



North Pacific Fisheries Commission

NPFC-2025-SC10-RP02

1st joint meeting of the Small Working Groups on JFS, BM, and JS

July 22, 2025 (9 am – 1 pm Tokyo time)

WebEx

Summary

Agenda Item 1. Opening of the Meeting

The 1st joint meeting of the Small Working Groups on JFS, BM, and JS in 2025 commenced at 9 am on 22 July 2025, Tokyo time in the format of video conferencing via WebEx. The meeting was attended by Members from Canada (Chris Rooper, Janelle Curtis), China (Libin Dai, Qiuyun Ma, Heng Zhang, Zhiwei Liu, Juncheng Lu, Zhengyan Jiang), Japan (Kazuhiro Oshima, Shuya Nakatsuka, Hajime Matsui, Kazunari Higashiguchi, Hiroshi Kubota), Russia (Vladimir Kulik, Dmitrii Antonenko) and the USA (Don Kobayashi, Jon Brodziak) as well as the Secretariat (Robert Day, Alex Zavolokin).

The meeting was opened by Dr. Janelle Curtis (SC Chair, Canada) who served as the Chair of this joint meeting and was supported by the Leads of the SWGs: Dr. Hajime Matsui (Japan), Dr. Shuya Nakatsuka (Japan) and Dr. Kazunari Higashiguchi (Japan).

Agenda Item 2. Adoption of Agenda

There were no amendments to the agenda.

Agenda Item 3. Japanese Flying Squid tasks

Dr. Hajime Matsui led discussions of the SWG JFS. The presentation from the Lead is available on the Collaboration website under SC / [Japanese Flying Squid](#).

3.1. Update catch and effort data among Members.

The Lead updated catch and effort statistics for JFS. In 2024, Japan operated JFS fishery in its national waters. Other Member did not fish for JFS in this year. There were no NFS catches in the Convention Area in 2023 and 2024.

3.2. Evaluate the influence of environmental variables on the life history, biology, and population dynamics (lower priority).

The Lead referred to previous studies (Sakurai et al. 2000, 2002; Rosa et al. 2011; Kuroda et al. 2020) and highlighted that recruitment of JFS is strongly affected by oceanographic conditions in the spawning grounds and the transport success of paralarvae from the spawning grounds to

feeding grounds. He reminded participants about Japan's monitoring program of the oceanographic conditions in the JFS spawning grounds that was introduced at SWG JFS 2024-01. This monitoring program identified favorable (2007, 2022 and 2023) and unfavorable (1986, 2015, 2016) oceanographic conditions for NFS.

The Lead presented a table summarizing previous studies on the effects of environmental variables on life history, biological characteristics, and population dynamics of NFS and encouraged participants to share any new papers.

China pointed out that JFS is not a target species in Chinese fisheries, so it is unlikely that there are any new studies on the environmental effects on NFS in the Convention Area.

[Agenda Item 4. Blue Mackerel Tasks](#)

Dr. Kazunari Higashiguchi led discussions of the SWG BM. The presentation from the Lead is available on the Collaboration website under SC / [Blue Mackerel](#).

[4.1. Update catch and effort data among Members.](#)

The Lead presented an updated summary footprint table of mackerels' catch and effort up to 2024. The table is available on the [website](#). He also informed participants that the ratio of CM and BM in the total mackerels catch was updated up to 2024 and uploaded on the Collaboration site under [TWG CMSA](#).

The Lead suggested to add the CM/BM ratio to the annual summary footprint and requested the Secretariat explain the procedure to do so. The Secretariat responded that this addition does not require any changes in the Members' annual report format and therefore does not need approval by the Commission. Participants **agreed** that the Lead, with support from the Secretariat, will revise the summary footprint template for mackerels and circulate it to Members for review.

The Lead requested Members to update data on length-weight relationship and catch-at-length (in numbers and tons) for BM in accordance with the [template](#) available on the Collaboration site.

China **agreed** to provide the requested data by the end of September 2025.

Russia responded that there was no BM catch in its chub mackerel fishery in the Russian EEZ and the Convention Area.

[4.2. Calculate ratio of BM and CM in catches.](#)

See Agenda Item 4.1.

4.3. Evaluate the influence of environmental variables on life history, biology, and population dynamics (lower priority).

Participants noted that it is difficult to access the influence of environmental variables on life history, biology, and population dynamics of BM as only a few scientific articles on this topic are available. The Lead encouraged participants to share papers on the impacts of environmental variables on the BM stock.

China (Heng Zhang) presented a review of BM fishery data and research activities in China in 2024-2025 (available on the Collaboration website under SC / [Blue Mackerel](#)). In 2024, 103 purse seine vessels and 3 trawl vessels engaged in fishing activities in the Convention Area from April to December. Most samples for length, weight, maturity and age came from purse seiners, and since 2023, one sample per month was collected from the trawl fishery. The presentation outlined the results of research activities based on the samples collected at sea and in ports, including CM/BM ratio, biological information and spatio-temporal distribution of BM. China agreed to share these data with Japan. China and Japan agreed to follow up with some discussion about this information intersessionally during the coming months.

Japan (Kazunari Higashiguchi) commented that the spatial distribution of BM presented by China is consistent with the one from Japan.

In response to the question from Russia about the method for distinguishing between BM and CM, Japan (Kazuhiro Oshima) shared a [link](#) to the presentation on BM and CM species identification presented at the SWG BM 2022-01 meeting.

[Agenda Item 5. Japanese Sardine Tasks](#)

The SC Chair informed participants that COM09 recognized JS as one of the priority species for stock assessment (SA). Such expert groups for stock assessment in the SC have a formal status, therefore it was suggested to establish a new SSC on JS at SC10 in December.

Dr. Shuya Nakatsuka expressed interest in chairing the new SSC and agreed to serve as the new Lead of SWG JS.

[5.1. Update shared data \(monthly catch and effort, biological data\) among Members, and integrate data from China, Japan, and Russia.](#)

[5.2. Updating catch and effort data and discussing potential data sharing needs.](#)

Japan (Kazunari Higashiguchi) gave an update on available data shared by Members and data gaps (available on the Collaboration website under SC / [Japanese Sardine](#)). He presented an updated summary footprint table of JS catch and effort up to 2024 and data on length-weight

relationship, catch in numbers at body length and catch in tons at body length that were uploaded on the Collaboration site. He noted that conducting a stock assessment for JS requires catch at age, weight at age, maturity at age and abundance indices.

On the question about data sharing, Japan responded that they might share quarterly data on JS from the Japanese EEZ. China supported the idea to submit data on a quarterly basis as opposed to monthly basis. This will be further discussed at future JS meetings.

The USA (Jon Brodziak) suggested that natural mortality at age should be included in the list of data required for stock assessment of JS.

In response to the questions about methods for determining age and maturity, Japan **agreed** to make a presentation on these two topics at the next SWG JS meeting.

China (Heng Zhang) presented a review of JS fishery data and research activities in China in 2024-2025 (available on the Collaboration website under SC / [Japanese Sardine](#)). He reported on the catch and effort from Chinese purse seine and trawl fisheries and presented the results of analyses on JS size composition, length-weight relationship, age-length key and spatial distribution of JS catch. These data were collected either by observers at sea or by scientists in ports. He concluded that JS catches have remained at high levels in recent years, and JS and CM catches demonstrated a seesaw effect.

In addition, China (Libin Dai) clarified that the Chinese purse seine and trawl fleets target CM and utilize JS as a bycatch, although the ratio of CM and JS varies over time, with an increase of JS in recent years. Thus, the shift in targeting should not be considered as a covariate in CPUE standardization.

On the issue of targeting CM versus JS, Russia (Vladimir Kulik) explained that Russian trawl fleet tried to avoid JS when CM was abundant. However, with declining CM catch, they developed new fishing techniques for trawlers such as fish pumps and increased the number of purse seiners that utilize JS more effectively.

The Lead encouraged Members to share information about their fisheries to facilitate work on CPUE standardization for JS stock assessment.

On the question about age determination method, China responded that they use otoliths to determine age as well as another method that will be presented at the next SWG JS meeting.

[5.3. Evaluate the influence of environmental variables on life history, biology, and population dynamics \(lower priority\).](#)

5.4. Draft a joint review paper of impacts of climate change on JS.

Chris Rooper gave a presentation addressing agenda items 5.3 and 5.4. He informed participants that he had conducted a literature review on the impacts of climate change and environment on JS and submitted an abstract to the PICES Annual Meeting scheduled for November 2025. It will be a poster presentation at the topic session S4. He invited NPFC scientists to contribute to and co-author this review.

The timeline for the review is as follows:

- Distribute excel worksheet to participants – July 29
- Each person reads a set of papers and fills out worksheet – Oct 15
- Analysis and summary – October 27
- PICES Poster – November 1
- Written report for SC – November 9

He noted that a significant number of scientific articles on JS are in Japanese, and some in Russian, Chinese and Korean, so he will reach out to these Members for their contributions.

Japan (Kazuhiro Oshima) suggested to focus this collaborative study on the Convention Area.

The USA (Jon Brodziak) brought participants' attention to recent observations of JS in the California Current and Bering Sea in 2022-2024 caused by heat waves and suggested including this information in the review.

China (Heng Zhang) noted that SST in the western North Pacific Ocean has continued to increase in the recent years and pointed out the importance of research on the influence of climate change on JS and CM which seems to result in opposite abundance trends for these two species.

5.5. Discuss formalization of SWG JS to SSC JS, including selection of Chair and Vice-Chair, and drafting terms of reference (TOR).

Participants noted that, following the direction from COM09 to prioritize JS for stock assessment, SC10 will consider establishing a new SSC on JS.

The Chair invited Members to nominate a Chair and vice-Chair for the new SSC one month before SC10, i.e. by 16 November. Nominations will be discussed at an HOD meeting on Day 2 of SC10.

The Lead (Shuya Nakatsuka) expressed interest in the position of Chair, and Heng Zhang nominated himself for the position of vice-Chair.

The Lead will draft TOR for the new SSC JS and circulate it to Members for review intersessionally between this meeting and SWG JS 2025-02. It will then be discussed at SWG JS 2025-02 and submitted to SC10.

Agenda Item 6. Focus and date of a 2nd intersessional meeting.

6.1. Selection of date (two days, ideally from 20-25 October)

Participants agreed to hold the next joint meeting of the SWGs JFS, BM, and JS on **21-22 October 2025** from 9am – 1pm, Tokyo time.

6.2. Outstanding SWG JFS, SWG JS, and SWG BM tasks.

6.2.1. Japan to present a summary of its 2024 stock assessments at SC10.

6.2.2. Japan to present a thorough summary of its 2024 JS stock assessment at SWG_JFS&BM&JS2025-02.

6.2.3. Prepare a written stock assessment summary for SC10.

6.2.4. Revise and update the species summary documents.

6.2.5. Prepare one or more slides for the SC Chair to present at COM10.

The Chair outlined the tasks for the next joint meeting, and noted that the leads of SWG JFS, SWG BM, and SWG JS could provide a summary of Japanese stock assessments during SC10 and prepare species summary documents and slides for the SC Chair to present at COM10 intersessionally. Thus, the second meeting of this group will focus on a more detailed description of the JS stock assessment by Japan. Members may also discuss data-sharing and data collection in support of the development of a collaborative SA for JS.

Participants discussed the use of the results of domestic stock assessments (SA) and **agreed** to follow last year's approach, in particular SC10 will observe SA results from Japan and other Members, if any, and include them in the relevant species summaries as domestic SAs.

Japan (Kazuhiro Oshima) noted that the most recent SAs for JS may not be needed at the next joint meeting, as discussions will be centered around SA methodology and data.

Regarding SA for JS, Japan (Shuya Nakatsuka) clarified that domestic SAs from Japan and potentially China will be used as a starting point for a regional SA to be conducted by the new SSC JS. He encouraged participants to work collaboratively on a single model selected by the SSC JS rather than individual models from Members. China and Canada supported the collaborative approach. China suggested that SA for JS may be conducted by the SSC JS, if capacity allows, or by an external expert.

Participants agreed to continue to discuss these SA approaches at the 2nd joint meeting in October.

The Chair summarized the expected outcomes of the intersessional work of the SWGs JFS, BM, and JS for submission to SC10, i.e. meeting summaries, draft TOR for SSC JS, species summaries and updates on domestic stock assessments from Japan. The SWG Leads were invited to report on these documents and prepare slides for the Chair to report on priority species to COM10.

[Agenda Item 7. Close of the Meeting](#)

The meeting closed at 11:45 am on 22 July 2025, Tokyo time.