



SCIENTIFIC COUNCIL – April 2020

REPORT OF THE NAFO SCIENTIFIC COUNCIL PLANNING MEETING

02 April 2020, By WebEx

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REPORT OF THE NAFO SCIENTIFIC COUNCIL PLANNING MEETING

Chair: Carmen Fernández

Rapporteur: Tom Blasdale

1. Opening of the meeting and appointment of rapporteur

NAFO Scientific Council (SC) met via webex at 09:00 AST on 2 April 2020 to discuss plans for the work of the Scientific Council in 2020 with respect to the ongoing disruption caused by the COVID-19 pandemic. The meeting was attended by representatives from Canada, Denmark in respect of Greenland and the Faroes, European Union, Japan, Russian Federation, United States of America and the NAFO Secretariat. A full list of participants can be found in Appendix IV. The meeting was opened by the SC Chair, Carmen Fernández (EU), who welcomed participants to the meeting and introduced the purpose of the meeting. The Scientific Council Coordinator, Tom Blasdale, was appointed as rapporteur.

Since it is anticipated that travel restriction relating to the pandemic will remain in place for some time, SC will not be able to hold its June meeting as normal. The SC executive held a meeting on 18 March 2020 to discuss alternatives. The report of that meeting was distributed prior to the present meeting as scwp20-01. In summary, there will be no face to face meeting of SC in June 2020. SC will meet by correspondence during the scheduled period in June to address the requests for advice received from the Commission and coastal states, to the extent possible (details provided below). Given the expected difficulties of working by correspondence, a further meeting of SC may be held during the period September 14-18, 2020. SC will decide during the SC meeting in June if this additional meeting would be useful and possible. If it was held, it would either take place face to face in Halifax or by correspondence (if by correspondence, the dates could be slightly different).

The agenda for the SC June meeting will be prepared immediately after this meeting and distributed next week.

A summary of the main points of agreement is presented below.

2. Practical arrangements

It was agreed that the meeting will start a day earlier than scheduled and finish one day later. This will not take up any more of participants' time, as most people would be traveling on these days in normal circumstances. Therefore:

- Meeting dates will be Thursday May 28 to Friday June 12. No WebEx sessions will be scheduled during the weekends, which will be treated as rest days.

Daily WebExes will be scheduled from 08:00 to 12:00 ADT (Halifax time). A serious challenge is that participants will be on different time zones: from Halifax time – 2h to Halifax time + 12 h. Participants agreed that this is workable. If needed, the WebEx may occasionally extend for 1 extra hour, until 1 pm Halifax time, but never beyond that time. In some days the plenary SC WebEx meeting will be shorter than 4 hours, but this will depend on how the meeting develops. WebEx sessions will include 15 minute breaks at approximately 2-hour intervals.

Because WebExes will only be held during a 4 (occasionally 5) hour period, during the rest of the time, meeting participants are expected to be working offline, by themselves or in informal ad-hoc small group meetings. For example, people working together on a particular request or assessment, may arrange some skype meetings among themselves (although it is acknowledged that such meetings could be difficult depending on time zones).

To facilitate efficient communication in these difficult meeting circumstances, the Secretariat will add extra capabilities to the SC meeting SharePoint, similar to those used by ICES, e.g.: capability to upload documents to the meeting SharePoint, checkout / checkin facility, version history of the documents.

All materials presented to the meeting should be uploaded to the SharePoint as much in advance of the presentation as possible (and even in advance of the start of the meeting, whenever possible). Meeting participants will need to ensure they have read the available documents in advance of WebEx discussions. To

help those reading the assessment documents, DEs should start their main assessment document with a list of the points they think are the most relevant for SC to focus on, if they can identify those.

WG-ESA:

- Everyone should read the WG-ESA report (from the November 2019 meeting) fully before the start of the SC meeting.

This will be very important to the SC's work this year. The WG-ESA report is expected to become available within the next few days (first half of April) and SC will be informed. WG-ESA co-Chair, Pierre Pepin, requested that, to the extent possible, people send their comments/concerns regarding the report to the WG-ESA co-Chairs (Pierre Pepin and Andrew Kenny) in advance of the June meeting, so that they can be addressed ahead of time.

It is expected that the SC's June work in relation to WG-ESA will proceed similarly to previous years. The WG-ESA co-Chairs will give presentations near the start of the meeting (focusing on specific Commission requests), which will be followed by general discussion in SC to agree the type of response required. Following this, the co-Chairs will prepare a draft response which will be considered in plenary later in the SC meeting. It was agreed that the WG-ESA presentations this year should be more specifically focused on the requests for advice, and provide less detail on other aspects of the scientific work conducted by WG-ESA and which can be read in the WG-ESA's report.

Documents:

All documents, presentations, working papers, intermediate results in spreadsheets or anything else that may be of relevance to follow progress of the SC June meeting, should be made available on the SharePoint promptly, before or during the meeting.

Deadlines for data submission and survey presentations:

- May 7 is the deadline for data to be made available to stock assessors (Designated Experts).

The Secretariat was requested to update the list of Designated Experts. The updated list is included in Annex II.

If there are any issues in relation to data availability or quality, these should be communicated to the Secretariat, relevant experts, and chairs (SC Chair, STACFIS Chair Katherine Sosebee) as soon as possible, so that appropriate action can be taken as soon as possible.

It was stressed that the difficult circumstances this year, made it even more important than usual that work is prepared in advance, deadlines adhered to, and difficulties encountered communicated as soon as possible.

It was agreed that:

- Survey presentations will be by WebEx during the week May 11-15 (day to be decided by Doodle poll) [Note: it was discovered after the meeting that the NAFO WebEx will not be available 12-15 May so the Doodle poll will be run for 8/11 May instead]

These are the standard survey presentations normally delivered in STACREC at the beginning of the June meeting. The WebEx will last no more than 4-5 hours, so presentations should aim to focus on the main issues of relevance for SC's work this year. This will be coordinated by the STACREC Chair (Karen Dwyer).

3. Priority requests to be addressed in the June meeting.

The SC June meeting this year (starting on May 28, as indicated earlier) will focus on the requests for advice rather than the usually wider perspective. The NAFO Commission list of requests to SC (SCS Doc. 19-29)

identifies requests number 1,2,7,8 and 11 as priority for this year, and will be treated as such for SC's work in June.

Coastal State requests from Greenland and Canada, which relate mainly to stock assessment and require advice on allowable catches for 2021, will also be viewed as priority.

Commission requests 5 and 12 will also be considered as priority, because they are essential to the work of WG-EAFFM, WG-RBMS and the EAFFM *workshop of fisheries managers and scientists to draft ecosystem objectives*, all of which are still assumed to take place in August 2020.

a) NAFO COM Request #1. Stock assessments

In line with the requests, assessments will be conducted by STACFIS (Chair Katherine Sosebee) for:

- Cod in 3M (advice for 2021)
- American plaice in 3M (advice for 2021, 2022, and 2023)
- Witch flounder in Div 3NO (advice for 2021 and 2022) – note: SC is doing this of its own accord. Dawn Maddock Parsons will assess this stock as a replacement for Joanne Morgan, but this implies the need to assess the stock this year because she will be assessing yellowtail flounder next year.
- Thorny skate in 3LNO (advice for 2021 and 2022)
- GHL in 1A inshore (advice for 2021 and 2022)
- GHL in 0+1 (advice for 2021 and 2022)
- Golden redfish, Demersal deep-sea redfish, Atlantic wolffish, Spotted wolffish in Subarea 1 (advice for 2021, 2022, and 2023)

In addition, STACFIS will produce interim monitoring reports (IMR) for all stocks for which these are needed. For squid, the IMR will be produced in September, to take into account the results of the summer survey.

The IMR work will be done offline and the reports should be made available in the SharePoint (a folder named "Interim Monitoring Reports" has been created within the STACFIS folder in the SharePoint). The Designated Experts and STACFIS Chair should make sure they notify SC of any aspect arising in this monitoring that might imply a need for reassessment or for new advice this year. The STACFIS Chair will put together a spreadsheet allocating reviewers of IMRs for each stock.

The assessments will be presented to SC by WebEx, but the material should be available in the SharePoint in advance, so that meeting participants have some time to read and consider it before the WebEx

Advice will be provided by SC and some of that advice may require some discussion in SC. The requests from Greenland and Canada on GHL 0+1 have some extra aspects this year that will require consideration by SC.

Note (item forgotten during the SC WebEx): The scientist Hugues Benoît (DFO, but not an SC member) had originally been scheduled to come to the June SC meeting as an invited speaker on survey issues and to review some of the above stock assessments in the June SC meeting. The SC Executive is currently investigating whether it may still be possible to conduct some form of review under the new SC meeting settings by correspondence.

b) NAFO COM Request #11. 3LN redfish

Work is underway and the request will be addressed by SC in June. The stock assessment and 5-year projections required as part of this request will be presented in STACFIS and included in the STACFIS report.

c) NAFO COM Request #2. Greenland halibut

SC will deal with this request, but the update assessments required as part of the request will be included in the STACFIS report.

Matters relating to this request were addressed in detail at the end of the SC WebEx. The conclusions are included in Annex I.

d) NAFO COM Request #7. Reassessment of VME closures, including area #14

Much of the necessary work has been done by WG-ESA in 2019. The report of that meeting will be available within a few days, as noted earlier.

e) NAFO COM Request #8. Progress on the review of the NAFO PA framework

The former SC Precautionary Approach Working Group, PA-WG, has recently been reinstated (now chaired by Karen Dwyer), with its previous ToRs, and has already started to work by correspondence. This WG will continue working by correspondence (next meeting is due in late April) in advance of the June SC meeting and lead the SC's work in responding to this request in June.

Planned work for the June meeting includes further development of the working paper and development of a work plan. It was noted that availability of EU funding to cover SC's work on the precautionary approach framework over the next 1 to 2 years may be dependent on the production of a work plan by late May/early June (even if the plan is not in final stage). To facilitate this, the PA-WG will advance a work plan as far as possible before the June meeting, with the aim to finalize it, as far as SC is concerned, by the end of the June meeting. The work plan would then be presented and discussed in WG-RBMS in August and the Annual Meeting in September.

f) NAFO COM Requests #5. SC to refine work under the Ecosystem Approach and report on these results to WGEAFFM and WGRBMS, and #12. Ecosystem Summary Sheet for 3LNO

These two requests are considered as priority for SC in June, as they will be needed for the WG-EAFFM and WG-RBMS meetings in August, and for the WG-EAFFM *workshop of fisheries managers and scientists to draft ecosystem objectives*, also scheduled for August. Based on feedback received from these WG chairs, SC is working on the assumption that these meetings will be held, although (as noted by the chairs) big uncertainty caused by the pandemic situation obviously remains.

Work in relation to these two requests was conducted by WG-ESA in 2019 and is included in the WG-ESA's report.

In addition, the SC Chair explained that she had spoken with the SC's co-Chair of WG-EAFFM and workshop on ecosystem management objectives, Andrew Kenny, particularly about the workshop, given that he could unfortunately not be present at the current SC's WebEx meeting. She explained that he had indicated he was working on trying to organize the workshop with relevant scientists as well as the Secretariat (the EAFFM co-Chair, Elizabethann Mencher, is currently on leave). He had also indicated that the intention for the workshop is to have external invited participants, both scientists and managers, internationally renowned and familiar with ecosystem approach implementations in other jurisdictions. These invited participants would need to be contacted soon (about late April), since otherwise it is not realistic to expect that they would be able to participate in a meeting in August. He is also planning to liaise to see how wider consultation with SC and CPs could be engaged, regarding invited participants and possibly other aspects of the workshop. SC members should stay tuned as further development is expected to occur during the coming month. The WG-ESA co-Chair, Pierre Pepin, noted that he had a similar understanding of the current state of developments for this workshop.

4. Other requests

Many of the other Commission requests could be left for September, if required, for the additional meeting that SC may decide to hold in the week before the Annual Meeting. It is clear, though, that very important requests

for this year could not be handled during that week in September, as it would not allow sufficient time for the Commission to consider the responses (neither would it allow much time to prepare an SC presentation to the Commission at the beginning of the Annual Meeting).

In respect to these requests, the following plan was agreed by SC at the WebEx.

a) NAFO COM Request #3. Effects of excluding scientific trawl surveys from VME closed areas on stock assessments.

Work on this is underway and may be completed in time for presentation in June. There is, however, a further complication in any case, and this is that the VME areas could be revised this year. It was agreed that responding to this request would be left flexible, taking into account all of the circumstances occurring this year.

- SC will address this request either in June, September, or June 2021

b) NAFO COM Request #6. Reassessment of bottom fisheries in 2021

Relevant work in connection with this request can be found in the WG-ESA report from November 2019. This request will be a very important part of the work of WG-ESA in November 2020, so SC needs to have a discussion this year to ensure a common understanding of what is to be done in November.

- SC will address this request in June.

The WG-ESA presentation and discussion of this request in SC in June should focus mostly on clarifying the work WGESA needs to do in November, in order to respond to this request in 2021.

c) NAFO COM Request #16. Continue to monitor and provide updates from research related to potential impact of activities other than fishing in the Convention Area

Relevant work in connection with this request can be found in the WG-ESA report from November 2019.

- SC will address this request in June if there is time. Otherwise, it will be address it in September.

d) NAFO COM Request #4. Identify discard species with high survivability rates

Concerning the discards and selectivity Action Plan, the Commission requested that SC give priority in 2020 to the identification of discard species/stocks listed in Annex I.A. and Annex I.B of the NCEM with high survivability rates.

This will require the completion of a literature review and a discussion of what conclusions can be drawn from it. If found to be relevant and possible, a discussion of further work required for the NAFO area (e.g. details of needed survivability experiments) will also be included in the response.

A subgroup of SC is already working on this request by correspondence, and will also try to incorporate some relevant outside expertise on the topic. The work is expected to be ready for June.

- SC will address this request in June if there is time. Otherwise, it will address it in September.

e) NAFO COM Request#9. Identify areas and times with high bycatch and discards of Greenland sharks

The Secretariat has organized for the records requested by SC last year to be digitized and they will soon become available. An SC scientist from Canada that worked on this request last year has offered to continue working on it this year.

- SC will address this request in June if there is time. Otherwise, it will address it in September.

f) NAFO COM Request #10. Continue developing 3-5 year workplan

- SC may look at this in June, but only if time is available. The request will, therefore, most likely be addressed in September.

g) NAFO COM Request #13. Alfonsino survey methodology

SC scientists from the EU are developing an acoustic survey protocol that will be presented to SC.

- SC will address this request in June if there is time. Otherwise, it will address it in September.

h) NAFO COM Request #14. Presentation of stock assessment and scientific advice for Cod 2J3KL (Canada), Witch 2J3KL (Canada) and Pelagic *Sebastes mentella* (ICES Divisions V, XII and XIV; NAFO 1)

As the scientists responsible for these cod and witch assessments in Canada are SC members, they will provide (reasonably in depth) presentations of the latest assessments of stock status and scientific advice available for these stocks. The redfish advice from ICES will be released in mid June, after the SC June meeting.

- For cod and witch, SC will aim to address this request in June.
- For redfish, SC will address this request in September.

i) NAFO COM Request #17. Technical measures to aid 3M cod productivity.

SC scientists from the EU are currently examining fishery and biological information that may potentially provide a basis for seasonal/area closures to protect spawning aggregations. The results of this analysis are expected to be available in time for the June meeting.

Norwegian scientists may be working on a scientific plan for a selectivity study to be done in the trawl fishing fleet. It is not known whether this work may be available for June but, if it is, SC will need to evaluate the plan. The SC Chair will get in contact with Norwegian scientists to gain further understanding of the likely situation for June.

- SC will aim to address this request in June.

j) NAFO COM Request #18. Provide information on sea turtles, sea birds and marine mammals that are present in NRA, based on available data.

WGESA has done some work on the turtles and mammals in November 2019 (available in WG-ESA's meeting report). For sea birds, scientists from Canada (mostly from outside SC) and the EU (from SC) will be working on information to present to SC. It was noted that relevant expertise on sea birds, from outside SC, might need to be available to SC when the response is finalized. It was also noted that the request was worded in a very open-ended manner and that a more specific request would be useful in future years if SC was requested to do additional work in its regard.

SC will need to consider what format the response should take and who will lead on the response.

- SC plans to hold a brief discussion in June and finalize the response to this request in September, following on the direction provided by SC in June.

k) NAFO COM Request #15. Possible sustainable management methods for northern shrimp in Div. 3M

This was addressed by SC/NIPAG in November 2019 and is complete.

5. Summary of conclusions regarding the priority of requests for SC's work in 2020

Level of priority	Request number (from COM Doc. 19-29).
To be done in June, as top priority	1, 2, 5, 7, 8, 11, 12 + Requests from Canada & Greenland (except shrimp)
To be done in June, as next level of priority	6, 14 (cod & witch), 17, 18 (short discussion, to give direction, and finalize in September)
To be done preferably in June, but could be delayed to September if no time in June	4, 9, 13, 16
To be done in September (unless progress in June was unexpectedly fast)	10, 14 (redfish), 18
Flexible (June, September, or June 2021)	3
Already done in 2019	15

Note: SC will also need to provide advice for 3M shrimp in advance of the September Annual Meeting. This is provisionally scheduled to take place by WebEx sometime around September 10-14.

6. Working arrangements for STACPUB, STACFEN and STACREC

The Chairs of STACFEN, STACPUB and STACREC will consider what can be done given this year's circumstances and focus only on the items that are priority. They will produce a first draft of the report offline, in conjunction with whoever they consider appropriate for this, and put these reports on the SharePoint (not necessary to go through the reports in plenary, but SC will be informed and will be given the opportunity to comment). These reports could be produced in June or September, and each Chair will decide this depending on other priority needs on which they may have to focus. However, if anything urgent arises requiring SC's attention, they will bring it to the attention of SC as early as possible during the June meeting.

Colleagues participating in STACFEN will produce the environmental information that goes into the STACFIS report and these parts will be made available as soon as possible in the June meeting (preferably before the start of the meeting, if possible). Although this year STACFEN will not be able to have a full day meeting during SC in June, it was agreed that a presentation at the start of the June meeting (on day 1, May 28) of the important information for STACFIS, focusing on the key items, will be provided by STACFEN. Input from different STACFEN members will be needed and the STACFEN Chair, Miguel Caetano, will coordinate this.

APPENDIX I. WORK DETAILS CONCERNING REQUEST #2 GREENLAND HALIBUT

The Commission requests the Scientific Council to conduct an update assessment of Greenland halibut in Subarea 2+Div 3KLMNO and to compute the TAC using the agreed HCR 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.

SC will deal with this request, but the update assessments required as part of this request will be included in the STACFIS report.

The following subgroup will be in correspondence and ensure the required preparatory work is done:

Doug Butterworth: doug.butterworth@uct.ac.za

Rebecca Rademeyer: rebecca.rademeyer@gmail.com

Paul Regular: paul.regular@dfo-mpo.gc.ca

Danny Ings: danny.ings@dfo-mpo.gc.ca

Diana González-Troncoso: diana.gonzalez@ieo.es

Katherine Sosebee: katherine.sosebee@noaa.gov

Ricardo Alpoim: ralpoim@ipma.pt

Carmen Fernández: cferllxx@gmail.com

Tom Blasdale: TBlasdale@nafo.int

Please keep all these people (Kathy, Ricardo, Carmen and Tom in CC) in the e-mail correspondence in relation to the preparatory work described below.

WORK NEEDED:

Update assessments (should be ready at the start of the SC meeting, but preferably before):

Conduct update assessments, including all data up to 2019, using the settings of base case SCAA and SSM Operating Models used in the 2017 MSE process. Doug and Rebecca will deal with the SCAA assessment and Paul with the SSM assessment.

Note: this is just a straight re-running of the agreed Base Case models. This is not a revision of the GHM MP, nor is it a retuning exercise for the MP. No projections will be conducted starting from the updated assessments (although projections could be needed if Exceptional Circumstances are identified to be occurring this year).

Because of lack of complete recording of the 2017 MSE work, we need to ensure that the Base Case settings (model specifications and data used) are clearly recorded now. Therefore:

- Doug and Rebecca will make those settings clear for SCAA, and Paul will do likewise for SSM, either by providing the 2017 MSE document where these settings are clearly described or, if such document does not exist, by writing them in a document now.

Data needs for the update assessments:

The needed stock assessment data must be provided to Doug and Rebecca (for SCAA), and Paul (for SSM), in advance of the June SC meeting. In relation to the problems experienced in Canadian surveys in 2018, the following SC recommendation must be acted upon before those data can be provided:

“the 2018 Canadian fall 2J3K and spring 3LNO indices should be included in the calculation of the HCR but the impact on age structure should be examined before these indices are included in any age structured model”

Obviously, the 2019 data also need to be checked before passing them on to those conducting the update assessments.

The following has been agreed regarding data provision:

Note that data for years prior to 2016 remain the same as used for the MSE process during that year (unless some errors were found in earlier data).

Danny puts together the catch-at-age data for the entire stock, and the Canadian survey data (both the required abundance indices and the catch-at-age information).

Diana puts together the EU survey data (both the required abundance indices and the catch-at-age information).

Doug/Rebecca to clarify by e-mail exactly data are needed for SCAA, Paul to do the same for SSM.

- **May 1:** deadline for providing to the stock assessors all data available and validated as appropriate for use in this year's update assessments (for example, in some cases, the data fulfilling these criteria on May 1 may be data up to 2018, with 2019 data provided only by May 15, as noted next).
- **May 15:** final deadline for providing to the stock assessors all remaining data (not provided on May 1) to be used in this year's update assessments.
- Issues identified for the Canadian surveys: Canadian colleagues will investigate the 2018 issues and any potential 2019 (or 2017, if relevant) issues, and provide their conclusions (as to whether the data can or can not be used in stock assessment) in a document as soon as possible. For some of these surveys, the document is expected to be available **no later than April 24**. The document investigating potential issues in any remaining surveys should be available **no later than May 8**.
- EU surveys (3M and 3NO): In principle, no problem issues are expected, but if any are identified the subgroup should be made aware of them **as soon as possible, preferably no later than April 24, and definitely no later than May 8**.
- Stock catch-at-age data: To be treated in the same way as the EU surveys data.

Assuming that those doing the work above reach a clear conclusion regarding whether a particular data set can or can not be used in the update stock assessments, we do not expect an SC WebEx should be needed to agree on this. However, if doubts arise an SC WebEx may be needed, and this would likely be on the week of May 11-15. When each of these documents is circulated, SC members will be given four working days to indicate if they differ from the conclusion reached and require a WebEx for further discussion and decision.

Paul will act as central person coordinating the progress of data preparation according to the above plan.

- **April 27:** Paul will inform the subgroup of progress on all the above issues.

SC also needs to:

- Apply the agreed HCR to compute the TAC for 2021 (NCEM 2020, Annex I.F) → Paul to do this in **June**.
- Check whether Exceptional Circumstances exist this year, according to the agreed protocol (NCEM 2020, Annex I.G). If Exceptional Circumstances were identified as occurring this year, SC would need to provide guidance on what steps should be taken. This would not be straightforward; therefore, it is relevant to identify as soon as we practically can if Exceptional Circumstances are likely to emerge this year. → Paul to check for the possible existence of Exceptional Circumstances (in relation to the associated rules about the requisite number of surveys completed satisfactorily and any other aspect that he may be able to check already) as soon as possible, and provide an update (i.e. his understanding of the likely situation this year) to the subgroup on **April 27**.
- In addition, although the following has not been written in the agreed Exceptional Circumstances protocol, SC recommended in 2018 that in years with update assessments (such as this year), the following should be done:

“Conduct a comparison of assessment model outputs for recruitment, exploitable biomass, and fishing mortality with operating model projections (base case). SC will compare the estimated median of the assessment with the 95% Confidence Interval from the base case of SSM and SCAA for these quantities. Expert judgement will determine whether Exceptional Circumstances are occurring.”

This can be done only after the update assessments have been conducted.

- Note: in June 2019, SC encountered a problem with the OM projections of the SSM base case. Canadian colleagues are currently investigating this problem and will report their findings, including potential implications for the GHL MSE implementation, should any be identified, to the June 2020 SC meeting. If the associated conclusions could be made available earlier that would be helpful (but it is understood that work commitments may preclude this possibility).

APPENDIX II: EXPERTS FOR PRELIMINARY ASSESSMENT OF CERTAIN STOCKS

Designated Experts for 2020:

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
Redfish Div. 3O	Danny Ings	danny.ings@dfo-mpo.gc.ca
American Plaice in Div. 3LNO	Laura Wheeland	laura.wheeland@dfo-mpo.gc.ca
Witch flounder in Div. 3NO	Dawn Maddock Parsons	dawn.parsons@dfo-mpo.gc.ca
Yellowtail flounder in Div. 3LNO	Dawn Maddock Parsons	dawn.parsons@dfo-mpo.gc.ca
Greenland halibut in SA 2+3KLMNO	Paul Regular	paul.regular@dfo-mpo.gc.ca
Northern shrimp in Div. 3LNO	Katherine Skanes	katherine.skane@dfo-mpo.gc.ca
Thorny skate in Div. 3LNO	Mark Simpson	mark.r.simpson@dfo-mpo.gc.ca
White hake in Div. 3NO	Mark Simpson	mark.r.simpson@dfo-mpo.gc.ca

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

Greenland halibut in SA 0+1	Margaret Treble	margaret.treble@dfo-mpo.gc.ca
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From the Instituto Español de Oceanografía, Vigo (Pontevedra), Spain

Roughhead grenadier in SA 2+3	Fernando Gonzalez-Costas	fernando.gonzalez@ieo.es
Splendid alfonsino in Subarea 6	Fernando Gonzalez-Costas	fernando.gonzalez@ieo.es
Cod in Div. 3M	Diana Gonzalez-Troncoso	diana.gonzalez@ieo.es
Shrimp in Div. 3M	Jose Miguel Casas Sanchez	mikel.casas@ieo.es

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American plaice in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
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Redfish in Div. 3LN	Antonio Avila de Melo	amelo@ipma.pt

From the Greenland Institute of Natural Resources, Nuuk, Greenland

Redfish in SA1	Rasmus Nygaard	rany@natur.gl
Other Finfish in SA1	Rasmus Nygaard	rany@natur.gl
Greenland halibut in Div. 1A	Rasmus Nygaard	rany@natur.gl
Northern shrimp in SA 0+1	AnnDorte Burmeister	anndorte@natur.gl
Northern shrimp in Denmark Strait	Frank Rigét	frri@natur.gl

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

Capelin in Div. 3NO	Konstantin Fomin	fomin@pinro.ru
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From National Marine Fisheries Service, NEFSC, Woods Hole, Massachusetts, United States of America

Northern Shortfin Squid in SA 3 & 4	Lisa Hendrickson	lisa.hendrickson@noaa.gov
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APPENDIX III. AGENDA

NAFO Scientific Council (SC) planning meeting

By WebEx 2, April 2020 09:00 ADT (Halifax time)

1. Opening of the meeting
2. Appointment of rapporteur
3. Logistics for the June meeting (timing of Webex sessions, communications, etc)
4. Priority requests (stock assessment work by STACFIS embedded here, as appropriate)
5. Other requests
6. Working arrangements for STACPUB, STACFEN and STACREC
7. Work required in preparation for June (at the minimum, details of NAFO Commission Request #2, GHL, will be discussed here)
8. Close

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