4
II. Review of Scientific Council Recommendations	4
III. Joint Session of Commission and Scientific Council	4
1. NAFO Performance Review	4
a) Implementation of the 2018 Performance Review recommendations	4
b) Update on the establishment of ad hoc virtual working group to consider the initiation of a third Performance Review of NAFO	4
2. Presentation of Scientific Advice by the Chair of the Scientific Council	5
a) Response of the Scientific Council to the Commission's Request for Scientific Advice	5
b) Feedback to the Scientific Council regarding the advice and its work during this meeting	5
c) Other issues as determined by the Chairs of the Commission and the Scientific Council	5
3. Presentation of the reports and recommendations of the Joint Commission–Scientific Council Working Groups	5
a) Joint Commission–Scientific Council Working Group on Improving Efficiency of NAFO Working.. Group Process (E-WG), 2024	5
b) Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), 2025	6
c) Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), April and July 2025	6
d) Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2025	7
4. Formulation of Requests to the Scientific Council for Scientific Advice on the Management in 2027 and Beyond of Certain Stocks in Subareas 2, 3, 4, 6 and Other Matters	8
IV. Research Coordination	8
V. Fisheries Science	8
VI. Requests from the Commission	8
1. Requests deferred from the June Meeting	8
2. <i>Ad hoc</i> Requests from Current Meeting	10
a) From the European Union	10
3. Requests arising from the Working Groups in 2025	11
a) Division 30 redfish advice	11
Scientific Council responded:	12
4. Further progress on items related to COM requests (in SCS Doc. 25/01)	12
a) Request #5: Develop a reference document detailing the ecosystem roadmap, for completion in the next 1-3 years	12
b) Request #7: The Commission requests the Scientific Council to develop reference points to facilitate the implementation of the Revised NAFO Precautionary Approach Framework, for stocks that currently do not have them: Northern shortfin squid in SA 3+4.	12
VII. Review of Future Meeting Arrangements	12
1. WG-ESA, 4 - 12 November 2025	12

2.	STACREC Surveys Presentation Meeting, May 2026	13
3.	PA-WG Meeting May 2026.....	13
4.	Scientific Council, June 2026.....	13
5.	Scientific Council and STACFIS Shrimp Assessment Meeting, 15 - 17 September 2026	13
6.	Scientific Council, September 2026	13
7.	WG-ESA, November 2026	13
8.	NAFO/ICES Joint Groups	13
a)	NAFO/ICES <i>Pandalus</i> Assessment Group (NIPAG)	13
b)	ICES – NAFO Working Group on Deep-water Ecosystem (WG-DEC).....	13
c)	ICES/NAFO/NAMMCO Working Group on Harp and Hooded Seals (WG-HARP)	13
9.	Commission- Scientific Council Joint Working Groups.....	13
a)	WG-EAFFM.....	13
b)	WG-RBMS	13
c)	CESAG.....	13
VIII.	Future Special Sessions	13
1.	Discussion of proposed topics	13
a)	Workshop on Div. 3M cod age readers.....	13
b)	Climate change meeting.....	13
c)	Other proposed topics	14
IX.	Other Matters	14
1.	Meeting Reports	14
2.	Results of the Scientific Council and STACFIS Shrimp Assessment Meeting, 9 – 11 September 2025	14
3.	Nomination of Designated Experts (DEs), Ecosystem Designated Experts (EDEs) and Chairs.....	14
a)	Chairs	14
b)	DEs and EDEs.....	15
4.	Advice when no projections can be made.....	15
5.	Divs. 3LN Redfish MSE Subgroup	16
6.	USA Exploratory Fishing.....	16
7.	Scoping document for a potential in-person meeting to explore approaches for further integrating information related to climate change throughout Scientific Council operations.....	16
8.	Process for Assessments and Interim Monitoring Reports (IMRs).....	16
9.	SC Rules of Procedures.....	16
X.	Adoption of Reports	17
1.	Committee Reports of STACFIS and STACREC	17
2.	Report of Scientific Council	17
XI.	Adjournment	17
Appendix I.	Report of Standing Committee on Research Coordination (STACREC)	18
1.	Opening	18
2.	Appointment of Rapporteur	18
3.	Fisheries Statistics.....	18
a)	Progress Reports on Secretariat Activities.....	18
b)	Review of STATLANT21 Data.....	18
4.	Research Activities.....	19

a) Surveys Planned for 2026 and 2027	19
5. Other Matters	19
a) Review of SCR and SCS Documents	19
b) Other Business	20
6. Adjournment.....	20
Appendix II. Report of Standing Committee on Fisheries Science (STACFIS)	21
I. Opening	21
II. Assessments Deferred from the June Meeting	21
21. Northern Shortfin Squid (<i>Illex illecebrosus</i>) in SAs 3+4.....	21
III. Other Matters	24
1. Nomination of Designated Experts (DEs)	24
2. Other Matters	25
a) Review of SCR and SCS Documents	25
b) Review of FIRMS classification of NAFO stocks	25
c) Other Business	25
IV. Adjournment	25
Appendix III. Agenda	26
Annex 1. The Commission's Request for Scientific Advice on Management in 2026 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters	29
Annex 2. Designated Experts in 2025	33
Annex 3. Denmark (on behalf of Greenland) Requests for Scientific Advice - 2026	34
Annex 4. Requests from Canada for Coastal State Advice in 2026.....	35
Appendix IV. List of Participants, September 2025	36

Recommended Citation:

NAFO. 2025. Report of the Scientific Council, 15 - 19 September 2025, Halifax, Canada. NAFO SCS Doc. 25/14.

REPORT OF SCIENTIFIC COUNCIL MEETING

15-19 September 2025

Chair: Diana González-Troncoso

Rapporteur: Andrea Perreault

I. PLENARY SESSIONS

The Scientific Council (SC) and its Standing Committees met at the Halifax Convention Centre, Halifax, Canada, with additional participants joining the meeting by Webex, from 15 to 19 September 2025 to consider the various matters in its agenda. Representatives attended from Canada, Denmark (in respect of the Faroes and Greenland), the European Union, Japan, Norway, the Russian Federation, the United Kingdom and the United States of America. The Executive Secretary, Senior Science Coordinator, Senior Scientific Information Administrator and other members of the Secretariat were in attendance. Observers attended from the Dalhousie University: Marine & Environmental Law Institute.

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

The Council was called to order at 10:08 on 15 September 2025. The provisional agenda was **adopted** with minimal changes and the NAFO Secretariat was appointed as rapporteur.

The Scientific Council's considerations on the Standing Committee Reports and other matters addressed by the Council follow in Sections II-XI.

The Agenda, and List of Representatives, Advisers and Experts, are given in Appendices III-IV. There were no Research (SCR) or Summary (SCS) Documents for review at this meeting.

The final session was called to order at 09:00 on 18 September 2025. The Scientific Council considered and adopted the reports of the STACREC and STACFIS Standing Committees and agreed that the report of this meeting would be finalized by correspondence. The meeting was adjourned early at 18:00 on 18 September 2025.

II. REVIEW OF SCIENTIFIC COUNCIL RECOMMENDATIONS

There were no Scientific Council recommendation requiring immediate attention at this meeting. A detailed review of recommendations was deferred to the June 2026 meeting.

III. JOINT SESSION OF COMMISSION AND SCIENTIFIC COUNCIL

1. NAFO Performance Review

a) Implementation of the 2018 Performance Review recommendations

The Commission Chair highlighted the summary of the status of the implementation of the recommendations of the 2018 Performance Review Panel in COM Doc. 24-24. The Commission Chair noted that progress has been made on all recommendations.

b) Update on the establishment of ad hoc virtual working group to consider the initiation of a third Performance Review of NAFO

The Chair reflected on the decision from the 2024 Annual Meeting that a virtual working group be established and Chaired by the STACFAD Chair to draft the Terms of Reference and criteria to conduct the third NAFO Performance Review (COM Doc. 24-20). The Chair of STACFAD also highlighted the correspondence that was circulated on 05 September 2025 in NAFO/25-214 which included a working paper containing background information on previous processes (COM WP 25-05). Reflecting on the discussions relating to the workload of the Scientific Council and noting the recommendation from the WG-RBMS (item III.3.c), the Commission agreed that the third NAFO Performance Review should be a focused assessment of the scientific process within NAFO.

- **The Commission agreed that the *ad hoc* virtual working group, chaired by the STACFAD Chair, should convene as agreed in COM Doc. 24-20, but that the Terms of Reference and criteria to conduct the third NAFO Performance Review should be focused on the assessment of the scientific process within NAFO.**

Noting that the workload of the Scientific Council is a priority issue in NAFO, the Commission may decide that an additional performance review focused on other issues could be initiated in the future.

2. Presentation of Scientific Advice by the Chair of the Scientific Council

a) Response of the Scientific Council to the Commission's Request for Scientific Advice

The Chair of the Scientific Council, Diana González-Troncoso (European Union), provided a comprehensive review of the work of the Scientific Council, including the responses to the Commission requests for scientific advice on fish stocks and other topics, outlined in detail in SCS Doc. 25/13. Contracting Parties expressed their deep appreciation for the work of the Scientific Council and thanked the Scientific Council Chair for the presentation and for her leadership of the Scientific Council in the past year.

b) Feedback to the Scientific Council regarding the advice and its work during this meeting

The Commission provided one written submission for request to the Scientific Council for additional information. The question was from the European Union and requested an additional yield scenario for cod in Division 3M. The Scientific Council response to this request is further discussed under agenda item VI.2.a.

The Commission reflected on the one recommendation from the WG-RBMS that noted the request (Commission agenda item 17.c) that the Scientific Council provide advice for redfish in Division 3O in a less prescriptive manner, providing the Commission with a range of management options aligned with the revised Precautionary Approach Framework. The Scientific Council response to this request is outlined in SCS Doc. 25/14 and further discussed under agenda item VI.3.a.

The Commission thanked the Scientific Council for their work on responding to the questions during the meeting.

c) Other issues as determined by the Chairs of the Commission and the Scientific Council

The Commission noted the current vacancies within the Scientific Council for Designated Experts and Chairs and reiterated the importance of Contracting Parties identifying individuals within their delegations to fill these roles. It was noted that the Performance Review (as discussed under agenda item III.1.b) may result in some recommendations to better facilitate the work of the Scientific Council but that the vacancies will need to be filled in the meantime.

The Commission also reflected on the concerns of the Scientific Council relating to the FAO The State of World Fisheries and Aquaculture (SOFIA), noting that SOFIA classifies stocks by their biomass status relative to B_{msy} . NAFO SC agrees that these categories can be informative as indicators of biomass status, but that information on stock biomass alone is insufficient to determine whether a stock is "Overfished", "Sustainably fished" or "Underfished". The Scientific Council Chair, at the request of the Scientific Council, conveyed these concerns to the Commission Chair to inform the Commission. The Commission discussed and agreed that the draft text that had been prepared by the Scientific Council (SCS Doc. 25/13) be circulated to the FAO.

The Commission also reflected on the recommendation from the Scientific Council to publish the NEREIDA report on the NAFO website to inform the public about the ongoing work of the project. The Commission agreed that the report could be published and reminded Contracting Parties of the confidentiality requirements in NAFO for the use and publication of data, particularly VMS data, outside of NAFO, in line with Article 29.12 of the NAFO Conservation and Enforcement Measures.

3. Presentation of the reports and recommendations of the Joint Commission-Scientific Council Working Groups

a) Joint Commission-Scientific Council Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2024

The Commission Chair (Deirdre Warner-Kramer, United States of America) highlighted the meeting report from the E-WG in COM-SC Doc. 24-06, and the proposed meeting dates for consideration by the Commission.

The E-WG proposed that for 2026, the following two-week periods, be considered for NAFO intersessional meetings: 16 – 27 February 2026; 13 – 24 April 2026; and 10 – 21 August 2026.

- **The Commission adopted the proposed meeting dates of 16–27 February 2026; 13–24 April 2026; and 10–21 August 2026 noting that Contracting Parties are not obliged to schedule meetings during these periods, but the dates may help in future planning of intersessional meetings.**

It was noted that the E-WG will meet following the Annual Meeting to further review the NAFO Schedule for the upcoming year, and updates will be communicated to Contracting Parties following that meeting.

b) Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), 2025

The Scientific Council Chair, Diana González-Troncoso (European Union), presented an update on the status of the work of CESAG in 2025. CESAG met in February 2025 (COM-SC Doc. 25-01) to discuss the possible inclusion of logbook (haul by haul) data, and data for all species, into the CESAG method. The Commission discussed the recommendations from the CESAG meeting, and it was noted that one recommendation could not be supported as domestic privacy laws would not allow for the inclusion of logbook data into the CESAG method. It was also noted that the current CESAG process seems to be working quite well in NAFO as it is currently outlined.

As such, the Commission adopted the report of CESAG, but only two of the three recommendations as follows:

- **The NAFO Secretariat continue to provide catch estimates for all species, based on the CESAG method protocol as outlined in Annex 1 of COM-SC Doc. 17-08.**
- **The Commission review the 60-day timeline for the submission of haul-by-haul data, outlined in Article 28.8(c) of the NAFO CEM.**

c) Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), April and July 2025

The co-Chairs of WG-RBMS, Fernando González-Costas (European Union) and Ray Walsh (Canada) presented the reports and recommendations from the April and July 2025 WG-RBMS meetings in COM-SC Doc. 25-02 and COM-SC Doc. 25-04. The co-Chairs presented an update on the application of the 2+3KLMNO Greenland halibut management strategy and exceptional circumstances, progress on the 3LN redfish management strategy evaluation, and the implementation of the revised Precautionary Approach Framework. It was also noted that WG-RBMS discussed the workload issues and position vacancies within the Scientific Council and put forward two recommendations to the Commission relating to this.

The Commission and Scientific Council adopted the reports of the WG-RBMS meetings (COM-SC Doc. 25-02 and COM-SC Doc. 25-04) as well as the recommendations as follows:

- 1. In relation to the application of the 2+3KLMNO Greenland halibut Management Strategy (agenda item 4),**
 - a. WG-RBMS acknowledges that exceptional circumstances were occurring due to recent gaps in the EU-Spain 3L survey series. Nevertheless, sensitivity analysis indicated that the application of the Management Procedure adopted in 2024 was still appropriate.**
 - b. WG-RBMS recommends, consistent with the Scientific Council advice, the continued application of the harvest control rule (excluding the EU-Spain 3L survey series) to set the TAC for 2026.**
- 2. In relation to the Precautionary Approach Framework:**
 - a. WG-RBMS recommends that, when providing stock management advice to the Commission, Scientific Council follow the Precautionary Approach Framework and provide the Commission with the range of scenarios specified in ANNEX A (Guidance for providing advice on Stocks Assessed) of [COM Doc. 24-18](#).**
 - b. WG-RBMS recommends that the Scientific Council reconsider the prescriptive language in the latest Scientific Council advice (grey box) on 3O redfish and provide the Commission with additional information at the September 2025 Annual Scientific Council and Commission meeting to allow the Commission to consider a range of management options aligned with the Precautionary Approach Framework.**

- c. **WG-RBMS recommends that the Commission adopt a standalone Commission document containing the revised Precautionary Approach Framework document outlined in COM-SC RBMS-WP 25-01 (now COM Doc. 25-16 (Annex 14)) including the modifications to the risk table that were incorporated in the 2024 Commission requests ([COM Doc. 24-18](#)).**
3. **In relation to the Scientific Council's workload, WG-RBMS notes the dire situation with the lack of Chairs and Designated Experts, expresses the WG's strong concern, and recommends the Commission encourage Contracting Parties to find ways to ensure the positions are filled by the close of the September 2025 Annual Meeting.**
4. **In relation to the Marine Stewardship Council requirements under its Standard 3.0, WG-RBMS recommends that the Commission send a follow-up correspondence to the Marine Stewardship Council response dated 15 April 2025, requesting to keep NAFO aware of any ongoing progress on the review process focussed on the MSC Fisheries Standard Toolbox.**
5. **In relation to the discussions on the potential third NAFO Performance Review, it was agreed the process outlined in [COM Doc. 24-20](#) should continue. In addition, the WG-RBMS recommends that the Commission consider expeditiously launching in 2025, as a first step, an external performance review with a focused assessment of the scientific process within NAFO.**

It was noted that Fernando González-Costas (European Union) would be stepping down as WG-RBMS co-Chair. The Commission thanked Fernando for his leadership in the working group over the years and recognized the work and expertise that he has contributed.

d) Joint Commission-Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2025

The WG-EAFFM co-Chair, Elizabethann Mencher (United States of America), and acting WG-EAFFM co-Chair Diana González-Troncoso (European Union), presented the report and recommendations from the July 2025 WG-EAFFM meeting in COM-SC Doc. 25-03. The co-Chairs presented an update on the progress of the ongoing work for the vulnerable marine ecosystems (VMEs) and significant adverse impact (SAI), the progress relating to the NAFO Roadmap for an Ecosystem Approach to Fisheries, the draft submission for the coral VME closures as Other Effective Area-based Conservation Measures (OECMs), the ongoing analysis relating to Greenland shark bycatch, and the outcomes of the climate change consultancy. It was also noted that WG-EAFFM discussed the workload issues and position vacancies within the Scientific Council and put forward a recommendation to the Commission relating to this.

The Commission and Scientific Council adopted the report of the WG-EAFFM meeting (COM-SC Doc. 25-03) as well as the recommendations as follows:

1. **In relation to discussions on the results of the climate change consultancy, the WG-EAFFM recommends that the Commission request the Scientific Council, as its workload allows, and in collaboration with the Secretariat, to draft a scoping document for a potential in-person meeting to explore approaches for further integrating information related to these issues throughout Scientific Council operations. This scoping document should identify the scientific expertise needed both within and outside Scientific Council and potential financial and workload implications.**
2. **In relation to the updates of the Ecosystem Summary Sheets (ESS), the WG-EAFFM recommends the Commission support the Scientific Council request to delay the next update of the ESS, currently scheduled for 2027, to 2028.**
3. **In relation to the management of bycatch of Greenland sharks, the WG-EAFFM recommends that the Commission request Contracting Parties to provide updates on their efforts to implement the relevant provisions of the NAFO CEM, including any independent relevant research or data, in time for consideration by the Scientific Council at its 2027 June meeting and the WG-EAFFM at its 2027 meeting.**
4. **In relation to the Scientific Council's workload, WG-EAFFM notes the dire situation with the lack of Chairs and Designated Experts, expresses the WG's strong concern, and recommends the Commission encourage Contracting Parties to find ways to ensure the positions are filled by the close of the September 2025 Annual Meeting.**

4. Formulation of Requests to the Scientific Council for Scientific Advice on the Management in 2027 and Beyond of Certain Stocks in Subareas 2, 3, 4, 6 and Other Matters

In accordance with the procedure outlined in FC Doc. 12-26, a draft of the requests outlined in COM WP 25-07 was developed by the steering committee and made available in advance of the meeting. The committee consisted of representatives from Canada and the European Union, with assistance from the NAFO Secretariat. Contracting Parties provided additional input into the requests document, which was reviewed by the Scientific Council and Commission throughout the meeting. The Scientific Council suggestion to move the 3LNO American plaice assessment to be every four years rather than every three years was noted. The Commission raised concern with waiting for an extended period for a full assessment of that stock and suggested to move the assessment schedule to every two years, alternating with the assessment of 3LNO yellowtail flounder as the Designated Expert is the same for both stocks. There was also a request added for the Scientific Council to assess and consider in 2026 the operating model underlining the MSE developed by Canada for the Northern shrimp in Divisions 2J3KLNO (SSAR) stock. As such, the Commission agreed to remove Northern shrimp in Divisions 3LNO from the assessment schedule until then.

- **The Commission adopted the requests to the Scientific Council for scientific advice in COM WP 25-07 (Rev. 6) now COM Doc. 25-13 (Annex 15).**

Throughout the development of the requests working paper, it was noted that there is still some confusion in the process that could be made more efficient. The Commission Chair presented a proposal relating to the process for the development of the Commission's requests to the Scientific Council in COM WP 25-13. The Commission reviewed the proposal and agreed that additional clarity was required regarding the timing and sequencing of the steps in the process.

- **The Commission agreed to follow the process outlined in COM WP 25-13 (now COM Doc. 25-15 (Annex 16)) for the 2026 annual meeting and discussion further adjustments to the process if required.**

IV. RESEARCH COORDINATION

The Council adopted the Report of the Standing Committee on Research Coordination (STACREC) as presented by the Chair, Mark Simpson (Canada). The full report of STACREC is in Appendix I.

V. FISHERIES SCIENCE

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

VI. REQUESTS FROM THE COMMISSION

1. Requests deferred from the June Meeting

a) Northern Shortfin Squid (*Illex illecebrosus*) in SAs 3+4

Scientific Council responded:

Northern Shortfin Squid (*Illex illecebrosus*) in SAs 3+4 Advice June 2025 for 2026 and beyond

Recommendation for 2026 and beyond

The lack of Designated Expert for this stock prevented the Scientific Council from being able to carry out a full assessment. Advice for Northern shortfin squid in SAs 3+4 is provided based on an Interim Monitoring Report which indicates that there is no significant change in the status of this stock and remains in the low productivity state.

Scientific Council reiterates the advice of 2022 of catches between 19 000 and 34 000 tons per year for Northern shortfin squid in SAs 3+4.

During the 2024 Annual Meeting, the Commission requested that in 2025, advice should be provided for 2026-2028 for Northern shortfin squid in SAs 3+4. During the year, the Designated Expert position for this stock became vacant, and so a full assessment could not be performed.

An Interim Monitoring Report updating the catch and survey indices for the current year was prepared by the Scientific Council and presented in plenary. Based on current information there is no significant change in the status of this stock.

A full assessment can only be carried out if a Designated Expert is appointed.

2. *Ad hoc* Requests from Current Meeting

a) From the European Union

The Commission would like to request the SC to provide the 3M cod yield consistent with the 60% probability of the stock biomass remaining above $B_{trigger}$ in 2027.

The Scientific Council responded:

The 2026 yield associated with the 60% probability of the stock biomass remaining above $B_{trigger}$ in 2027 is 14 037 t. The results of this scenario are highlighted in the tables below. With this yield, the piscivore catch₂₀₂₆/TCI in the 3M EPU would be scoped to be below the 2TCI ecosystem reference point (Catch₂₀₂₆/TCI = 1.97). Other NAFO managed stocks in this guild and EPU are 3M redfish and 2+3KLMNOPs Greenland halibut.

Table 1.

	B		SSB		Yield
F _{bar} =0					
2025	72781	(64190 - 84672)	42110	(37010 - 47199)	12613
2026	70715	(59492 - 86463)	49894	(42995 - 57342)	0
2027	74739	(60797 - 93900)	54593	(47562 - 61647)	
F _{bar} =F _{60%HZ} (median=0.103)					
2025	72781	(64190 - 84672)	42110	(37010 - 47199)	12613
2026	70715	(59492 - 86463)	49894	(42995 - 57342)	14037
2027	61146	(46724 - 80790)	40625	(33562 - 47661)	
F _{bar} =F _{50%HZ} (median=0.114)					
2025	72781	(64190 - 84672)	42110	(37010 - 47199)	12613
2026	70715	(59492 - 86463)	49894	(42995 - 57342)	15360
2027	59027	(45109 - 78281)	39297	(32323 - 46311)	
F _{bar} =0.75F _{lim} (median=0.128)					
2025	72781	(64190 - 84672)	42110	(37010 - 47199)	12613
2026	70715	(59492 - 86463)	49894	(42995 - 57342)	16948
2027	57413	(43514 - 76682)	37782	(30770 - 44755)	
F _{bar} =0.85F _{lim} (median=0.145)					
2025	72781	(64190 - 84672)	42110	(37010 - 47199)	12613
2026	70715	(59492 - 86463)	49894	(42995 - 57342)	18774
2027	55556	(41684 - 74838)	35939	(28998 - 42910)	
F _{bar} =F _{lim} (median=0.171)					
2025	72781	(64190 - 84672)	42110	(37010 - 47199)	12613
2026	70715	(59492 - 86463)	49894	(42995 - 57342)	21362
2027	52942	(39067 - 72241)	33433	(26520 - 40388)	

Table 2.

		Healthy zone					
		F = 0	F = F _{60%HZ}	F = F _{50%HZ}	F = 0.75F _{msy}	F = 0.85F _{msy}	F _{lim} = F _{msy}
Yield (50%)	2025	12613	12613	12613	12613	12613	12613
	2026	0	14037	15360	16948	18774	21362
P(F>F _{lim})	2025	<1%	<1%	<1%	<1%	<1%	<1%
	2026	<1%	<1%	1%	5%	16%	50%
P(B<B _{lim})	2025	<1%	<1%	<1%	<1%	<1%	<1%
	2026	<1%	<1%	<1%	<1%	<1%	<1%
	2027	<1%	<1%	<1%	<1%	<1%	<1%
P(F>F _{target})	2025	<1%	<1%	<1%	<1%	<1%	<1%
	2026	<1%	1%	7%	21%	50%	83%
P(B<B _{trigger})	2025	27%	27%	27%	27%	27%	27%
	2026	3%	3%	3%	3%	3%	3%
	2027	<1%	40%	50%	61%	73%	85%
P(B ₂₀₂₇ >B ₂₀₂₅)		100%	31%	20%	10%	4%	1%
(B _{future} - B _{current}) / B _{current}		29.5	-3.5	-7.3	-11	-15.2	-21.1

3. Requests arising from the Working Groups in 2025

a) Division 30 redfish advice

The Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) in July 2025 requested:

In relation to the Precautionary Approach Framework:

- a. **WG-RBMS recommends that the Scientific Council reconsider the prescriptive language in the latest Scientific Council advice (grey box) on 30 redfish and provide the Commission with additional information at the September 2025 Annual Scientific Council and Commission meeting to allow the Commission to consider a range of management options aligned with the Precautionary Approach Framework.**

Scientific Council responded:

Division 30 redfish is in the Critical Zone of the NAFO Precautionary Approach Framework. $F_{current}$ ($F=0.102$, corresponding to a catch of 2 700 t) is $1.13F_{lim}$. Recent F s have kept the stock in the Critical Zone. Given that Division 30 redfish is assessed using an index-based assessment, SC is unable to provide the range of F s required in the PA table that is compatible with the primary objective of the PAF for stocks in the Critical Zone, which is to rebuild the stock out of the Critical Zone. $F=0$ would provide the greatest probability of increasing the stock out of the Critical Zone, but in practice catches at the lowest possible level, like those associated with unavoidable incidental catches in other fisheries, are expected to provide the highest probability to rebuild the stock out of the Critical Zone.

SC **requests** guidance from WG-RBMS on how to provide advice when it is not possible to make projections.

4. Further progress on items related to COM requests (in [SCS Doc. 25/01](#))

a) Request #5: Develop a reference document detailing the ecosystem roadmap, for completion in the next 1-3 years

At its 2025 June meeting, Scientific Council (SC) produced a draft document detailing the NAFO Roadmap for an Ecosystem Approach to Fisheries (Roadmap). This draft was tabled as a working paper for discussion with, and input from, managers at the 2025 WG-EAFFM meeting. This document was structured in three sections focused on the policy context, the general Roadmap framework, and the current implementation of the framework. Feedback from WG-EAFFM was overall positive, with the suggestion that the final document to be included in the formal response should be focused on the policy context and general framework. The information on current implementation, while deemed useful by WG-EAFFM, was considered better suited for another type of document. WG-EAFFM considered that a framework document to be adopted by COM should be centered around elements that would be expected to remain fairly stable over a number of years. At WG-EAFFM, CPs were also asked to provide in writing any additional consideration and/or comments they may have no later than 29 August 2025.

Written comments received included requests to highlight how climate change has been considered within the Roadmap, and to make clear in the document that timelines for implementation of the Roadmap were flexible, and subject to institutional priorities and resources/capacity constraints.

SC considered the input received and developed a plan for completing this request. This plan includes the following steps:

- WG-ESA 2025. Incorporate feedback received into a revised version of the document.
- SC June 2026. Discuss the revised document and produce the formal SC response to the request.
- WG-EAFFM 2026. Table SC response (revised document), and discuss with managers to produce final consensus text that can be recommended for adoption by Commission.
- Annual Meeting 2026. Formal adoption of the Roadmap by Commission.

b) Request #7: The Commission requests the Scientific Council to develop reference points to facilitate the implementation of the Revised NAFO Precautionary Approach Framework, for stocks that currently do not have them: Northern shortfin squid in SA 3+4.

As was the case at the 2025 June SC meeting, there was still no Designated Expert for SAs 3+4 northern shortfin squid at the 2025 September meeting. As such, until a Designated Expert is appointed for this stock, a full assessment and calculation of Reference Points cannot be addressed for SAs 3+4 northern shortfin squid.

VII. REVIEW OF FUTURE MEETING ARRANGEMENTS

1. WG-ESA, 4 - 12 November 2025

The Working Group on Ecosystem Science and Assessment will be held at Instituto Español de Oceanografía (IEO), Madrid, Spain, 4 - 12 November 2025.

2. STACREC Surveys Presentation Meeting, May 2026

The STACREC Surveys Presentation Meeting will be held on WebEx in May 2026. Date to be determined.

3. PA-WG Meeting May 2026

The Precautionary Approach Working Group will meet by WebEx in May 2026. Date to be determined.

4. Scientific Council, June 2026

The Scientific Council June meeting will be held in Halifax, Canada, 29 May - 11 June 2026.

5. Scientific Council and STACFIS Shrimp Assessment Meeting, 15 - 17 September 2026

The Scientific Council September Shrimp 2026 meeting will be held in Halifax, Canada, 15 - 17 September 2026.

6. Scientific Council, September 2026

The Scientific Council Annual Meeting will be held in Lithuania, 21 - 25 September 2026.

7. WG-ESA, November 2026

Dates and location to be determined.

8. NAFO/ICES Joint Groups

a) NAFO/ICES *Pandalus* Assessment Group (NIPAG)

The NIPAG meeting will be held in Copenhagen, Denmark, 5-7 May 2026.

b) ICES – NAFO Working Group on Deep-water Ecosystem (WG-DEC)

Dates and location to be determined.

c) ICES/NAFO/NAMMCO Working Group on Harp and Hooded Seals (WG-HARP)

Dates and location to be determined.

9. Commission- Scientific Council Joint Working Groups

a) WG-EAFFM

The Joint Commission - Scientific Council Working Group on the Ecosystem Approach Framework to Fisheries Management will take place in August 2026, exact dates and location to be decided.

b) WG-RBMS

The Joint Commission - Scientific Council Working Group on Risk Based Management Strategies will take place in August 2026, exact dates and location to be decided.

c) CESAG

The next meeting of the Catch Estimation Strategy Advisory Group will take place in the autumn of 2025.

VIII. FUTURE SPECIAL SESSIONS

1. Discussion of proposed topics

a) Workshop on Div. 3M cod age readers

As was discussed at the June meeting, the Scientific Council agreed that a review of the comparative age reading for Div. 3M cod should be carried out as there had not been a session on this since 2017. Currently, readers from Spain, Faroes and Norway read Div. 3M cod otoliths. An exchange between these readers would be very useful to try to establish a protocol.

b) Climate change meeting

As discussed at the June meeting, Scientific Council highlighted the proposal to have a dedicated in-person meeting to bring together the multidisciplinary experts required to evaluate the options and design an approach to integrate climate change considerations throughout Scientific Council operations.

c) Other proposed topics

There were no other topics proposed in this meeting.

IX. OTHER MATTERS

1. Meeting Reports

There were no additional meeting reports reviewed at this meeting.

2. Results of the Scientific Council and STACFIS Shrimp Assessment Meeting, 9 – 11 September 2025

The Scientific Council Chair, Diana González-Troncoso (European Union), provided an update on the Scientific Council and STACFIS Shrimp Assessment Meeting that took place at the NAFO Secretariat in Halifax, Canada, from 09 to 11 September 2025. A new understanding of the Northern Shrimp population structure in the Northwest Atlantic, based upon their distribution, dispersal, and life history traits, had been presented at the meeting. The Divs. 3LNO shrimp stock was shown to be part of a broader stock known as the South Stock Assessment Region (SSAR). A summary of the new stock assessment model for the full SSAR that had been run, approved and adopted by Canada was presented at the September meeting, where it was noted that the documentation on the assessment model was not available at the time of the meeting and the model was not endorsed by SC.

The SC advice from the 09-11 September 2025 meeting identified that the Divs. 3LNO shrimp is part of the broader SSAR. It was also flagged that the assessment method used by SC for the stock in past years could no longer be applied as it was not consistent with the best available scientific information. Therefore, it was also not possible to provide reference points consistent with the new NAFO PAF. Guidance was requested from the Commission to determine the next steps forward for the stock.

At the Annual Meeting, SC discussed their concerns with how the stock assessment process was handled for the Divs. 3LNO shrimp stock. It was noted that during the September shrimp assessment meeting, the previous approach to estimate the Divs. 3LNO shrimp survey index had been flagged as no longer considered reliable, and therefore the indices could not be presented. However, the details driving this decision were not presented or endorsed at the September assessment meeting. SC stressed the importance of transparency in decision making for all NAFO area stocks, and a related recommendation is detailed in the STACREC report (Appendix I).

Additionally, it was discussed that should the new SSAR stock assessment model be used for advice in the NAFO area, the model needs to be reviewed and endorsed by SC beforehand. This may require additional intersessional meetings due to the expected workload of SC at the 2026 June SC meeting.

Additional discussions also occurred after the review of the upcoming Commission requests for 2027 (COM Doc. 25-13) as a new request tasks the SC to assess and consider the operating model underlying a MSE process developed by Canada for the SSAR stock of shrimp in the Canadian inshore waters. SC noted that not only should proposed operating models be reviewed and endorsed by SC, but that any MSE related process should be reviewed and endorsed by SC in collaboration with the WG-RBMS.

The next Scientific Council and STACFIS Shrimp Assessment Meeting will be held prior to the Annual Meeting, 15 - 17 September 2026, at the NAFO Secretariat, in Halifax, Canada (SCS Doc. 25/15).

3. Nomination of Designated Experts (DEs), Ecosystem Designated Experts (EDEs) and Chairs

a) Chairs

Since September 2023, Diana González-Troncoso (EU), Mark Simpson (Canada), Rick Rideout (Canada), Miguel Caetano (EU) and Martha Krohn (Canada) have acted as Chairs of the Scientific Council, STACREC (and Vice-Chair of the Scientific Council), STACPUB, STACFEN and STACFIS, respectively. These positions are typically held for two years. Mark Simpson should have taken the position of the Scientific Council Chair at the close of this meeting, had there been new candidates as Chairs of STACREC and STACFIS.

Usually, the outgoing STACFIS Chair occupies the position of STACREC Chair, but it is preferable that the Chair of SC and the Vice-Chair of SC do not come from the same Contracting Party. No other candidates were identified

to fill the position of Chair of STACREC (and Vice-Chair of SC). For that reason, it was decided that the current Chairs of SC and STACREC should continue acting as Chairs of their Committees for one more year. This is an unusual situation that comes from the lack of support of CPs in providing candidates to take on the leadership and DE roles of the Scientific Council.

José De Oliveira (UK) was nominated as the next STACFIS Chair. The STACPUB Chair will continue in his role. The STACFEN Chair position is vacant.

SC thanks both Martha Krohn (STACFIS) and Miguel Caetano (STACFEN) for their invaluable work as Chairs.

Three working groups remain without SC Chairs: WG-RBMS, WG-CESAG (both Joint COM/SC WGs) and PA-WG. The Climate Change subgroup also does not have a Chair. Additionally, after November 2025, one WG-ESA co-Chair position will be vacant. Regarding the SC CESAG co-Chair, it was decided that the STACREC Chair should act as the SC co-Chair of that group (Appendix I). Regarding the PA-WG, it is reasonable that the WG-RBMS SC co-Chair takes this position as they are closely related.

SC **reiterates** its recommendation from June 2025 that *all Contracting Parties support the work of the Scientific Council by providing candidates for Chairs and DEs for the NAFO SC.*

b) DEs and EDEs

As of the closing of this meeting, three Designated Expert (DE) positions are vacant: Divs. 3NOPs white hake, Divs. 3LNOPs thorny skate and SA 3+4 squid, and the position of Ecosystem Designated Expert (EDE) for Divs. 3LNO Ecosystem Production Unit. In June 2026 there is a request for a full assessment of thorny skate; however, this assessment will not be able to be conducted if no DE is appointed before the start of the May 2026 STACREC meeting.

SC **recommends** that *a succession plan (shadowing, mentoring, etc) be developed to maintain the DE positions fully operational.*

4. Advice when no projections can be made

During the July 2025 WG-RBMS meeting, it was recommended that, when providing stock management advice to the Commission, Scientific Council follow the Precautionary Approach Framework and provide the Commission with the range of scenarios specified in Annex A (Guidance for providing advice on Stocks Assessed) of COM Doc. 24-18. This Annex is designed to present the results of projections with different fishing mortality scenarios.

When a stock does not have an approved assessment model or its assessment is performed based on survey indices without using an assessment model, it is not possible to make projections for different F levels, so the table in Annex A cannot be completed.

Other issues also emerging from the implementation of the PAF include the appropriateness of some of the scenarios in the PAF risk table approved in some situations. This is the case for scenarios related to $F_{current}$ in the critical zone when the level of $F_{current}$ is particularly high compared to levels of F that allow for stock recovery.

Additionally, the WG-RBMS, during its meeting in July 2025, agreed to recommend that the Scientific Council reconsider the prescriptive language in the latest advice on redfish in Division 30 and provide the Commission with additional information at the September 2025 Annual Meeting for consideration of a range of management options aligned with the PAF. This was responded by the SC during this meeting (see Section VI.3.a).

SC **requests** guidance from WG-RBMS about how to provide advice for the stocks in these situations. An intersessional WG-RBMS meeting before June 2026 may be necessary to provide the advice in June 2026.

5. Divs. 3LN Redfish MSE Subgroup

A brief update was given on the informal Divs. 3LN redfish MSE subgroup and it was highlighted that progress is ongoing on operating models for the stock. It was noted that an intersessional SC meeting may be required to provide an update on the work in advance of the 2026 June SC meeting.

6. USA Exploratory Fishing

SC was made aware that the communication of June 2025 from the USA on Intended Exploratory Fishing was withdrawn on Monday September 15, 2025 and therefore not discussed during this meeting.

7. Scoping document for a potential in-person meeting to explore approaches for further integrating information related to climate change throughout Scientific Council operations.

WG-EAFFM recommended the Scientific Council, as workload allows, in consultation with the NAFO Secretariat, to draft a scoping document for a potential in-person meeting to explore approaches for further integrating information related to climate change throughout Scientific Council operations (agenda item III.3.d) This scoping document should identify the scientific expertise needed both within and outside Scientific Council and potential financial and workload implications.

SC agreed to have a first discussion about this item at the 2025 November WG-ESA meeting to decide the way to move forward to answer this request. SC **recommends** *having a dedicated session during that meeting to put together biologists, oceanographers, modellers and stock assessment scientists to start drafting the scoping document.*

8. Process for Assessments and Interim Monitoring Reports (IMRs)

Three assessments are currently being monitored only (by IMR):

- Subarea 6 Alfonsino
- Subareas 2-3 Roughhead Grenadier
- Capelin in Divisions 3NO

Other assessments will be on the schedule as they are laid out in the Commission request table (unless SC is unable to carry out the assessment for any reason - for example if there is no DE).

For stocks that are being monitored by IMRs:

A first look at the indices at the May SC/STACREC meeting will provide an early opportunity to consider whether a full assessment will be needed in June (i.e. whether a change in perception of the stock and new advice is required).

By default, the IMRs will be reviewed by correspondence in June by the STACFIS Chair and one additional reviewer and not reviewed in plenary.

In addition, at the beginning of the June meeting, the DE, the IMR reviewer and the STACFIS Chair will discuss whether there are circumstances such that the IMR should be seen in plenary for SC to consider whether there has been a change in perception of the stock and a full assessment is required.

9. SC Rules of Procedures

SC has agreed that the Executive Committee and Working Group Chairs will start the process to review its rules of procedures to be reviewed at the 2026 September meeting.

X. ADOPTION OF REPORTS

1. Committee Reports of STACFIS and STACREC

The reports of STACFIS and STACREC were adopted on 18 September 2025 subject to editorial revision following this meeting.

2. Report of Scientific Council

The Scientific Council report was adopted on 18 September 2025 subject to editorial revision following this meeting.

XI. ADJOURNMENT

The meeting was adjourned at 18:00 on 18 September 2025.

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

Chair: Mark Simpson

Rapporteur: Andrea Perreault

1. Opening

STACREC met at the Halifax Convention Centre, Halifax, Canada, with additional participants joining the meeting by Webex, on 17 September 2025. The meeting opened at 10:00. Representatives attended from Canada, Denmark (in respect of the Faroes and Greenland), the European Union, Japan, Norway, the Russian Federation, the United Kingdom and the United States of America. Observers attended from the Dalhousie University: Marine & Environmental Law Institute.

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as rapporteur. The Chair thanked the Secretariat and the Science Coordinator for their amazing support.

3. Fisheries Statistics**a) Progress Reports on Secretariat Activities**

There were no new items to report at this meeting.

b) Review of STATLANT21 Data

The NAFO Secretariat presented the catch estimates developed by CESAG based on the strategy outlined in Annex 1 of COM-SC Doc. 17-08, amended following a recommendation from STACFIS in 2018, to include catch estimates broken down by quarter and gear type.

In accordance with Rule 4.4 of the Rules of Procedure of the Scientific Council, as amended by Scientific Council in June 2006, the deadline dates for this year's submission of STATLANT 21A data and 21B data for the preceding year were 1 May and 31 August, respectively. The Secretariat produced a compilation of the countries that have submitted to STATLANT and made this available to the meeting.

The European Commission provided an update on previous data confidentiality issues that had prevented the submission of the STATLANT 21A data in time for the June 2025 Scientific Council meeting and in previous years. It was noted that the issue had been resolved, and data were expected to be provided in a timely manner going forward. It was highlighted that this resolution could not be applied retroactively and how to address older data confidentiality issues remains a work in progress. Canada also noted that a similar issue had been resolved, and data were expected to be provided in a timely manner going forward.

The Chair stressed the importance of submitting data on schedule, since Designated Experts need complete data for their assessments at the Scientific Council June meeting.

Table 1. Dates of receipt of STATLANT 21A reports for 2022-2024 and 21B reports for 2022-2024 received prior to 10 September 2025.

Country/ component	STATLANT 21A (deadline, 1 May)			STATLANT 21B (deadline, 31 August)		
	2022	2023	2024	2022	2023	2024
CAN-CA	28 May 24	28 May 24	11 Jun 25			
CAN-SF	24 Apr 23	03 May 24	30 Apr 25			
CAN-G	26 Apr 23	10 May 24	09 May 25	28 Aug 23	30 Aug 24	29 Aug 25
CAN-NL	28 Apr 23	30 Apr 24	30 Apr 25	31 Aug 23	09 Sep 24	03 Sep 25
CAN-Q						
CUB						
E/BUL						
E/EST	21 Apr 23	29 Apr 24	25 Apr 25		26 Aug 24	28 Aug 25
E/DNK	9 Jun 23	30 Apr 24	06 May 25		13 Aug 24	25 Aug 25
E/FRA						
E/DEU	9 Jun 23	30 Apr 24	12 May 25		15 Aug 24	28 Jul 25
E/LVA	5 Apr 23	30 Apr 24				21 Aug 25
E/LTU	9 Jun 23	23 Apr 24	28 Apr 25		31 May 24	
EU/POL						29 Jul 25
E/PRT						
E/ESP	9 Jun 23	24 Apr 24	28 Apr 25		23 Aug 24	14 July 25
GBR			30 Apr 25			21 Aug 25
FRO	5 Jun 23	30 Apr 24	16 May 25	07 Jun 23	30 Apr 24	16 May 25
GRL	1 May 23	01 May 24	23 May 25	22 Aug 23	30 Aug 24	
ISL			30 Jun 25			
JPN	28 Apr 23	24 Apr 24	22 Apr 25	30 Aug 23	29 Aug 24	26 Aug 25
KOR						
NOR	9 Jun 23	29 May 24 updated: 8 Aug 24	19 May 25		23 Aug 24	01 Sep 25
RUS	28 Apr 23	23 Apr 24	28 Apr 25	8 Sep 23	13 Sep 24	02 Sep 25
USA	31 May 23 updated: 7 May 24	7 May 24 updated: 29 Apr 25	29 Apr 25			
FRA-SP	27 Apr 23	26 Apr 24	28 May 25			18 Aug 25
UKR						

4. Research Activities

a) Surveys Planned for 2026 and 2027

The SCS survey documents will be finalized by the Secretariat.

5. Other Matters

a) Review of SCR and SCS Documents

There were no SCR or SCS documents to be reviewed at the time of the meeting.

b) Other Business**i) Invited speaker for June 2026: SPiCT stock assessment package**

During the September 2025 Scientific Council and STACFIS Shrimp Assessment meeting, it was recommended that an invitation be extended to Dr. Casper Berg (DTU Aqua) to lead a seminar focused on the stochastic surplus production model in continuous time (SPiCT) package at the June 2026 Scientific Council meeting. The SPiCT model is currently used in the assessment of Northern shrimp in Denmark Strait and off East Greenland and Greenland halibut in Subarea 0 and 1 and could potentially be used to provide advice for other data-limited NAFO stocks. An invitation will be extended to Dr. Berg.

ii) CESAG chair

Given recent discussions, Chair vacancies and workload issues, STACREC **recommends** that *the CESAG Chair be incorporated into the STACREC Chair moving forward.*

iii) Survey Index Methodology

Scientific Council discussed the recent September 2025 Scientific Council and STACFIS Shrimp Assessment meeting (SCS 25/15), where it had been noted that the previous approach to estimate the Divs. 3LNO shrimp survey index was no longer considered reliable, and therefore the indices could not be presented. Scientific Council flagged that the decision on the reliability of the methodology was taken outside of Scientific Council and not presented or endorsed in plenary at the September meeting.

STACREC **recommends** that *all survey indices used in NAFO stock assessments be made available for review at the May STACREC meeting. Any proposed changes to the methodology for estimating a survey index must be presented, discussed, and formally endorsed by Scientific Council at a STACREC meeting.*

6. Adjournment

The STACREC meeting closed on 17 September at 1230.

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

Chair: Martha Krohn

Rapporteur: Andrea Perreault

I. OPENING

The Committee met at the Halifax Convention Centre, Halifax, Canada, with additional participants joining the meeting by Webex, from 15 to 17 September 2024 to consider the various matters in its agenda. Representatives attended from Canada, Denmark (in respect of the Faroes and Greenland), the European Union, Japan, Norway, the Russian Federation, the United Kingdom and the United States of America. Observers attended from the Dalhousie University: Marine & Environmental Law Institute. The Chair, Martha Krohn (Canada), opened the meeting by welcoming participants. The agenda was reviewed, and a plan of work developed for the meeting in accordance with the Scientific Council plan of work. The provisional agenda was adopted.

II. ASSESSMENTS DEFERRED FROM THE JUNE MEETING

21. Northern Shortfin Squid (*Illex illecebrosus*) in SAs 3+4

Interim Monitoring Report (SCR Doc. 98/59, 75; 06/45; 16/21, 34REV; 19/42REV; 20/02, 10REV, 11; 23/02, 03; 24/05, 07; SCS Doc. 21/05, 06, 16)

a) Introduction

Illex illecebrosus, Northern shortfin squid, is semelparous with a lifespan of less than one year. Spawning occurs year-round with two peaks that result in summer- and winter-hatched intra-annual cohorts. This transboundary resource comprises a single stock throughout its range of exploitation in Subareas 3-6 (with minor catches from Division 2J in some years) and spawning only occurs in USA waters. However, the Northern (Subareas 3+4) and Southern (Subareas 5+6) Stock Components are assessed and managed separately, primarily using TACs, by NAFO and the USA, respectively.

b) Fishery Data

Since 1999, Subareas 3+4 catches have been predominantly from the Subarea 3 inshore jig fishery. The exceptions occurred during 2013-2015, when catches were reported as zero for Subarea 3. During 1999-2011, Subareas 3+4 catches were low during most years, ranging between about 57 t in 2001 to 6 981 t in 2006 and averaging 1 077 t, compared to the period of peak catches during 1976-1981 that averaged 80 645 t (Figure 21.1). During 2012-2015, catches were the lowest and averaged only 27 t, but gradually increased to 10 567 t in 2021, the highest catch since 1997 and well-above the 1982-2016 low productivity period average. However, catches in Subareas 3+4 plummeted to 37 t in 2022 and remained low in 2023 (112 t) and 2024 (<100t). During 2000-2022, only 4% of the 34 000 t TAC for Subareas 3+4 was harvested on average, with a peak of 31% in 2021.

Recent catches and TACs ('000 t) are as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
TAC SA 3+4	34	34	34	34	34	34	34	34	34	34
STATLANT 21 SA 3+4	<0.1 ¹	0.4 ¹	1.4 ¹	2.8 ¹	3.9 ¹	10.7 ¹	<0.1 ¹	0.1 ¹	<0.1	
STATLANT 21 SA 5+6²	6.7	22.5	24.1	27.2	28.4	30.9	5.7	5.3	6.6	
STACFIS SA 3+4	0.2	0.4	1.5	2.9	3.9	10.5	<0.1	0.1	<0.1	
STACFIS SA 5+6²	6.7	22.5	24.1	27.2	28.4	30.9	5.7	5.4	6.6	
STACFIS Total SA 3-6³	6.9	22.9	25.6	30.1	32.3	41.4	5.7	5.5	6.6	

¹ Includes catches (<0.1 t to 56 t during 2013-2023) reported as 'Unspecified Squid' from Subarea 4 because they were likely *Illex* based on the geographic distribution of this species versus *Doryteuthis pealeii*.

² Catches from Subareas 5+6 are included because there is no basis for considering separate stocks in Subareas 3+4 and Subareas 5+6.

³ STACFIS Total Subareas 36 catches were computed as catches harvested in the NAFO Convention Area (2013-2017 from the STATLANT 21 database; 2018 onward from NAFO CESAG database for Subareas 3+4 and USA landings database for Subareas 5+6).

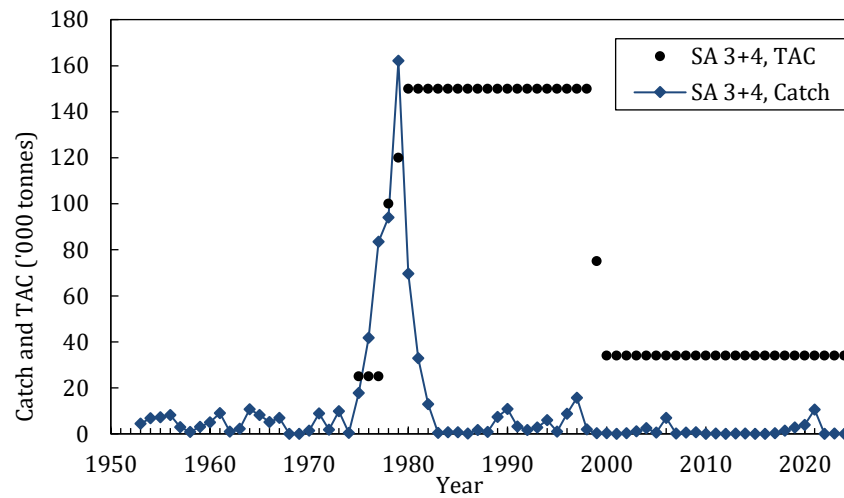


Figure 21.1. Northern shortfin squid in Subareas 3+4: nominal catches and TACs.

c) Research Survey Data

The Canadian July Divisions 4VWX survey is the most representative indicator of relative biomass levels in SAs 3+4. Like most squid species, the biomass indices from this survey show high interannual variability, but exhibited distinct high and low productivity periods. Biomass indices averaged 13.2 kg per tow during the high productivity period (1976-1981) and 2.6 kg per tow during the low productivity period (1982-2016). The indices fluctuated widely after 2003 (Figure 21.2), but generally declined between 2004 and 2013, from a level near the high productivity period mean to the lowest level on record, respectively. The index increased in 2017 (16.1 kg per tow) and was greater than the high productivity period mean. The 2018 index was not computed due to inadequate survey sampling coverage, but in 2019 the biomass index was twice as high (32.1 kg per tow) as the 2017 index and was the second highest value in the time series. After 2019, only the 2020 and 2023 Divisions 4VWX biomass indices were available and showed a large decrease to 8.2 kg per tow in 2020 and 0.58 kg per tow in 2023. The *CCGS Teleost* was replaced in 2021 with a new vessel, the *CCGS Capt. Jacques Cartier*, the latter which fished with a different bottom trawl and towing protocol. Catch conversion factors for *Illex* were estimated using data from comparative fishing experiments conducted during the 2022 and 2023 July Divisions 4VWX surveys. The length-disaggregated conversion factors became available in 2024 and were applied to the 2023 index. However, the 2021 and 2022 biomass indices were not computed because the survey sampling coverage of *Illex* habitat was inadequate during both years. In 2024 and 2025 the 4VWX biomass index was 0.07 and 0.86 kg per tow, respectively.

The EU-Spain Divisions 3NO survey biomass index also showed a large increase to a time series high in 2019, however has been very low in recent years. The EU Division 3M survey biomass index was higher in 2017 but also has remained low in recent years (Figure 21.2). The 2025 3NO and 3M estimates are preliminary.

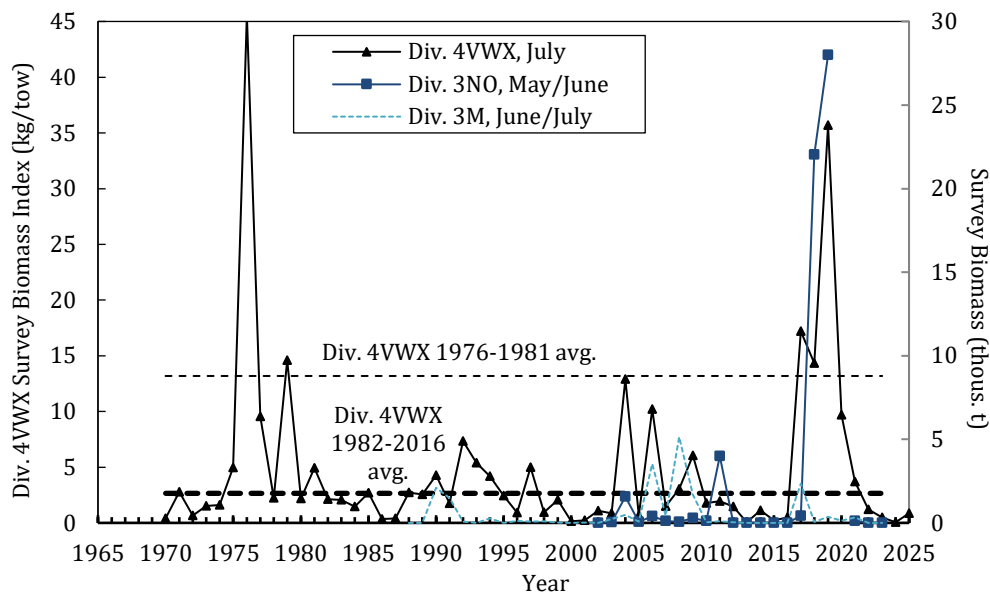


Figure. 21.2. Northern shortfin squid in Subareas 3+4: survey biomass indices from the July Canadian surveys in Divisions 4VWX, the June EU-Spain surveys in Divisions 3NO and the July EU surveys in Division 3M. The 2025 estimates are preliminary.

d) Conclusion

Large decreases occurred in the July Divisions 4VWX biomass index in recent years. The time series showed a large decrease from above the high productivity period average in 2019 to below them in 2020, followed by a decrease to below the low productivity period average in 2023-2025. The two other available summer surveys, the Divisions 3LNO and Division 3M surveys, also returned to low biomass levels after 2019 and remained low in 2025.

Based on current information there is no significant change in the status of this stock.

A full assessment can only be carried out if a Designated Expert is appointed.

e) Research Recommendation

In 2013, STACFIS **recommended** that *gear/vessel conversion factors be computed to standardize the 1970-2003 relative abundance and biomass indices from the July Divisions 4VWX surveys.*

STATUS: No progress has been made.

III. OTHER MATTERS

1. Nomination of Designated Experts (DEs)

Scientific Council reviewed the current Designated Expert list and noted the vacancies on the list.

From the Science Branch, Northwest Atlantic Fisheries Centre, Department of Fisheries and Oceans, St. John's, Newfoundland & Labrador, Canada

Cod in Div. 3NO	Rick Rideout	rick.rideout@dfo-mpo.gc.ca
American Plaice in Div. 3LNO	Laura Wheeland	laura.wheeland@dfo-mpo.gc.ca
Witch flounder in Div. 3NO	Katherine Skanes	katherine.skane@dfo-mpo.gc.ca
Yellowtail flounder in Div. 3LNO	Laura Wheeland	laura.wheeland@dfo-mpo.gc.ca
Greenland halibut in SA 2+3KLMNO	Paul Regular	paul.regular@dfo-mpo.gc.ca
Northern shrimp in Div. 3LNO	Nicolas Le Corre	nicolas.lecorre@dfo-mpo.gc.ca

From the Department of Fisheries and Oceans, Winnipeg, Manitoba, Canada

Greenland halibut in SA 0+1 (offshore)	Kevin Hedges	kevin.hedges@dfo-mpo.gc.ca
--	--------------	----------------------------

From the Department of Fisheries and Oceans, Ottawa, Ontario, Canada

Redfish Div. 3O	Danny Ings	danny.ings@dfo-mpo.gc.ca
-----------------	------------	--------------------------

From the Instituto Español de Oceanografía, Vigo (Pontevedra), Spain

Roughhead grenadier in SA 2+3	Fernando González-Costas	fernando.gonzalez@ieo.csic.es
Splendid alfonsino in Subarea 6	Fernando González-Costas	fernando.gonzalez@ieo.csic.es
Cod in Div. 3M	Irene Garrido Fernández	irene.garrido@ieo.csic.es
Northern Shrimp in Div. 3M	Jose Miguel Casas Sánchez	mikel.casas@ieo.csic.es
Ecosystem Designated Expert 3M	Diana González-Troncoso	diana.gonzalez@ieo.csic.es

From the Instituto Nacional de Recursos Biológicos (INRB/IPMA), Lisbon, Portugal

American plaice in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Golden redfish in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Redfish in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Redfish in Div. 3LN	Patricia Gonçalves	patricia@ipma.pt

From the Greenland Institute of Natural Resources, Nuuk, Greenland

Demersal Redfish in SA1	Rasmus Nygaard	rany@natur.gl
Wolfish in SA1	Rasmus Nygaard	rany@natur.gl
Greenland halibut in Div. 1 inshore	Rasmus Nygaard	rany@natur.gl
Northern shrimp in SA 0+1	AnnDorte Burmeister	anndorte@natur.gl
Northern shrimp in Denmark Strait	Tanja B. Buch	TaBb@natur.gl

From Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), Russian Federation

Capelin in Div. 3NO	Konstantin Fomin	fomin@pinro.ru
---------------------	------------------	----------------

Designated Expert Vacancies

Ecosystem Designated Expert 3LNO	VACANT
Northern Shortfin Squid in SA 3 & 4	VACANT
Thorny skate in Div. 3LNO	VACANT
White hake in Div. 3NO	VACANT

2. Other Matters

a) Review of SCR and SCS Documents

There were no SCRs or SCSs for review during STACFIS.

b) Review of FIRMS classification of NAFO stocks

Scientific Council reiterates that the Stock Classification system is not intended as a means to convey the scientific advice to the Commission and should not be used as such. Its purpose is to respond to a request by FIRMS to provide such a classification for their purposes. The category choices do not fully describe the status of some stocks. Scientific advice to the Commission is to be found in the Scientific Council report in the summary sheet for each stock.

Stock Size (incl. structure)	Fishing Mortality			
	None-Low	Moderate	High	Unknown
Virgin-Large		3LNO Yellowtail Flounder		
Intermediate		3M Redfish ¹ SA2+3KLMNO Greenland halibut 3M cod SA 0+1 (Offshore) Greenland halibut SA0+1 Northern shrimp	East Greenland Northern shrimp	SA1 American Plaice SA1 Spotted Wolffish
Small	3NOPs White hake 3NO Witch flounder 3LN Redfish			
Depleted	3M American plaice 3LNO American plaice 3NO Cod 3M Northern shrimp ¹ 6G Alfonsino		3O Redfish	SA1 Redfish SA1 Atlantic Wolffish
Unknown	SA2+3 Roughhead grenadier 3NO Capelin	1B-C Greenland halibut Inshore	1D Greenland halibut Inshore 1E-F Greenland halibut Inshore	SA3+4 Northern shortfin squid 3LNOPs Thorny skate Greenland halibut in Uummannaq Greenland halibut in Disko Bay Greenland halibut in Upernavik 3LNO Northern shrimp ²

¹ Fishing mortality may not be the main driver of biomass for this stock.

² Stock designation has changed

For many stocks, lack of surveys in recent years has impacted assessments.

c) Other Business

There was no other business.

IV. ADJOURNMENT

The meeting adjourned at 15:00 on 17 September 2025.

APPENDIX III. AGENDA
47th Annual Meeting of NAFO
15-19 September 2025
Halifax, Nova Scotia, Canada

NAFO Scientific Council
Provisional Agenda

- I. Plenary Session (Scientific Council Chair: Diana González-Troncoso)**
 - 1. Opening
 - 2. Appointment of Rapporteur
 - 3. Adoption of Agenda
 - 4. Plan of Work
- II. Review of Scientific Council Recommendations**
- III. Joint Session of Commission and Scientific Council**
 - 1. NAFO Performance Review
 - a. Implementation of the 2018 Performance Review recommendations
 - b. Update on the establishment of ad hoc virtual working group to consider the initiation of a third Performance Review of NAFO
 - 2. Presentation of scientific advice by the Chair of the Scientific Council
 - a. Response of the Scientific Council to the Commission's request for scientific advice
 - b. Feedback to the Scientific Council regarding the advice and its work during this meeting
 - c. Other issues as determined by the Chair of the Commission and of the Scientific Council
 - 3. Meeting Reports and Recommendations of the Joint Commission–Scientific Council Working Groups
 - a. Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2024
 - b. Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), 2025
 - c. Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), April and July 2025
 - d. Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2025
 - 4. Formulation of Request to the Scientific Council for Scientific Advice on Management in 2027 and beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters

IV. Research Coordination (STACREC Chair: Mark Simpson)

1. Opening
2. Appointment of Rapporteur
3. Fisheries Statistics
 - a. Progress Reports on Secretariat Activities
 - b. Review of STATLANT21 Research Activities
4. Research Activities
 - a. Surveys Planned for 2026 and 2027
5. Other Matters
 - a. Review of SCR and SCS Documents
 - b. Other Business
 - i) Reviewers for June 2026: topics
6. Adjournment

V. Fisheries Science (STACFIS Chair: Martha Krohn)

1. Opening
2. Nomination of Designated Experts
3. Other Matters
 - a. Review of SCR and SCS Documents
 - b. Assessments deferred from the June meeting
 - i. Northern shortfin squid in SA 3+4 (full assessment)
 - c. Review of FIRMS classification of NAFO stocks
 - d. Other Business
4. Adjournment

VI. Requests from the Commission

1. Requests/advice deferred from the June Meeting
2. *Ad hoc* Requests from Current Meeting
3. Requests arising from Working Groups in 2025
4. Further progress on items related to COM requests (in [SCS Doc. 25/01](#))
 - a. Request #7: The Commission requests the Scientific Council to develop reference points to facilitate the implementation of the Revised NAFO Precautionary Approach Framework, for stocks that currently do not have them: Northern shortfin squid in SA 3+4.

VII. Review of Future Meeting Arrangements

VIII. Future Special Sessions

1. Discussion of proposed topics
 - a. Workshop on Div. 3M cod age readers
 - b. Climate Change meeting
 - c. Other proposed topics

IX. Other Matters

1. Meeting reports
2. Results of the Scientific Council and STACFIS Shrimp Assessment Meeting, 9-11 September 2025
3. Chair and Designated Experts: election of vacant positions
4. SOFIA State of the stocks
5. Any other business

X. Adoption of Reports

1. Committee Reports of STACFIS and STACREC
2. Report of Scientific Council

XI. Adjournment

ANNEX 1. THE COMMISSION'S REQUEST FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 2026 AND BEYOND OF CERTAIN STOCKS IN SUBAREAS 2, 3 AND 4 AND OTHER MATTERS

(From [NAFO SCS Doc. 25/01](#))

Following a request from the Scientific Council, the Commission agreed that items 1, 2, and 3 should be the priority for the June 2025 Scientific Council meeting subject to resources.

1. The Commission requests that the Scientific Council provide advice for the management of the fish stocks below according to the assessment frequency presented below. In line with the Revised NAFO Precautionary Approach Framework (Annex 4 of COM-SC Doc. 24-03) the Commission should be informed by the range of options and associated risks provided by the Scientific Council. The Commission will decide upon the acceptable risk level in the context of the entirety of the Scientific Council advice for each stock guided and as foreseen by the NAFO Precautionary Approach.

Yearly basis	Two-year basis	Three-year basis	Interim Monitoring Only
Cod in Division 3M	Redfish in Division 3M Thorny skate in Divisions 3LNO Witch flounder in Divisions 3NO Redfish in Divisions 3LN Yellowtail flounder in Divisions 3LNO Northern shrimp in Divisions 3LNO Northern shrimp in Division 3M White hake in Divisions 3NO	American plaice in Division 3M Northern shortfin squid in Subareas 3+4 Redfish in Division 3O Cod in Divisions 3NO American plaice in Divisions 3LNO	Subarea 6 Alfonsino Subareas 2-3 Roughhead Grenadier Capelin in Divisions 3NO

Advice should be provided using the guidance provided in **Annex A**, or using the predetermined Management Procedure in the cases where they exist (currently Greenland halibut 2+3KLMNO). For Division 3M shrimp supplementary advice in terms of fishing-days could also be considered as appropriate.

To implement this schedule of assessments, the Scientific Council is requested to conduct a full assessment of these stocks as follows:

- In 2025, advice should be provided for 2026 for: Cod in Division 3M
- In 2025, advice should be provided for 2026 and 2027 for: Yellowtail flounder in Divisions 3LNO, White hake in Divisions 3NO, Northern shrimp in Divisions 3LNO
 - With respect to Northern shrimp in Divisions 3LNO, Scientific Council is requested to provide its advice to the Commission prior to the 2025 Annual Meeting based on the survey data up to and including 2025.
- In 2025, advice should be provided for 2026, 2027 and 2028 for: Redfish in Division 3O, Northern shortfin squid in Subareas 3+4.

The Commission also requests the Scientific Council to continue to monitor the status of all other stocks annually and, should a significant change be observed in stock status (e.g. from surveys) or in bycatch in other fisheries, provide updated advice as appropriate.

2. The Commission requests the Scientific Council to monitor the status of Greenland halibut in Subarea 2 + Divisions 3KLMNO annually to compute the TAC using the agreed Management Procedure and determine whether exceptional circumstances are occurring. If exceptional circumstances are occurring, the exceptional circumstances protocol will provide guidance on what steps should be taken.

3. The Commission requests that Scientific Council continue to advance work on the 3LN redfish MSE processes during 2024-2025.
4. As practicable and taking into account Scientific Council capacity constraints, develop stock summary sheets for NAFO managed stocks that are evaluated using MSE processes.
5. In relation to the Ecosystem Roadmap as a whole, the Commission requests that the Scientific Council develop a reference document detailing the ecosystem roadmap, for completion in the next 1-3 years.
6. In relation to the habitat impact assessment component of the Roadmap (VME and SAI analyses), the Commission requests that Scientific Council:
 - a. Continue the development of a centralized data repository using ArcGIS online to host the data and data-products for scientific advice, in conjunction with the NAFO Secretariat
 - b. Work towards the reassessment of VMEs and impact of bottom fisheries on VMEs for 2027; including potential management options in the reassessment of bottom fisheries.
 - c. Develop materials on the potential of submitting NAFO coral bottom fishing closed areas as OECMs for discussion at the 2025 WG-EAFFM meeting.
7. The Commission requests the Scientific Council to develop reference points to facilitate the implementation of the Revised NAFO Precautionary Approach Framework, for stocks that currently do not have them.
8. In relation to its workload, the Commission requests the Scientific Council to:
 - a. Continue to update the 3-5 year work plan, which reflects requests arising from the 2024 Annual Meeting, other multi-year stock assessments and other scientific inquiries already planned for the near future. The work plan should identify what resources are necessary to successfully address these issues, gaps in current resources to meet those needs and proposed prioritization by the Scientific Council of upcoming work based on those gaps.
 - b. Consider undertaking internal, or support external, assessments to inform the ongoing effort to address the Scientific Council workload. Such assessments could include how to optimize:
 - i. the organization / structure and function of the Scientific Council, its standing committees and working groups,
 - ii. further development and implementation of the Scientific Council's workplan.
9. The Commission requests Scientific Council to conduct ongoing analysis of the Division 3M cod fishery data by 2025 in order to:
 - a. monitor the consequences of the management decisions (including the analysis of the redistribution of the fishing effort along the year and its potential effects on ecosystems, the variation of the cod catch composition in lengths/ages, and the bycatch levels of other fish species, benthos in general, and VME taxa in particular); and
 - b. carry out any additional monitoring that would be required, including Division 3M cod caught as bycatch in other fisheries during the closed period.
10. Noting the voluntary contribution of the United States to support a consultant to provide feedback on NAFO's processes to address climate change impacts, requests the SC to conduct an analysis of progress and/or outcomes of that work.

ANNEX A: Guidance for providing advice on Stocks Assessed

The Commission requests the Scientific Council to consider the following in assessing and projecting future stock levels for those stocks listed above. These evaluations should provide the information necessary for the Commission to consider the balance between risks and yield levels, in determining its management of these stocks:

Stochastic short-term projections (3 years) should be performed with the F levels that are included in the risk table from the Revised PA Framework (Table 1 below), based on the point estimate of biomass. The first year of the projection should assume a catch equal to the agreed TAC for that year. In instances where Scientific Council expects catches to be significantly different from the agreed TAC, an additional projection could be provided based on the best available catch estimation.

In relation to Tier 1 of the Roadmap Scientific Council should provide annually catch information in relation to 2TCI, including recent cumulative catch levels and a scoping of expected cumulative catch levels.

For stocks assessed with a production model, the advice should include updated time series or plots of:

- Catch and TAC of recent years
- Catch to relative biomass
- Relative Biomass
- Relative Fishing mortality
- Stock trajectory against precautionary approach reference points

For stock assessed with an age-structured model, information should be provided on stock size, spawning stock sizes, recruitment prospects, historical fishing mortality. Graphs and/or tables should be provided for all of the following for the longest time-period possible:

- historical yield and fishing mortality;
- spawning stock biomass and recruitment levels;
- Stock trajectory against precautionary approach reference points

For stocks for which only general biological and/or catch data are available, few standard criteria exist on which to base advice. The stock status should be evaluated in the context of management requirements for long-term sustainability and the advice provided should be consistent with the precautionary approach.

The following graphs should be presented for the longest time-period possible:

- catch and TAC of recent years
- length distributions
- time trends of survey abundance estimates
- an age or size range chosen to represent the spawning population
- an age or size-range chosen to represent the exploited population
- recruitment proxy or index for an age or size-range chosen to represent the recruiting population.
- fishing mortality proxy, such as the ratio of reported commercial catches to a measure of the exploited population.
- stock trajectory against precautionary approach reference points

In all cases any additional information the Scientific Council deems appropriate should be provided.

y current year (year in which the assessment is made, data until year y-1)

	Yield			P(F>F _{lim})			P(B<B _{lim})				P(F>F _{target})			P(B<B _{trigger})				P(By+3 > By)	(By+3-By)/By
F in y+1 and following years	Yield y (50%)	Yield y+1 (50%)	Yield y+2 (50%)	y	y+1	y+2	y	y+1	y+2	y+3	y	y+1	y+2	y	y+1	y+2	y+3		
Critical Zone																			
F=0	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F=X% current*	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F current	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Cautious Zone																			
F lower edge leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F midrib leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F upper edge leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Healthy Zone																			
F=0.75F _{msy}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F _{target} =0.85F _{msy}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F _{lim} =F _{msy}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

*X% may vary stock by stock. In the future, this framework may be modified to include F bycatch.

The number of years in the risk projections table will be the same as the years of advice.

ANNEX 2. DESIGNATED EXPERTS IN 2025

Scientific Council reviewed the current Designated Expert list and noted the vacancies on the list.

From the Science Branch, Northwest Atlantic Fisheries Centre, Department of Fisheries and Oceans, St. John's, Newfoundland & Labrador, Canada

Cod in Div. 3NO	Rick Rideout	rick.rideout@dfo-mpo.gc.ca
American Plaice in Div. 3LNO	Laura Wheeland	laura.wheeland@dfo-mpo.gc.ca
Witch flounder in Div. 3NO	Katherine Skanes	katherine.skane@dfo-mpo.gc.ca
Yellowtail flounder in Div. 3LNO	Laura Wheeland	laura.wheeland@dfo-mpo.gc.ca
Greenland halibut in SA 2+3KLMNO	Paul Regular	paul.regular@dfo-mpo.gc.ca
Northern shrimp in Div. 3LNO	Nicolas Le Corre	nicolas.lecorre@dfo-mpo.gc.ca

From the Department of Fisheries and Oceans, Winnipeg, Manitoba, Canada

Greenland halibut in SA 0+1 (offshore)	Kevin Hedges	kevin.hedges@dfo-mpo.gc.ca
--	--------------	----------------------------

From the Department of Fisheries and Oceans, Ottawa, Ontario, Canada

Redfish Div. 3O	Danny Ings	danny.ings@dfo-mpo.gc.ca
-----------------	------------	--------------------------

From the Instituto Español de Oceanografía, Vigo (Pontevedra), Spain

Roughhead grenadier in SA 2+3	Fernando González-Costas	fernando.gonzalez@ieo.csic.es
Splendid alfonsino in Subarea 6	Fernando González-Costas	fernando.gonzalez@ieo.csic.es
Cod in Div. 3M	Irene Garrido Fernández	irene.garrido@ieo.csic.es
Northern Shrimp in Div. 3M	Jose Miguel Casas Sánchez	mikel.casas@ieo.csic.es
Ecosystem Designated Expert 3M	Diana González-Troncoso	diana.gonzalez@ieo.csic.es

From the Instituto Nacional de Recursos Biológicos (INRB/IPMA), Lisbon, Portugal

American plaice in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Golden redfish in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Redfish in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Redfish in Div. 3LN	Patricia Gonçalves	patricia@ipma.pt

From the Greenland Institute of Natural Resources, Nuuk, Greenland

Demersal Redfish in SA1	Rasmus Nygaard	rany@natur.gl
Wolfish in SA1	Rasmus Nygaard	rany@natur.gl
Greenland halibut in Div. 1 inshore	Rasmus Nygaard	rany@natur.gl
Northern shrimp in SA 0+1	AnnDorte Burmeister	anndorte@natur.gl
Northern shrimp in Denmark Strait	Tanja B. Buch	TaBb@natur.gl

From Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), Russian Federation

Capelin in Div. 3NO	Konstantin Fomin	fomin@pinro.ru
---------------------	------------------	----------------

Designated Expert Vacancies

Ecosystem Designated Expert 3LNO	VACANT
Northern Shortfin Squid in SA 3 & 4	VACANT
Thorny skate in Div. 3LNO	VACANT
White hake in Div. 3NO	VACANT

ANNEX 3. DENMARK (ON BEHALF OF GREENLAND) REQUESTS FOR SCIENTIFIC ADVICE - 2026

Denmark (on behalf of Greenland) Coastal State Request for Scientific Advice – 2026

(from SCS Doc. 25/03)

Denmark (on behalf of Greenland) hereby request scientific advice on management in 2026 of certain stocks in NAFO Subareas 0 and 1. Denmark (on behalf of Greenland) requests the Scientific Council for advice on the following species:

1. Golden Redfish and Demersal Deep-Sea Redfish

Advice on Golden redfish (*Sebastes marinus*) and demersal deep-sea redfish (*Sebastes mentella*) in Subarea 1 was in June 2023 given for 2024-2026. The Scientific Council is requested to continue its monitoring of the above stocks and provide updated advice as appropriate in the event of significant changes in stock levels.

2. Atlantic Wolffish and Spotted Wolffish

Advice on Atlantic Wolffish (*Anarhichas lupus*) and Spotted Wolffish (*Anarhichas minor*) in Subarea 1 was in June 2023 given for 2024-2026. The Scientific Council is requested to continue its monitoring of the above stocks and provide updated advice as appropriate in the event of significant changes in stock levels.

3. Greenland Halibut, Offshore

Advice on Greenland Halibut, Offshore in Subareas 0 and 1 was given in 2024 for 2025 and 2026. Denmark (on behalf of Greenland) request the Scientific Council to provide catch advice according to the NAFO Precautionary Approach Framework (PAF). The advice should also include a range of risk-based catch options for 2026-2027. Specifically, Denmark (on behalf of Greenland) recommends that for each option a clear technical basis is provided and that a table with defined reference points is provided in the advice. Catch options that are in accordance with the NAFO PAF should be highlighted.

The advice shall remain a two-year advice, but Denmark (on behalf of Greenland) recommends the advice cycle to start at even years (starting with the 2026-2027 advice) to follow a request by the Scientific Council with the purpose of better distributing the workload of the Scientific Council.

4. Greenland Halibut, Inshore, West Greenland

Advice on the inshore stocks of Greenland Halibut in Subarea 1 was given in 2024 for 2025-2026. Denmark (on Behalf of Greenland) requests the Scientific Council to continue its monitoring of the above stocks and provide updated advice in the event of significant changes in stock levels.

5. Northern Shrimp, West Greenland

Subject to the concurrence of Canada as regards to Subareas 0 and 1, Denmark (on behalf of Greenland) requests the Scientific Council before December 2025 to provide advice on the scientific basis for management of Northern Shrimp (*Pandalus borealis*) in Subareas 0 and 1 in 2026 in line with Greenland's stated management objective of maintaining a mortality risk of no more than 35% in the first year prediction and to provide a catch option table ranging with 5,000 t increments. Future catch options should be provided for as many years as data allows for.

6. Northern Shrimp, East Greenland

Furthermore, the Scientific Council is in cooperation with ICES requested to provide advice on the scientific basis for management of Northern Shrimp (*Pandalus borealis*) in Denmark Strait and adjacent waters east of southern Greenland in 2026 and for as many years ahead as data allows for.

ANNEX 4. REQUESTS FROM CANADA FOR COASTAL STATE ADVICE IN 2026

(from SCS Doc. 25/04)

Canada would like to submit its request to the Scientific Council for advice on the following species:

1. **Greenland halibut (Subarea 0 + 1 (offshore))**

The Scientific Council is requested to provide an overall assessment of status and trends in the total stock area throughout its range and to specifically provide risk-based advice on a range of TAC options for 2026 and 2027. The stock status should be evaluated in the context of management requirements for long-term sustainability and the advice provided should be consistent with NAFO's Revised (2024) Precautionary Approach Framework (PAF).

Specifically, Canada requests that, in addition to the risk table inputs provided in Table 2 of NAFO Revised PAF, the following options also be included:

- $F_{\text{status quo}}$
- Current TAC
- the 2019-2022 TAC level (36,370 t)

For each of the projections, please include the probabilities that biomass will increase or remain the same ($P(B_{2027} \geq B_{2025})$); and the probability that biomass will decrease ($P(B_{2027} < B_{2025})$).

Canada also requests that the NAFO Scientific Council define, in a table within the assessment document, stock reference points/indicators such as maximum sustainable yield (MSY), biomass at MSY (B_{MSY}), limit reference point (B_{lim}), and B_{trigger} .

Canada encourages the Scientific Council to continue to advance a model-based approach to bridge survey time series (i.e. data from the RV Paamiut and RV Tarajoq).

2. **Northern shrimp (Subarea 1 and Division 0A)**

Canada requests that the Scientific Council consider the following options in assessing and projecting future stock levels for Northern shrimp (*Pandalus borealis*) in Subarea 1 and Division 0A:

The status of the stock should be determined and risk-based advice provided for catch options corresponding to Z_{msy} in 5,000t increments with forecasts for 2026 to 2028 (inclusive). These options should be evaluated in relation to Canada's Harvest Strategy (2022 revised version attached) and NAFO's Revised Precautionary Approach Framework.

Presentation of the results should include graphs and/or tables related to the following:

- Historical and current yield, biomass relative to B_{msy} , total mortality relative to Z_{msy} , and recruitment (or proxy) levels for the longest time period possible;
- Total mortality (Z) and fishable biomass for a range of projected catch options (as noted above) for the years 2026 to 2028. Projections should include both catch options and a range of effective cod predation biomass levels considered appropriate by the Scientific Council. Results should include risk analyses of falling below: B_{msy} , 80% B_{msy} and B_{lim} (30% B_{msy}), and of being above Z_{msy} based on the 3-year projections, consistent with the Harvest Decision Rules in Canada's Harvest Strategy; and
- Total area fished for the longest time period possible.

Please provide the advice relative to Canada's Harvest Strategy as part of the formal advice (i.e., grey box in the advice summary sheet).

APPENDIX IV. LIST OF PARTICIPANTS, SEPTEMBER 2025

SCIENTIFIC COUNCIL CHAIR	
González-Troncoso, Diana	Centro Oceanográfico de Vigo (COV-IEO), CSIC, Vigo, Spain E-mail: diana.gonzalez@ieo.csic.es
CANADA	
Koen-Alonso, Mariano	Science Branch, Fisheries & Oceans Canada St. John's, NL E-mail: Mariano.Koen-Alonso@dfo-mpo.gc.ca
Krohn, Martha <i>Chair of STACFIS</i>	Senior Science Advisor, Fisheries & Oceans Canada, Ottawa, ON E-mail: martha.krohn@dfo-mpo.gc.ca
Simpson, Mark <i>Vice-Chair of Scientific Council and Chair of STACREC</i>	Science Branch, Fisheries & Oceans Canada, St. John's, NL. E-mail: mark.r.simpson@dfo-mpo.gc.ca
Kennington, Ellen	Science Branch, Fisheries & Oceans Canada Halifax, NS E-mail: Ellen.Kennington@dfo-mpo.gc.ca
Ings, Danny	Science Branch, Fisheries & Oceans Canada, Ottawa, ON E-mail: danny.ings@dfo-mpo.gc.ca
Irvine, Amy	Oceans North, Halifax Office, Halifax, NS, Canada E-mail: airvine@oceansnorth.ca
Rayner, Gemma	Oceans North, Halifax Office, Halifax, NS, Canada E-mail: grayner@oceansnorth.ca
Rideout, Rick <i>Chair of STACPUB</i>	Science Branch, Fisheries & Oceans Canada, P.O. Box 5667, St. John's, NL. A1C 5X1 Tel.: +709-772-6975 – E-mail: rick.rideout@dfo-mpo.gc.ca
DENMARK (IN RESPECT OF FAROE ISLANDS AND GREENLAND)	
Olsen, Hannipoula	Fisheries Researcher, Faroe Marine Research Institute, Tórshavn, Faroe Islands. E-mail: hannipo@hav.fo
Ridao Cruz, Luis	Nóatún 1, P.O. Box 3051, FO-110 Tórshavn, Faroe Islands Tel.: +298 353900 - E-mail: luisr@hav.fo
EUROPEAN UNION	
Alpoim, Ricardo	Instituto Português do Mar e da Atmosfera (IPMA), Lisbon, Portugal E-mail: ralpoim@ipma.pt
Garrido Fernández, Irene	Centro Oceanográfico de Vigo (COV-IEO), CSIC, Vigo, Spain E-mail: irene.garrido@ieo.csic.es
Gonçalves, Patricia	Instituto Português do Mar e da Atmosfera (IPMA), Lisbon, Portugal E-mail: patricia@ipma.pt
González-Costas, Fernando	Centro Oceanográfico de Vigo (COV-IEO), CSIC, Vigo, Spain E-mail: fernando.gonzalez@ieo.csic.es
Vielmini, Ilaria	DG MARE, Brussels, Belgium E-mail: Ilaria.VIELMINI@ec.europa.eu
Sacau Cuadrado, Mar	Centro Oceanográfico de Vigo (COV-IEO), CSIC, Vigo, Spain E-mail: mar.sacau@ieo.csic.es
Näks, Liivika	Head of the Unit of Ocean Fisheries, Estonian Marine Institute, University of Tartu. E-mail: liivika.naks@ut.ee
Caetano, Miguel <i>Chair of STACFEN</i>	Instituto Português do Mar e da Atmosfera (IPMA), Algés, Portugal E-mail: mcaetano@ipma.pt
JAPAN	
Taki, Kenji	Senior Scientist, Japan Fisheries Research and Education Agency, 2-12-4 Fukuura, Kanazawa, Yokohama, 236-8648, Japan E-mail: takisan@affrc.go.jp to

NORWAY	
Hallfredsson, Elvar	Institute of Marine Research, Norway. E-mail: E-mail: elvar.hallfredsson@hi.no
RUSSIAN FEDERATION	
Fomin, Konstantin	Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), Murmansk. E-mail: fomin@pinro.ru
Belyaev, Vladimir	Advisor to the Director of the Russian Federal Research Institute of Fisheries and Oceanography (VNIRO). E-mail: belyaev@vniro.ru
UKRAINE	
Paramonov, Valerii	Institute of Fisheries and Marine Ecology (IFME), State Agency of Melioration and Fisheries of Ukraine. E-mail: vparamonov@i.ua
UNITED KINGDOM	
De Oliveira, José	CEFAS, Lowestoft Laboratory, Lowestoft, UK E-mail: jose.deoliveira@cefass.gov.uk
UNITED STATES OF AMERICA	
Brown, Russell	National Marine Fisheries Service, NEFSC, Woods Hole, MA E-mail: russell.brown@noaa.gov
DALHOUSIE UNIVERSITY	
Koubrak, Olga	Marine & Environmental Law Institute. E-mail: okoubrak@dal.ca
Engler, Cecilia	Marine & Environmental Law Institute. E-mail: mcengler@dal.ca
NAFO SECRETARIAT	
Benediktsdóttir, Brynhildur	Executive Secretary, NAFO Secretariat, Halifax, Canada. E-mail: bbenediktsdottir@nafo.int
Bell MacCallum, Dayna	Senior Scientific Information Administrator, NAFO Secretariat, Halifax, Canada. E-mail: dbell@nafo.int
Perreault, Andrea	Senior Science Coordinator, NAFO Secretariat, Halifax, Canada E-mail: aperreault@nafo.int