



North Pacific Fisheries Commission

NPFC-2023-SC08-WP05

### **Report of Small Working Group for Japanese Sardine: activities in 2023**

In 2023 there were two intersessional meetings of the SWG Japanese Sardine held in conjunction with working groups for other priority species (Neon Flying Squid, Japanese Flying Squid, Blue Mackerel).

The first meeting was held on June 19, 2023 in a virtual format. Important outcomes were:

- Japan presented a summary of their domestic assessment of Japanese Sardine which is updated annually and is available at <https://abchan.fra.go.jp/hyouka/>.
- In general, the catch of JS in the Convention Area occurs mostly in years of high abundance when, the distribution of JS expands to the CA, while in years of low abundance the JS catch is mostly found in Japanese domestic waters.
- It was agreed that the JS stock could be monitored using Japan's domestic stock assessment and the summary of JS status should be reported in the annual updates of the Species Summary of JS delivered to the Scientific Committee for submission to the Commission.
- Japan's domestic assessment includes catch data from Japan, China and Russia. . Including other Members' catch at size and catch at age data would improve the stock assessments of JS
  - Japan requested other Members to intersessionally share length frequency data and their length-weight relationships, if available, for improving its domestic stock assessments and incorporating them in the species summary documents.
- Nominal CPUE was calculated by Members using shared data and the value of this data was discussed in detail. In particular the difficulties in standardizing catch per unit effort given the particularities of fishing practice (e.g. the changes in seine fishing where the catch is not actually landed, but is instead is pumped out of the fishing net onto the catcher vessel), were discussed in detail.

The second intersessional meeting was held on August 8, 2023. The main outcomes of this meeting were:

- There were two updates from Members on JS research, Japan reminded participants about the domestic stock assessment of JS and indicated they are currently in the process of updating the stock assessment, and China summarized and shared a newly published on JS indicating that Japanese sardine stock recovering, but is affected by changes in the climate and marine environment, which may cause distribution changes.
- Sharing code for the JS domestic stock assessment with SWG participants was also discussed, with the idea that sharing of code would improve transparency of the stock assessment results and for providing advice from SC to COM based on Japan's domestic stock assessment. Japan was to discuss internally and report to SC08 in December if the code of their JS stock assessment model can be shared with Members.

- Japan and China both shared length frequency data and length-weight relationship data through the collaboration website. There will be further discussion on the data needs to improve Japan's stock assessment of JS at the next SC meeting.
- An updated JS Species Summary document was shown and discussed. This summary contains outputs from Japan's domestic JS stock assessment.

An updated species summary for JS was prepared for SC08 based on comments received at the intersessional meeting. At the SC08 meeting, it is expected that there will be discussion on

1. the potential for providing data from Members to support Japan's domestic JS assessment,
2. Objectives and needs for linking footprint and effort data using GIS tools
3. Sharing of code for the JS stock assessment
4. Any other matters related to JS