



North Pacific Fisheries Commission

NPFC-2018-SSC BF01-Final Report

**1st Meeting of the Small Scientific Committee
on Bottom Fish
REPORT**

11-12 April 2018

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North Pacific Fisheries Commission
1st Meeting of the Small Scientific Committee on Bottom Fish

11-12 April 2018

Tokyo, Japan

REPORT

Agenda Item 1. Opening of the meeting

1. The 1st Meeting of the Small Scientific Committee on Bottom Fish (SSC BF01) took place in Tokyo, Japan on 11-12 April 2018, and was attended by Members from Canada, China, Japan, the Republic of Korea, the Russian Federation, and the United States of America. The Deep Sea Conservation Coalition (DSCC) attended as an observer. The meeting was opened by Dr. Taro Ichii (Japan) who served as the SSC BF Chair.

Agenda Item 2. Adoption of Agenda

2. The agenda was adopted without revision.

Agenda Item 3. Meeting arrangements

3. Science Manager Dr. Aleksandr Zavolokin outlined the meeting arrangements.

Agenda Item 4. Review of Member's bottom fisheries and research activities

4. Russia reported on its bottom fishing activities in the Convention Area (NPFC-2018-AR-Annual Summary Footprint - Bottom Fisheries (Rev. 1)). Russia operated one longline vessel in 2017.
5. Korea reported on its bottom fishing activities in the Convention Area (NPFC-2018-AR-Annual Summary Footprint - Bottom Fisheries (Rev. 1)). Korea operated one bottom trawler in 2017. The total catch in 2017 is 309.3 tons, including both North Pacific armorhead and splendid alfonsino.
6. Japan reported on its bottom fishing activities in the Convention Area (NPFC-2018-AR-Annual Summary Footprint - Bottom Fisheries (Rev. 1)). Japan operated two trawlers and one gill net vessel. The total catch in 2017 is 314.1 tons for North Pacific armorhead, and 3,783.7 tons for splendid alfonsino. However, Japan has found misreporting in its trawl data and is reviewing

the data from previous years. Japan will report the results of its review to the Technical and Compliance Committee.

7. The SSC BF01 concluded that the catch levels of North Pacific armorhead remain low and have been low since 2015.
8. Japan reported on its 2017 scientific survey in the Southern Emperor Seamounts area and acoustic data analysis (NPFC-2018-SSC BF01-WP04). From 2016 to 2017, Japan conducted scientific surveys for species identification via fishing, trawl and camera to understand the distribution of demersal fish on the Colahan and C-H Seamounts in the day and at night. Results for C-H Seamount show strong spatial patterns for the distribution of North Pacific armorhead and splendid alfonsino while results for the Colahan Seamount are not clear and Japan will further investigate the species composition there.
9. Korea presented the results of its analysis of molecular variance in the slender armorhead (North Pacific armorhead) from the Emperor Seamounts (NPFC-2018-SSC BF01-IP01). No significant genetic differentiation was found between the different seamount populations.

Agenda Item 5. Progress in stock assessments of bottom fish and development of adaptive management process and harvest control rules for North Pacific armorhead

10. Japan presented a review of biology and fisheries of splendid alfonsino, especially in the Emperor Seamounts area (NPFC-2018-SSC BF01-WP03). Japan concluded that catch- and CPUE-based stock assessments will be difficult because of uncertainty in catch reports and difficulty in using CPUE data. Therefore analyses such as yield-per-recruit or spawner-per-recruit may be more appropriate. Furthermore, small and arguably immature fish account for a large proportion of catch, especially in trawls. Analyses showed a significant reduction in the fork length of fish caught by Japanese trawlers between 2009 and 2016. Therefore life-history-based indicators to regulate size/age at capture can be useful. Further study on the life history of splendid alfonsino in the Convention Area is required, particularly reproduction patterns.
11. Japan presented a proposal for specifying the adaptive management processes for North Pacific armorhead and splendid alfonsino, following the five-year work plan of the 2017-2021 Research Plan of the Scientific Committee (SC) in the underlying scientific basis (NPFC-2018-SSC BF01-WP02 (Rev. 1)). For North Pacific armorhead, Japan proposed the following measures which depend on the strength of recruitment: (1) When the recruitment is low, NPA is basically not targeted and a catch limit for bycatch is set. The limit is set at approximately a half of the recent average catch. This principle for calculation is applied to all the Members

that are currently fishing North Pacific armorhead. (2) When the recruitment is strong, a half of the existing NPA fishing area will be closed. No catch limits are applied because it is difficult to specify an appropriate level of catch for the conservation of a half of the spawning stocks. This will be determined during the fishing season by a monitoring survey conducted by fishing vessels.

For splendid alfonsino, Japan proposed setting a minimum allowable mesh size (130 mm) for trawl nets to reduce fishing pressure on immature fish (fork length <25 cm; estimated age 2-3 years).

12. The SSC BF01 requested that Japan and Korea, as Members who fish North Pacific armorhead in the Convention Area, develop a more concrete monitoring survey plan and decision on management authority for the fishery, and present it to the 2019 meeting of the SSC BF or SC.
13. China suggested that Members who conduct the monitoring program provide a document that describes sampling plans and designs for the monitoring program with details, and also evaluate the performance of sampling designs on capturing recruitment condition of North Pacific armorhead.
14. Regarding splendid alfonsino, the SSC BF01 endorsed the setting of the minimum allowable mesh size for trawl nets as a positive first step in the management of splendid alfonsino. The United States expressed concern that the minimum allowable mesh size of 130 mm may not be large enough to guard against catches of immature splendid alfonsino.

Agenda Item 6. Data collection and reporting

6.1 Observer data

6.2 Fisheries data

15. Korea reported on the progress in the development of data collection and reporting templates. Korea explained that there are currently three data collection lists under consideration (as specified in CMMs 2017-05 and 2017-06, as proposed by Korea, and as proposed by Japan).
16. The SSC BF01 agreed to move forward by developing a data collection list based on the items stipulated in CMMs 2017-05 and 2017-06, for submission to next year's SSC BF meeting. They also recommended that the SSC BF collaborate with the SSC VME in developing the list and other data-related issues.

Agenda Item 7. Review of the CMMs 2017-05 and 2017-06 for bottom fisheries and protection of vulnerable marine ecosystems

17. The United States presented its views on the management of North Pacific armorhead and splendid alfonsino (NPFC-2018-SSC BF01-WP01). The United States expressed concern over the declining catch of North Pacific armorhead and, as shown in NPFC-2018-SSC BF01-WP03, the declining size composition of splendid alfonsino in the Convention Area. Due to the low stock status of North Pacific armorhead in U.S. waters, the United States is obliged, under domestic conservation and management laws, to rebuild the stock to a sustainable level. The United States expressed strong support for the recommendation by the SC to implement an adaptive management process for the North Pacific armorhead fishery.
18. The SSC BF01 had no scientific advice with respect to the proposal above and requested that discussion be deferred to the Commission meeting as it concerns management issues.
19. The SSC BF01 determined that it is not necessary to revise CMMs 2017-05 and 2017-06 at this point in time. However, the SSC BF01 noted that it may become necessary to revise the above CMMs based on the discussions of the SSC BF01 on the Japan's proposal to set a minimum allowable mesh size for trawl nets, especially to reduce catch of immature splendid alfonsino.

Agenda Item 8. Review/update of the 2017-2021 Work Plan

20. The SSC BF01 reviewed the 2017-2021 Work Plan and updated it as detailed in NPFC-2018-SC03-WP07.
21. The SSC BF01 also recommended considering additional scientific tasks, such as a review of the deep sea bycatch species.

Agenda Item 9. Scientific projects

9.1 Ongoing projects

9.1.1 Spatial management of VMEs and bottom fisheries

22. The Data Coordinator, Mr. Mervin Ogawa, reported on discussions with the Secretariat of the Commission for the Conservation of Antarctic Marine Living Resources on the development and management of the spatial database (NPFC-2018-SSC VME03-WP02).
23. The SSC BF01 agreed to establish an informal small working group (Canada, China, Japan, Korea, Russia, United States) that will work intersessionally to provide suggestions to the Data Coordinator for the spatial management project, in collaboration with the informal small working group of the same nature from the SSC VME.

9.2 New projects

24. The SSC BF01 discussed potential new projects and proposed holding a face-to-face meeting to discuss data requirements, data sharing and other tasks related to bottom fish and VMEs.

Agenda Item 10. Other matters

25. No other issues were discussed.

Agenda Item 11. Recommendations to the Scientific Committee

26. The SSC BF01 recommends the following to the SC:

- a. Endorse Japan's proposal for the adaptive management process for North Pacific armorhead in principle, except for measures related to the strength of recruitment, subject to further evaluation of the survey design for capturing the recruitment conditions and decision on management authority for the fishery which shall be presented at the 2019 meeting of the SSC BF or SC.
- b. Endorse the setting of a minimum allowable mesh size (130 mm) for trawl nets to reduce fishing pressure on immature splendid alfonsino and consider revision of CMM 2017-05 at the upcoming Commission meeting.
- c. The SSC BF had no scientific advice with respect to the US proposal to ban fishing NPA and splendid alfonsino and suggests that SC defer the proposal to the Commission meeting.
- d. Maintain the wording of the bottom fish-related sections of CMM 2017-06.
- e. Endorse the updated 2017-2021 SSC BF Work Plan (NPFC-2018-SC03-WP07).
- f. Consider additional scientific tasks, such as a review of the deep sea bycatch species.
- g. Endorse the updated list of projects from the SSC BF as detailed in NPFC-2018-SC03-WP08.

Agenda Item 12. Next meeting

27. The SSC BF01 requests the guidance of the SC for determining the date and location of the next meeting.

Agenda Item 13. Adoption of the Report

28. The SSC BF01 Report was adopted by consensus.

Agenda Item 14. Close of the Meeting

29. The SSC BF01 closed at 10:24 on 12 April 2018.

Annex A – Agenda

Annex B – List of Documents

Annex C – Participants List

AGENDA

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LIST OF DOCUMENTS**MEETING INFORMATION PAPERS**

Number	Title
NPFC-2018-SC03-MIP01 (Rev 2)	Meeting Information
NPFC-2018-SSC BF01-MIP02	Provisional Agenda
NPFC-2018-SSC BF01-MIP03	Provisional Annotated Agenda
NPFC-2018-SSC BF01-MIP04	Indicative Schedule

REFERENCE DOCUMENTS

Symbol	Title
https://www.npfc.int/cmm-bottom-fisheries-and-protection-vmes-nw-pacific-ocean-click-link	CMM For Bottom Fisheries and Protection of VMEs in the NW Pacific Ocean
https://www.npfc.int/cmm-bottom-fisheries-and-protection-vmes-ne-pacific-ocean-click-link	CMM For Bottom Fisheries and Protection of VMEs in the NE Pacific Ocean

WORKING PAPERS

Symbol	Title
NPFC-2018-SSC BF01-WP01	Views of the United States on the Management of North Pacific Armorhead and Splendid Alfonsino
NPFC-2018-SSC BF02-WP02 (Rev. 1)	Conservation and Management Measures for the sustainable management of NPA and splendid alfonsino stocks
NPFC-2018-SSC BF03-WP03	Review of biology and fisheries of splendid alfonsino <i>Beryx splendens</i> , especially in the Emperor seamounts area
NPFC-2018-SSC BF01-WP04	Report of the scientific survey in the Southern Emperor Seamounts (southern ES) area in 2017: Results of the acoustic data analysis
NPFC-2018-SSC VME03-WP02	Spatial management of VMEs and bottom fisheries

INFORMATION PAPERS

Symbol	Title
NPFC-2018-SSC BF01-IP01	Evidence of shallow mitochondrial divergence in the slender armorhead, <i>Pentaceros wheeleri</i> (Pisces, Pentacerotidae) from the Emperor Seamount Chain
NPFC-2018-AR-Annual Summary Footprint - Bottom Fisheries (Rev. 1)	2017 – Annual summary footprint for bottom fisheries in the NPFC Area of Competence

ANNUAL REPORTS

Symbol	Title
NPFC-2018-AR Canada	2017 Annual Report of Canada
NPFC-2018-AR China	2017 Annual Report of China
NPFC-2018-AR Japan (Rev. 2)	2017 Annual Report of Japan (Rev. 2)
NPFC-2018-AR Korea	2017 Annual Report of Republic of Korea
NPFC-2018-AR Chinese Taipei	2017 Annual Report of Chinese Taipei
NPFC-2018-AR Russia	2017 Annual Report of Russian Federation
NPFC-2018-AR United States of America	2017 Annual Report of United States of America
NPFC-2018-AR Vanuatu	2017 Annual Report of Vanuatu
NPFC-2018-AR-Annual Summary Footprint - Bottom Fisheries (Rev. 1)	2017 – Annual summary footprint for bottom fisheries in the NPFC Area of Competence

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