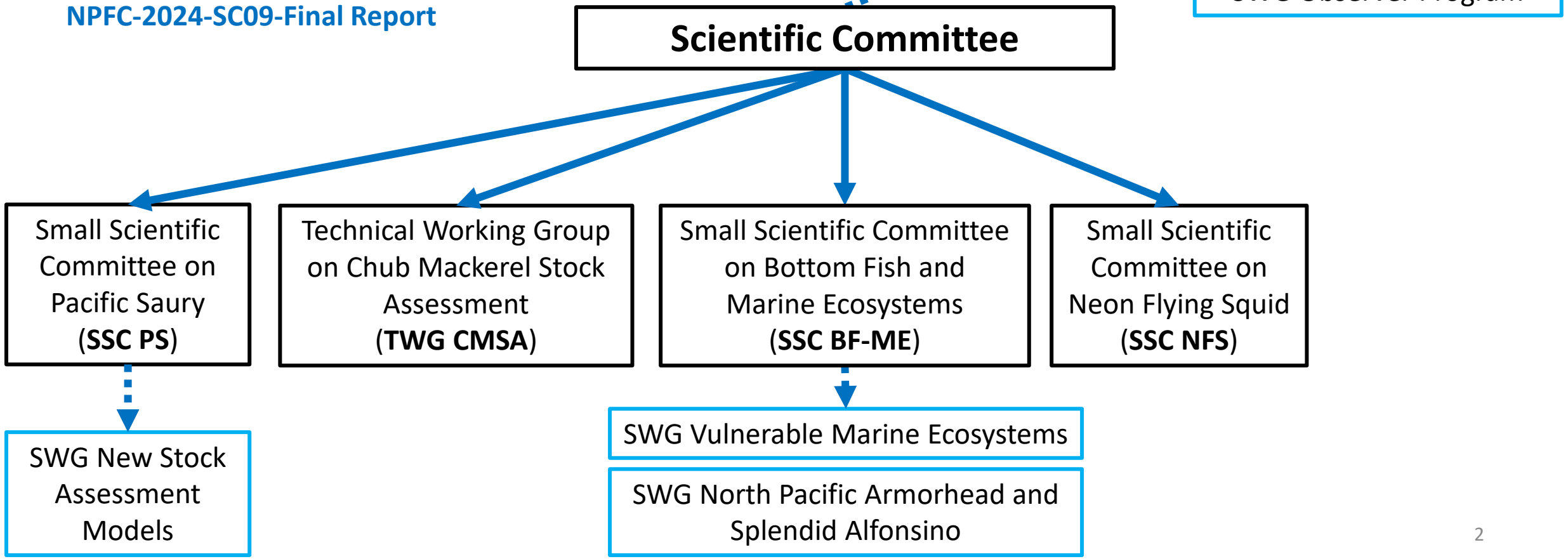
NPFC-2026-COM10-IP12 Rev. 1

Report of the Scientific Committee

10th Commission Meeting
14-17 April 2026, Osaka

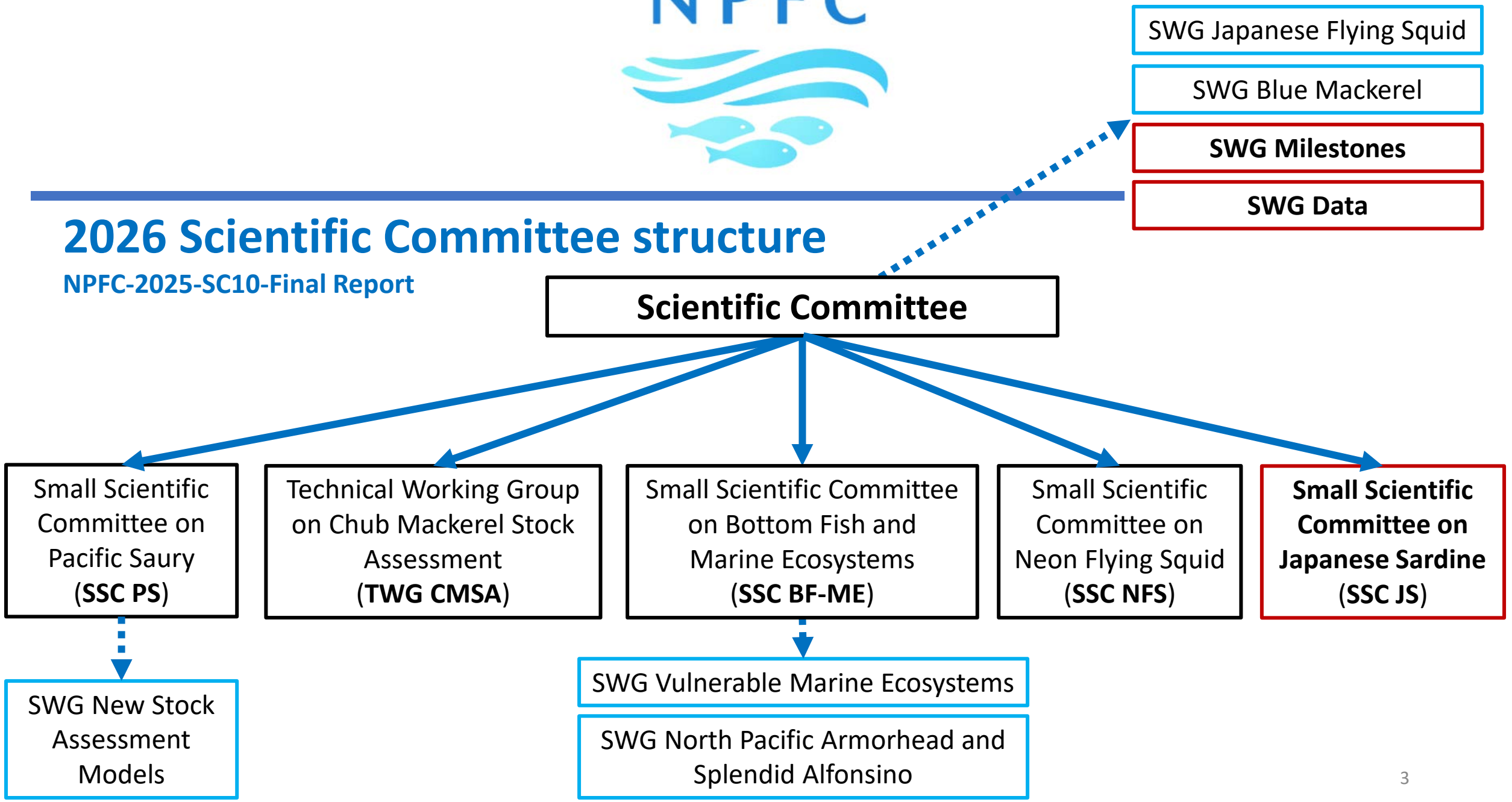
2025 Scientific Committee structure

NPFC-2024-SC09-Final Report



2026 Scientific Committee structure

NPFC-2025-SC10-Final Report



2025-26 Scientific Committee meetings

- 8-10 July: Small Scientific Committee on Neon Flying Squid (**SSC NFS-02**)
- 15-18 July: Technical Working Group on Chub Mackerel Stock Assessment (**TWG CMSA-11**)
- 1-5 September: Small Scientific Committee on Pacific Saury (**SSC PS15**)
- 8-10 December: Small Scientific Committee on Bottom Fish & Marine Ecosystems (**SSC BFME-06**)
- 11-14 December: Small Scientific Committee on Pacific Saury (**SSC PS-16**)
- 16-19 December: Scientific Committee (**SC-10**)
- 4-6 March: Small Scientific Committee on Neon Flying Squid (**SSC NFS-03**)

2025-26 Intersessional Scientific Committee meetings

- Intersessional meetings of **TWG CMSA**
- NPFC/FAO informal workshop on science-based management options available for operationalizing the precautionary approach
- Informal intersessional meetings of 8 Small Working Groups (SWGs):

  - Data (**SWG Data**)
  - New Stock Assessment Models (**SWG NSAM**)
  - North Pacific Armorhead and Splendid Alfonsino (**SWG NPA-SA**)
  - Vulnerable Marine Ecosystems (**SWG VME**)
  - Japanese Flying Squid (**SWG JFS**)
  - Japanese Sardine (**SWG JS**)
  - Blue Mackerel (**SWG BM**)
  - Observer Program (**SWG OP**)

All formal meetings were either virtual or hybrid:

- intersessional meetings were via WebEx
- thoughtful, cooperative, and productive participation

Members:

- Canada, China, European Union, Japan, Republic of Korea, Russian Federation, Chinese Taipei, USA, Vanuatu

Observers:

- DSCC, FAO, ICES, NPAFC, PICES, Pew Charitable Trusts, The Ocean Foundation, The Ocean Governance Institute, WWF, MSC

Invited experts:

- Dr. Quang Huyhn (stock assessment for PS), Dr. Joel Rice (stock assessment for CM),
  Dr. Rujia Bi (stock assessment for NFS), Dr. Maite Pons and Dr. Ricardo Amoroso (stock assessment for SA and NPA)

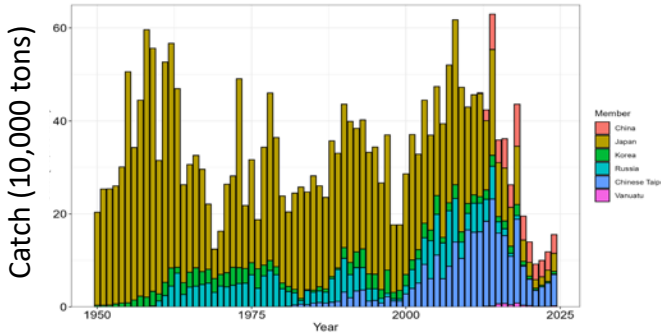
Secretariat:

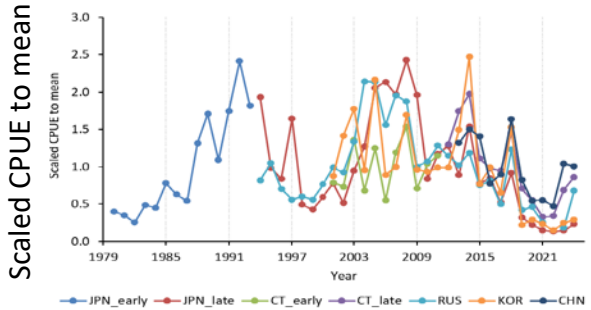
- Kept us on track with rules of procedure, meeting arrangements, preparing reports, and much more

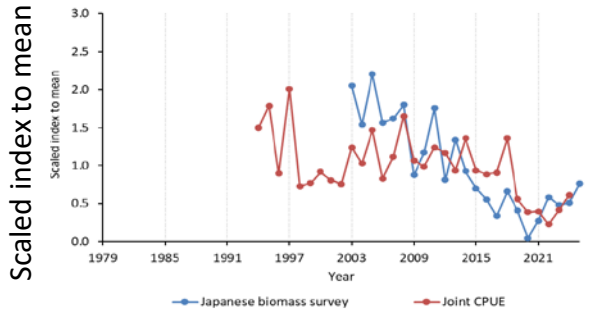
Small Scientific Committee on Pacific saury (SSC PS)

Chair: Toshihide Kitakado (Japan)

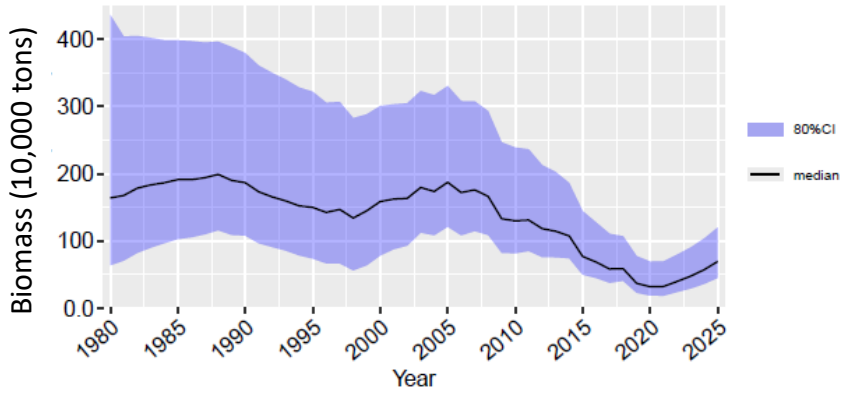
Time series of catch and abundance indices

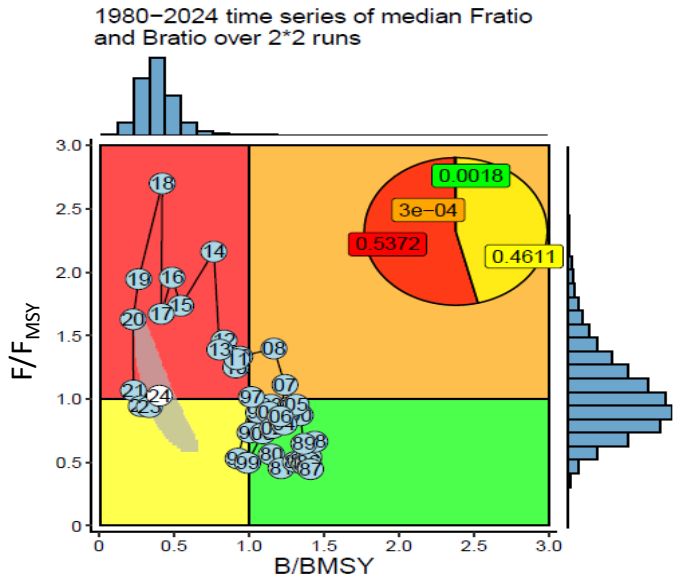






Stock status based on an interim assessment model





Comments on stock status

- The 2025 stock assessment results are based on Japanese and Chinese Taipei's analyses
- High likelihood of stock being overfished
- Even though biomass may have increased modestly during 2020-2025, the stock biomass remains at low levels
- Currently this stock is managed by an interim harvest control rule (HCR) stipulated in CMM 2025-08
- Development of a new stock assessment model and full management procedures are in progress

See NPFC-2025-SC10-Final Report, Annex P

Key 2025-26 stock assessment results – lack of consensus

NPFC-2025-SC10-Final Report, Annex P

- The SSC PS reviewed the stock assessments conducted by Members and could not reach consensus on the treatment of results.
- The SC noted that:
  - China expressed concern that the current Bayesian State Space Production Model (BSSPM) exhibits instability and uncertainty in key parameter estimates, and that it does not adequately capture non-stationary population dynamics.
  - China also expressed concern regarding the scaling uncertainty in the current BSSPM stock assessments.
- Fishing Members noted an improvement in stock conditions during the 2025 fishing season, but these new data are not included in the assessment due to timing issues.

Key 2025-26 stock assessment outcomes – interim HCR

NPFC-2025-SSC PS16-Final Report
NPFC-2025-SC10-Final Report, Annex P

- Other members also recognized the uncertainties identified by China, but:
  - considered the stock assessment as the best scientific information available
  - believed it appropriate to aggregate the results
  - noted the stock has yet to reach past abundance levels and a precautionary approach in the interim HCR in CMM 2025-08 is warranted given uncertainty in the stock assessment.
- The interim HCR for Pacific saury under CMM 2025-08 was used to calculate the annual catch level in the 2026 fishing year.
- Based on assessment inputs from Japan and Chinese Taipei, the unconstrained annual catch level for 2026 = $(B_{2025}*F_{MSY}*(B_{2025}/B_{MSY})$ = 91,180 MT.
- Based on the adopted HCR, the constrained 2026 catch level would be 0.9 x 202,500 = **182,250 MT**.

Key 2025-26 stock assessment outcomes – future model outputs

NPFC-2025-SSC PS16-Final Report, NPFC-2025-SC10-Final Report, Annex P

- The SC noted that the SSC PS should continue working both to improve the BSSPM and to develop new age-structured models.
  - a new age-structured model would not be guaranteed to perform perfectly.
  - a new age-structured model can be used as a basis for operation models in a future MSE framework.
  - the BSSPM might be used as an internal assessment method when developing model-based management procedures, as has been used in other RFMOs.

Recommendations

NPFC-2025-SC10-Final Report

- Consider the stock assessment report for PS, while noting:
    - The SC reviewed the 2026 stock assessment by SSC PS.
    - Members did not reach consensus on the treatment of stock assessment results.
    - The summary of discussions in paragraphs 81–88 of **NPFC-2025-SC10-Final Report**.
- Continue to hire an invited expert to support the SSC PS and SWG NSAM in 2026.

Technical Working Group on Chub Mackerel Stock Assessment (TWG CMSA)

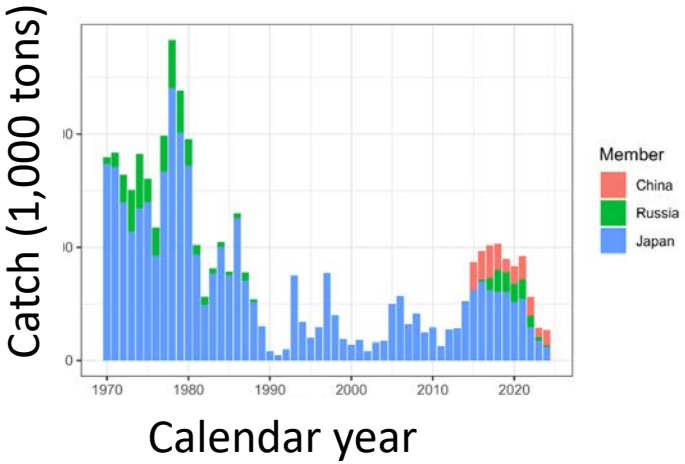
Chair: Dr. Kazuhiro Oshima (Japan)

Time series of chub mackerel catch and stock assessment

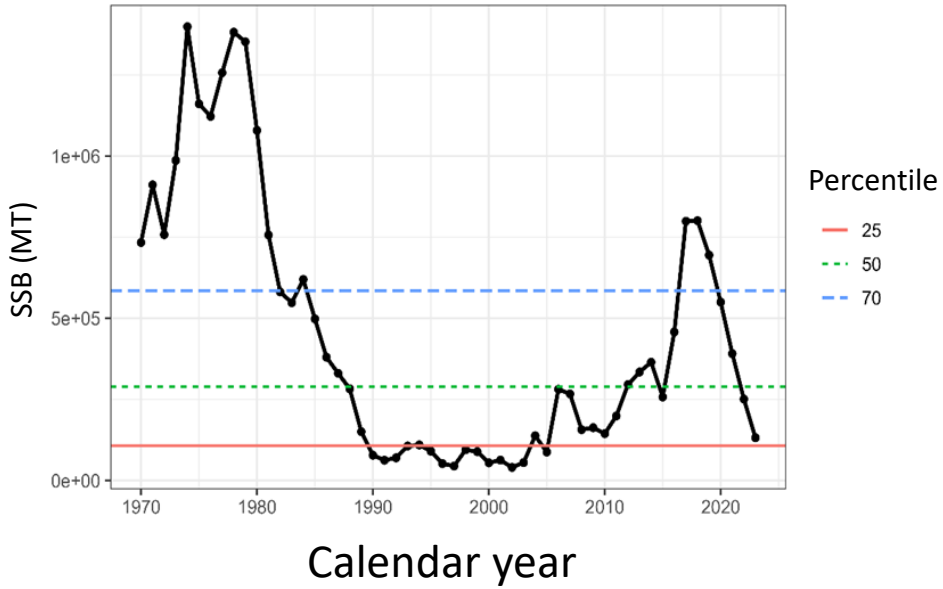
Species Summary for Chub Mackerel (Chub Mackerel 2026.pdf)

NPFC-2025-SC10-Final Report

EEZ and CA



Stock Assessment



Comments on Status

- Total catch decreased in last three years.
- SSB decreased after 2018 when it reached a peak since 2000s.
- SSB in 2023 was lower than historical median.
- Fishing mortality showed stable trend during last decade.
- Empirical reference points of SSB
  - 25th percentile as limit
  - 50th percentile as Reference A
  - 70th percentile as Reference B

Key 2025-26 stock assessment outcomes

NPFC-2025-TWG CMSA11-Final Report
NPFC-2025-SC10-WP10
NPFC-2023-SC10-Final Report, Annex H - Stock assessment report for chub mackerel

- The SC reviewed and endorsed the chub mackerel stock assessment report (Annex H).

- TWG CMSA had three tasks from COM09:
  - Task 1: Provision and analysis of gear specific data to explore if there is a need to protect the immature portion of the stock and advice on options for achieving that, as appropriate.
  - Task 2: Clarification of the correspondence of fishing days and the level of catch in relevant fleets
  - Task 3: Provide projections and associated probabilities, based on constant catch or F scenarios, aiming at reaching an appropriate MSY proxy (SSB and F) within 5 to 10 years.

Key 2025-26 stock assessment outcomes

NPFC-2025-TWG CMSA11-Final Report
NPFC-2025-SC10-Final Report, Annex H - Stock assessment report for chub mackerel

- SC noted that given uncertainty, it was not appropriate to provide long-term harvesting recommendations
    - Projections indicate that current fishing mortality is unsustainable

    (**see Annex H of NPFC-2025-SC10-Final Report**)

- The SC recommended that the 50th and 70th percentiles of the estimated historical SSB (1970–2023) be treated as interim reference levels and the 25th percentile of estimated historical SSB be treated as an interim limit reference point; Members have differing views on which of the reference levels should be treated as the target

- The SC tasked the TWG CMSA to hold further discussions on how best to measure and compare chub mackerel fishing effort among Members

Key 2025-26 Recommendations

NPFC-2025-TWG CMSA11-Final Report
NPFC-2025-SC10-Final Report, Annex H - Stock assessment report for chub mackerel

- Endorse the stock assessment report for CM (**NPFC-2025-SC10-Final Report, Annex H**)

- Consider the following interim reference levels:
  - 50th percentile of the estimated historical SSB (1970–2023 fishing years)
  - 70th percentile of the estimated historical SSB (1970–2023 fishing years)

- Consider the 25th percentile of estimated historical SSB as an interim limit reference point.

- Reduce fishing mortality to recover SSB to the reference levels.

- Continue to hire an invited expert to support the TWG CMSA in 2026.

Key 2025-26 stock assessment outcomes – COM tasks

NPFC-2025-TWG CMSA11-Final Report, NPFC-2025-SC10-WP22(Rev2); NPFC-2026-COM10-IP07
NPFC-2025-SC10-Final Report, Annex H - Stock assessment report for chub mackerel

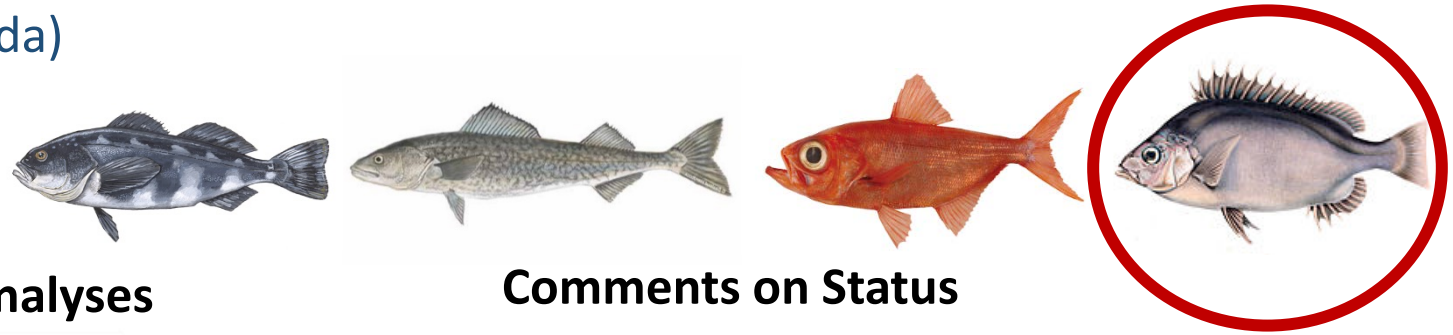
- TWG CMSA **Task 1** from COM09 (**see NPFC-2026-COM10-IP07**):
  - Extensive discussion and preliminary analyses
  - SAM stock assessment model outputs are insufficient to address this task
  - SC recommends that the Commission require Members to submit gear specific catch-at-age / catch-at-length data including accessory devices used for fishing purposes in the CA and EEZ

- TWG CMSA **Task 2** from COM09 (**see NPFC-2026-COM10-IP07**):
  - TWG CMSA presented a description of Member definitions and calculations of “fishing day”
  - TWG CMSA agreed to develop a common methodology for defining and calculating “fishing day”

- TWG CMSA **Task 3** from COM09:
  - TWG CMSA addressed this through the future projections as part of the 2025 CM stock assessment
  - TWG CMSA agreed to use increments of 10,000 MT
  - TWG CMSA recommended the 50th and 70th percentiles of the estimated historical SSB as reference levels.

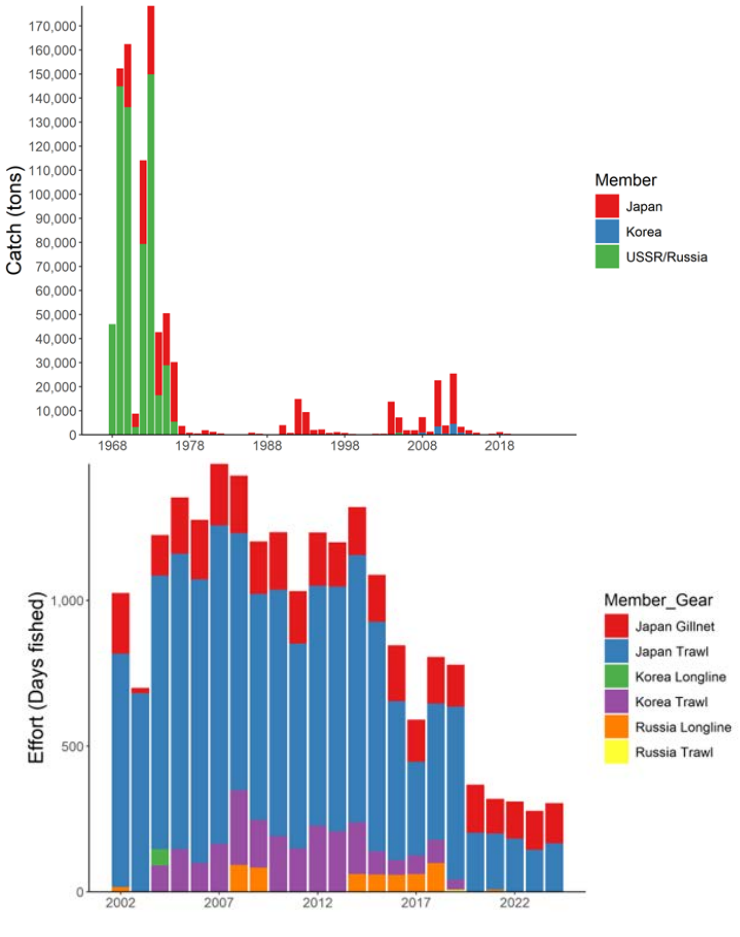
Small Scientific Committee on Bottom Fish & Marine Ecosystems (SSC BF-ME)

Chair: Dr. Chris Rooper (Canada)

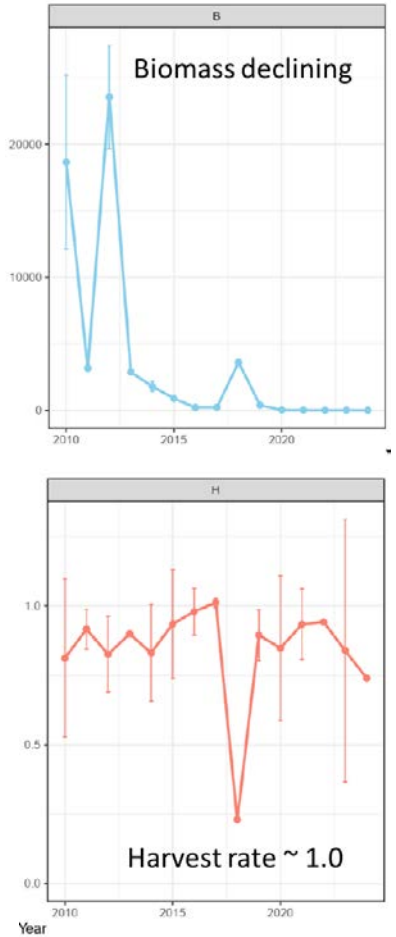


North Pacific Armorhead

Convention Area



Depletion analyses



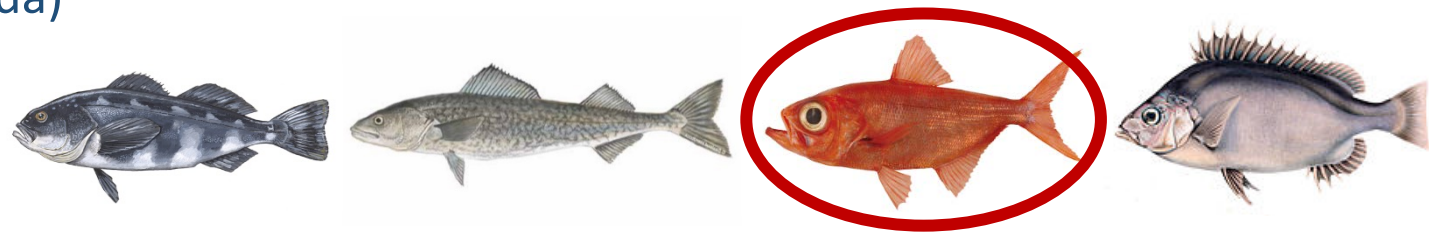
Comments on Status

- No strong recruitment detected in recent years (since 2013)
- Stock status remains low
- Harvest rate is likely to be high
- Potential caveats including:
  - Possible effect of target shift
  - Uncertainty in the estimation of recruitment season
  - estimate of harvest rate (>1) in some years and seamounts
  - Potential bias caused by the removal of zero-catches

- Keep monitoring possible recruitment events and avoid high harvest rates for recruited fish as specified in CMM 2025-05
- Since recruitment has been weak, SSC BFME recommends reducing the harvest rates as much as possible
- SSC BFME recognize the effort of Japanese fishers to avoid harvest of NPA since 2019

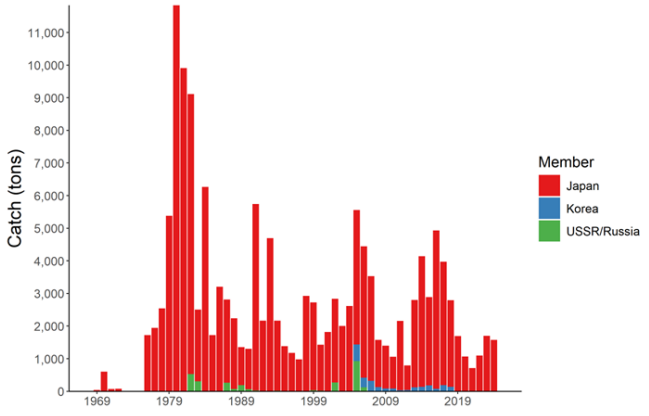
Small Scientific Committee on Bottom Fish & Marine Ecosystems (SSC BF-ME)

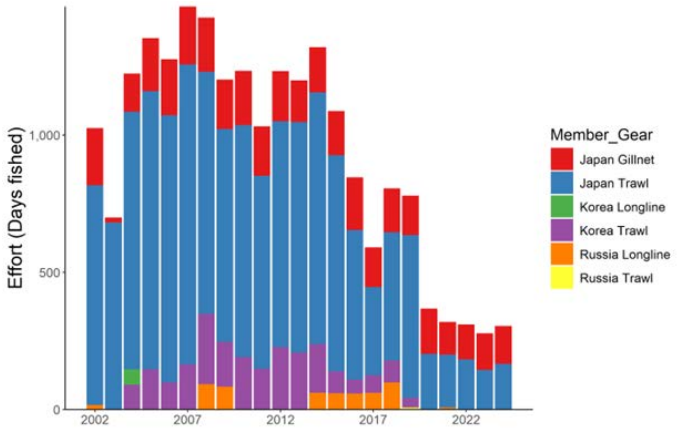
Chair: Dr. Chris Rooper (Canada)



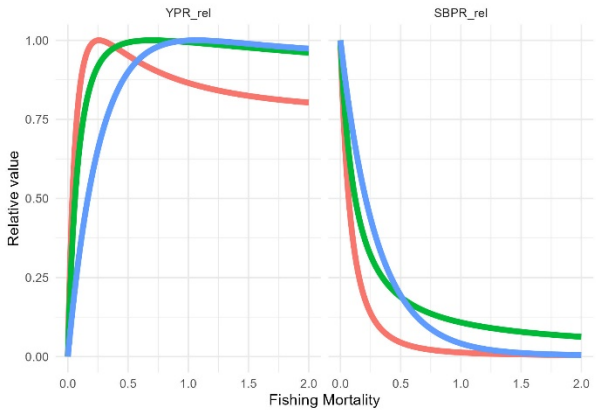
Splendid Alfonsino

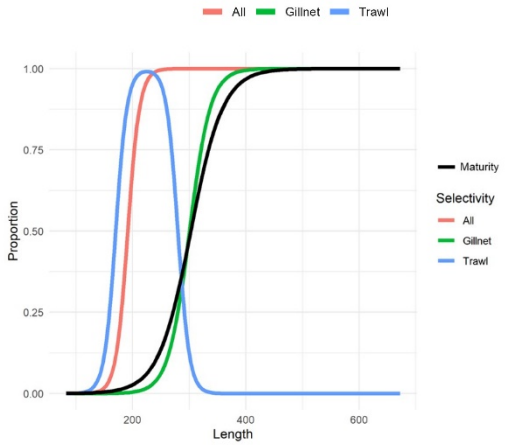
Convention Area





Per recruit analyses



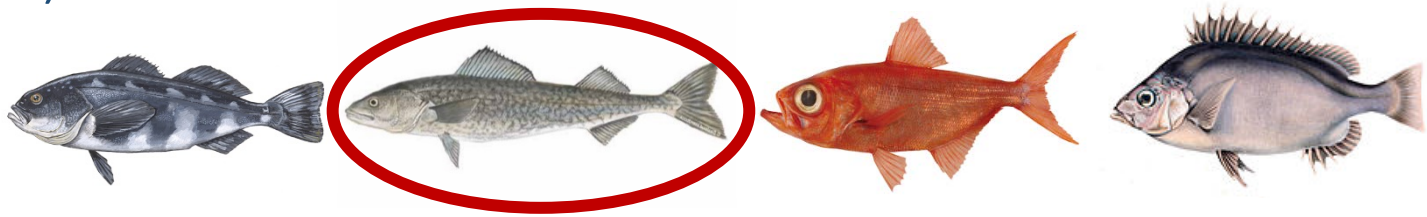


Comments on Status

- High likelihood that growth overfishing is occurring (harvest before the size that maximizes YPR)
- Splendid Alfonsino are being captured before they are mature, likely reducing the spawning potential
- Caveat - Trawl fishery has dome shaped selectivity which may make the analyses pessimistic about the status of the stock

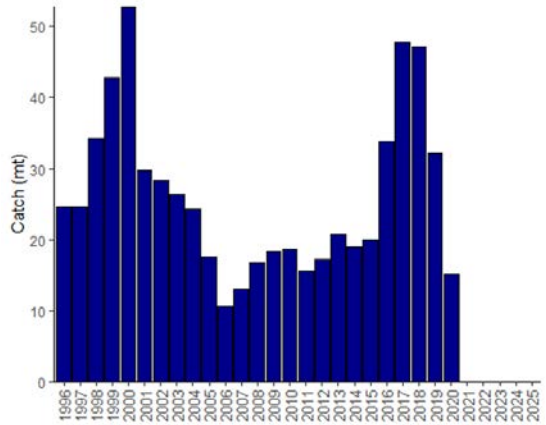
Small Scientific Committee on Bottom Fish & Marine Ecosystems (SSC BF-ME)

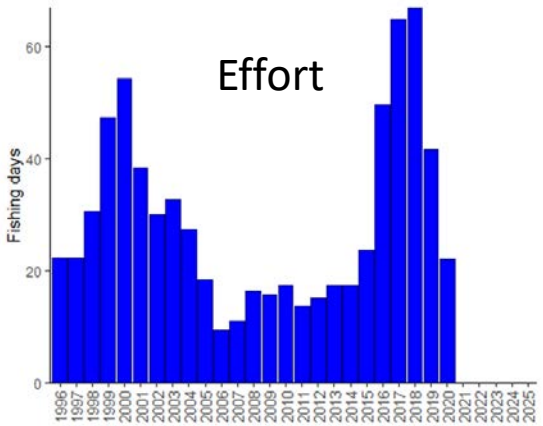
Chair: Dr. Chris Rooper (Canada)



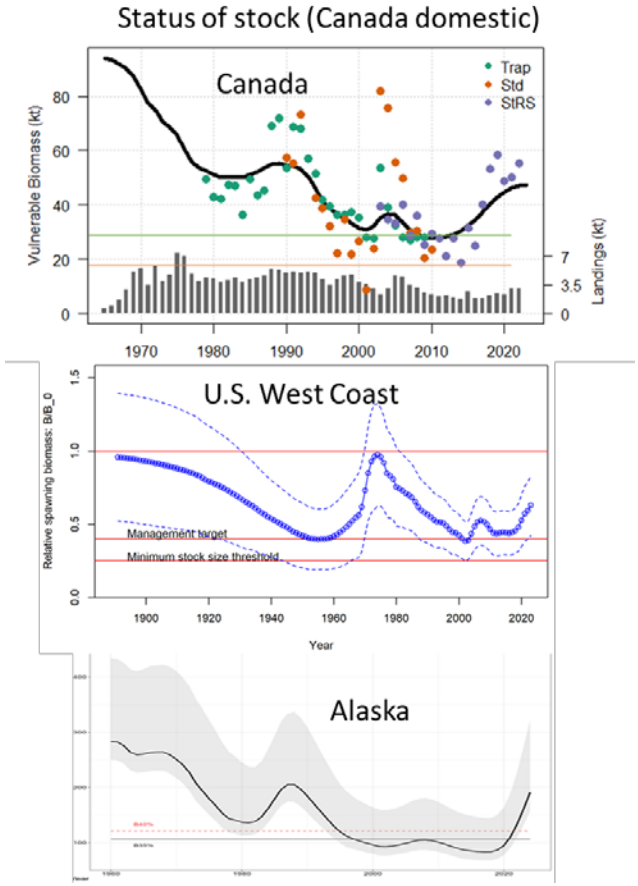
Sablefish

Convention Area



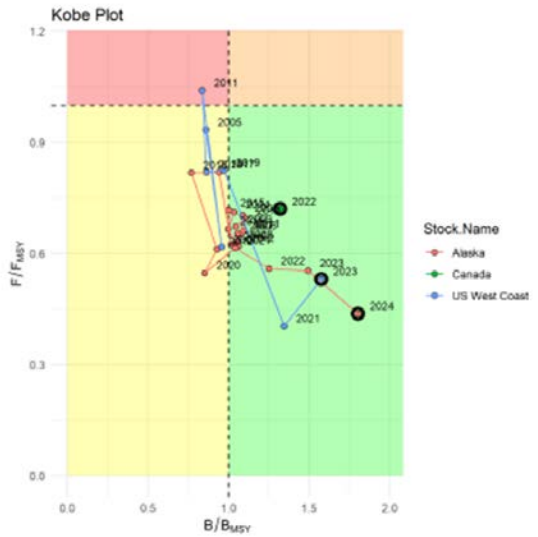


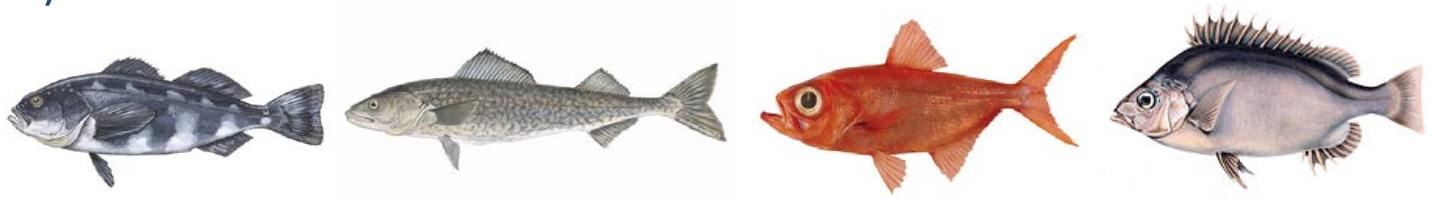
Domestic Assessment



Comments on Status

- Fish stock **<u>healthy</u>**
- No CA fishing since 2020
- Economically not profitable
- Likely some fishing in 2026





Key activities - VMEs

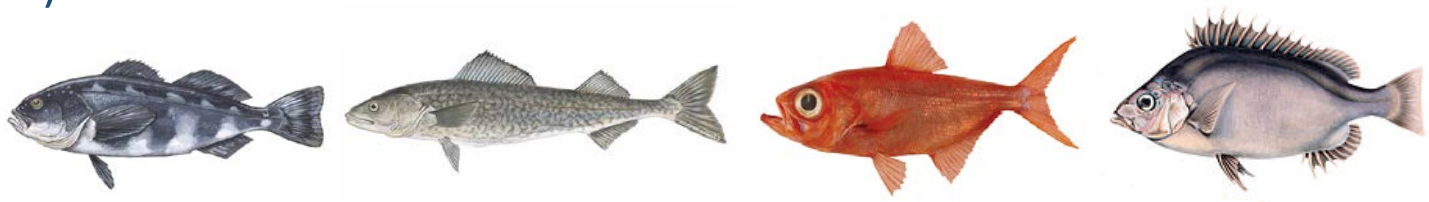
NPFC-2025-SSC BFME06-Final Report, NPFC-2025-SSC BFME06-WP14, NPFC-2025-SSC BFME06-WP09; NPFC-2025-SSC BFME06-IP05

- **Canada updated VME identification on Cobb Seamount with pennatulaceans (NPFC-2025-SSC BFME06-WP15)**
  - Three new VMEs on Cobb Seamount were identified
- **Canada updated areas likely to be VMEs on the Cobb-Eickelberg Seamount chain with predictive models that include pennatulaceans (NPFC-2025-SSC BFME06-WP09)**
  - Areas likely to be VMEs are predicted to occur on all seamounts along the Cobb-Eickeberg Seamount chain
- **Canada used a drop camera to survey VME indicator taxa and associated species in 2022 and 2024 (NPFC-2025-SSC BFME06-IP05)**
  - deep sea corals are widespread along the Cobb-Eickelberg Seamount chain at relatively low densities on all seamounts surveyed
- **Japan used a drop camera to survey VMEs in the Emperor Seamount Chain (NPFC-2025-SSC BFME06-IP09)**
  - 3 new potential VMEs were identified **(NPFC-2025-SSC BFME06-WP17)**

NPFC

Small Scientific Committee on Bottom Fish & Marine Ecosystems (SSC BFME)

Chair: Dr. Chris Rooper (Canada)



Key outcomes – VMEs/SAIs

NPFC-2025-SSC BFME06-Final Report

Japan updated its assessment of potential impacts of its bottom fisheries on VMEs

- The risk of SAI was assessed by overlapping the spatial distribution of trawl and gillnet fisheries. **(NPFC-2025-SSC BFME06-WP17)**
- SSC BFME provided technical suggestions and encouraged Japan to submit updated papers on the impacts of bottom fisheries on VMEs to SSC BFME07 and SC11.

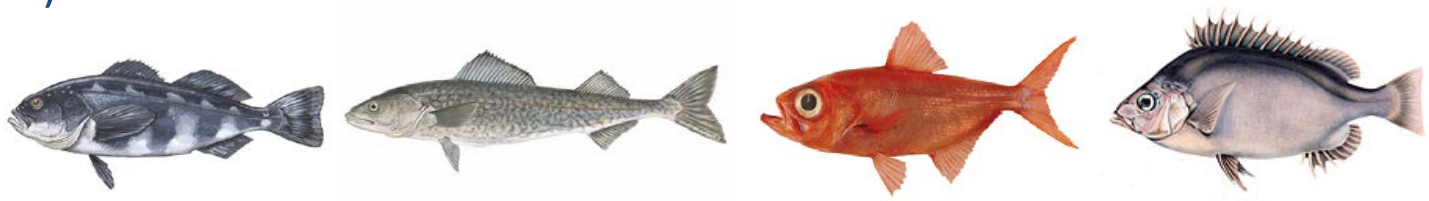
Canada updated its assessment of potential impacts of its bottom fisheries on VMEs

- **(NPFC-2025-SSC BFME06-WP19)**
- SSC BFME provided technical suggestions and Canada will work intersessionally to improve its assessment and update SSC BFME07 and SC11.

NPFC

Small Scientific Committee on Bottom Fish & Marine Ecosystems (SSC BFME)

Chair: Dr. Chris Rooper (Canada)



Key Recommendations

NPFC-2025-SSC BFME06-Final Report, NPFC-2025-SC10-Final Report

- Endorse the fisheries dependent and fisheries-independent indicators of trend for NPA, SA, and sablefish identified in **NPFC-2025-SC10-Final Report**
- Continue to hire an invited expert to support the work of SWG NPA-SA in 2026.
- Note that for SA, there continues to be a high likelihood that growth overfishing is occurring (harvest before the size that maximizes yield-per-recruit) and that SA are being captured before they are mature, likely reducing the spawning potential.
- Note that for NPA, no strong recruitment has been detected since 2013, stock status remains low, and harvest rate is likely to be high. Because of weak recruitment, SSC BFME recommends reducing harvest rates as much as possible.
- Note that domestic stock assessments indicate sablefish is healthy and not subject to overfishing.

Small Scientific Committee on Neon Flying Squid (SSC NFS)

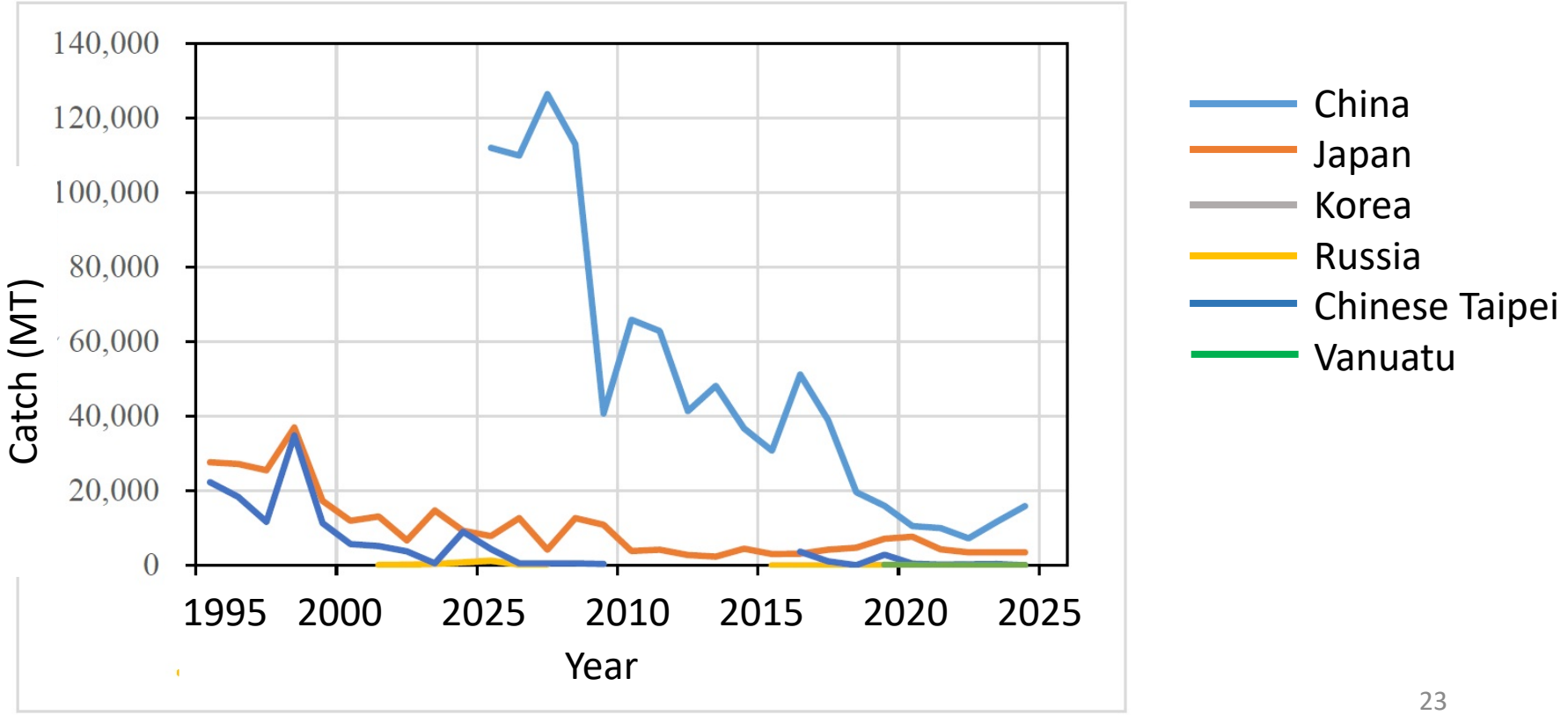
Chair: Dr. Luoliang Xu (China)

Catches

NPFC-2025-SSC NFS02-Final Report

Species summary for Neon Flying Squid 2026 (https://www.npfc.int/system/files/2026-01/Neon Flying Squid 2026.pdf)

NPFC-2025-SC10-Final Report



Small Scientific Committee on Neon Flying Squid (SSC NFS)

Chair: Dr. Luoliang Xu (China)

Key Outcomes and Recommendations

NPFC-2025-SSC NFS02-Final Report, NPFC-2025-SC10-Final Report

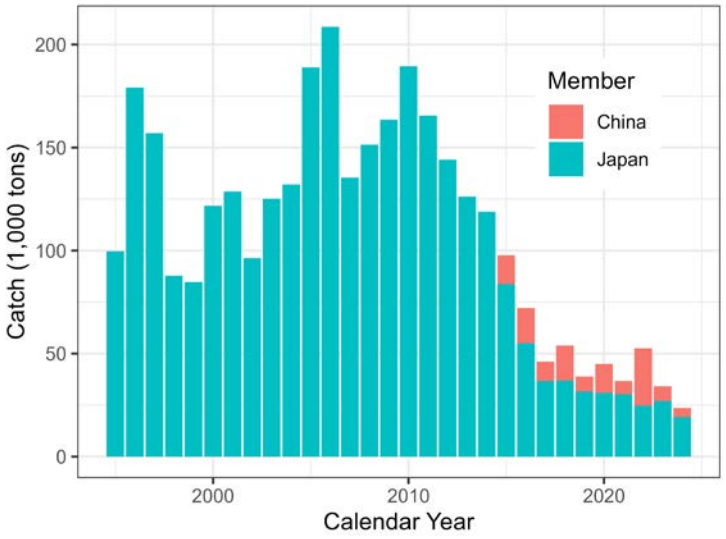
- SC endorsed the report of the 2nd SSC NFS meeting
- The SC noted preliminary stock assessments:
  - China conducted a stock assessment with Just Another Bayesian Biomass Assessment (JABBA)
  - Japan conducted a stock assessment with stochastic surplus production model in continuous time (SPiCT)
- The SC recommended to continue to hire an invited expert in 2026 to support the work of SSC NFS
- The SC recommended endorsing the following Fisheries-dependent indicators of trend for NFS: Standardized CPUE, mean size at catch, total catch
- The SC recommended endorsing the following Fisheries-independent indicators of trend for NFS: Abundance index, Size composition, driftnet survey during summer

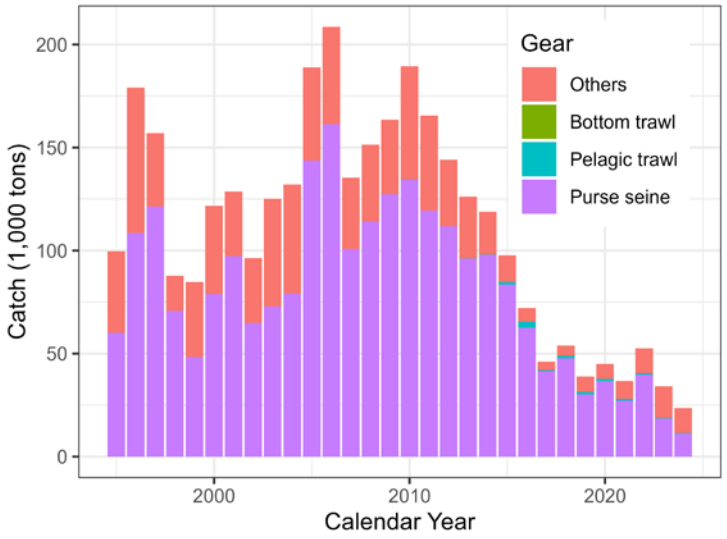
Small Working Group on Blue Mackerel (SWG BM)

Lead: Dr. Kazunari Higashiguchi (Japan)

NPFC-2025-SC10-Final Report, NPFC-2025-SC10-IP05
NPFC-2025-SC10-RP01, NPFC-2025-SC10-RP02, NPFC-2025-SC10-WP21
Blue mackerel species summary (https://www.npfc.int/system/files/2026-01/Blue Mackerel 2026.pdf)

Total catch





Comments

- Japanese catch is from National waters
- Chinese catch is from the Convention Area
- Russian catch is negligible
- Blue mackerel catches are based on the ratio of blue mackerel to chub mackerel in sampled catch
- Japan's stock assessment was observed and discussed by the SC. **NPFC-2025-SC10-IP06**
- The SC did not endorse the assessment.

Done

Small Working Group on Japanese Flying Squid

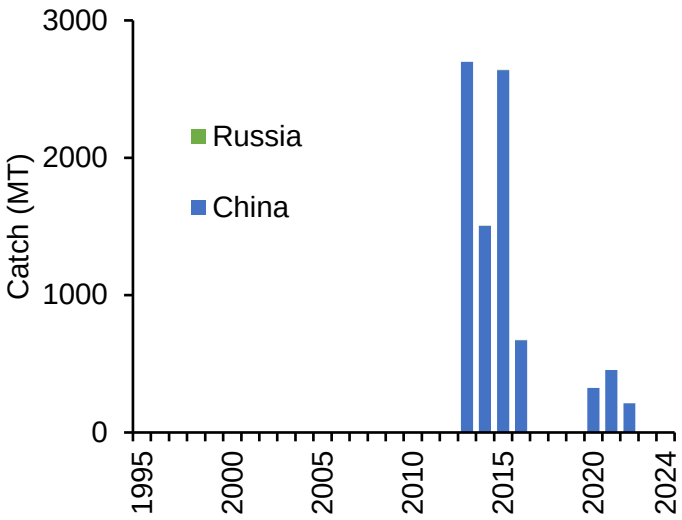
Lead: Dr. Hajime Matsui (Japan)

NPFC-2025-SC10-Final Report, NPFC-2025-SC10-IP04

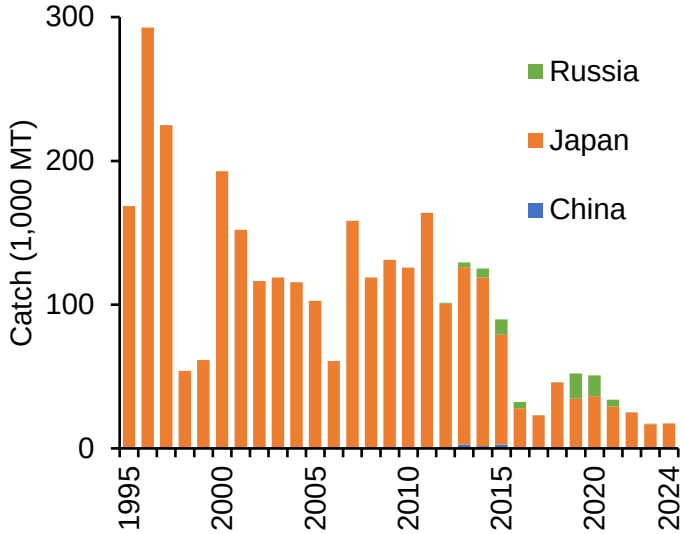
NPFC-2025-SC10-RP01, NPFC-2025-SC10-RP02, NPFC-2025-SC10-WP14

Species summary for Japanese Flying Squid (https://www.npfc.int/system/files/2026-01/Japanese Flying Squid 2026.pdf)

Catch in the CA



Catch in Domestic Waters & CA



Comments

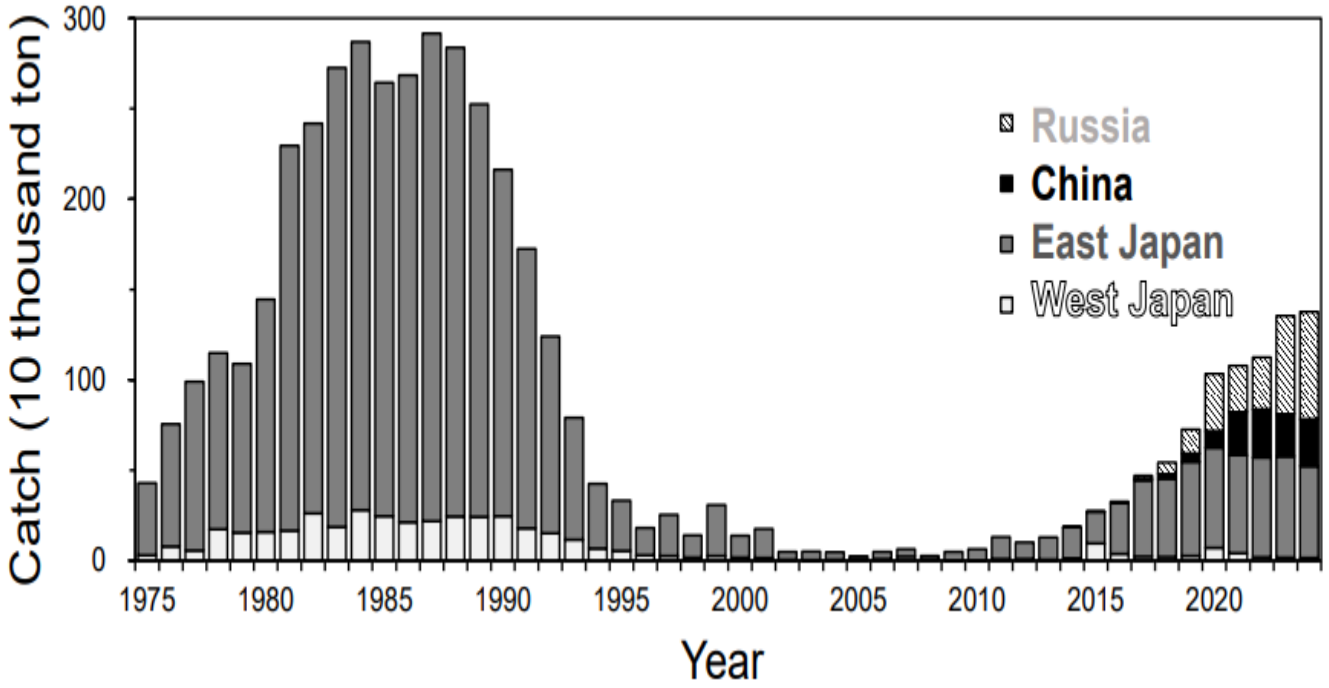
- There was no catch in the CA in 2023 and 2024
- The majority of catches comes from Japanese and Russian national waters
- Japan's stock assessment was observed and discussed by the SC. **NPFC-2025-COM09-IP05**
- The SC did not endorse the assessment.

Done

Small Working Group on Japanese Sardine

Lead: Dr. Shuya Nakatsuka (Japan)

NPFC-2025-SC10-Final Report, NPFC-2025-SC10-IP07
NPFC-2025-SC10-RP01, NPFC-2025-SC10-RP02, NPFC-2025-SC10-WP23
Species summary for Sardine (https://www.npfc.int/system/files/2026-01/Japanese Sardine 2026.pdf)



Comments on Status

- Catch is increasing in recent years.
- Japanese catch and most of Russia's catch are from their national waters.
- Chinese catch is from the CA.
- Japan's stock assessment was observed and discussed by the SC.
- The SC did not endorse the assessment.
- The SC established a formal SSC for JS.

Small Scientific Committee on Japanese Sardine (SSC JS)

Chair: Shuya Nakatsuka (Japan)
Vice-Chair: Libin Dai (China)

NPFC-2025-SC10-Final Report
NPFC-2025-SC10-WP09

- SC endorsed Terms of Reference (ToR) for SSC JS (**NPFC-2025-SC10-WP09**)

- The SC elected:
  - Dr. Shuya Nakatsuka (Japan) as the Chair of SSC JS
  - Dr. Libin Dai (China) as the Vice-Chair of SSC JS

- The SC recommended hiring an invited expert to support SSC JS's work to conduct an NPFC stock assessment.

- The SC recommended the Commission request Members to share relevant data for conducting a JS stock assessment using the data templates developed by SWG Data in advance of SSC JS01.

Key outcomes – Provision of advice to the Commission

NPFC-2025-SC10-Final Report

- **The SC revised the structure and content of SC reports to:**
  - improve readability
  - clarify progress and planned work
  - include summaries of stock assessments by SC subsidiary groups

Note:
- the structure of species status templates will be developed by SWG Milestones for review at SC11
- species summary documents will be posted on the NPFC website

Scientific Committee (SC)

Chair: Dr. Janelle Curtis (Canada); **Vice-Chair:** Dr. Jie Cao (China)

Key outcomes – Standards of 'best available science' (PR Recommendation 3.4.1)

NPFC-2025-SC10-Final Report

- China proposed an NPFC Resolution on the Best Available Science **(NPFC-2025-SC10-WP16)**
- The SC encouraged Members to share additional feedback and encouraged China to present an updated proposal to the Commission.

Key outcomes – How does the SC Provide Advice to the Commission when there is a lack of consensus?

- **Paragraph 186 of SC10 Report:**

"During SC discussions there were differing opinions on whether the SC provided "advice" or "information" to the Commission on the status of stocks. In particular this issue was relevant to the 2025 Pacific Saury Stock Assessment, where there was no consensus on the suitability of the existing BSSPM model. The Pacific Saury CMM 2025-08 requests the SSC PS to calculate the annual catch level and apply the interim HCR specified in the CMM. This was done, but it was not clear whether the lack of consensus meant that the application of the interim HCR constituted "advice" or "information." Some Members of the SC request clarity from the Commission on whether the SC can provide "advice" while capturing the majority and minority views of Members consistent with Article 10 (3) of the NPFC Convention."

- Some Members would like to know how the SC should report stock assessments or other scientific results to the Commission when there is no consensus among Members?

- In cases where there is no consensus, can the SC provide scientific advice while capturing the majority and minority views of Members consistent with Article 10 (3) of the NPFC Convention?

Key outcomes – Frequency of benchmark and data update stock assessments

NPFC-2025-SC10-Final Report

- The SC recommended that in general, benchmark stock assessments should be conducted every 3–5 years and that the data update stock assessments should be conducted annually. This was also the recommendation for neon flying squid.

- For Pacific saury, the SC recommended that the frequency of benchmark stock assessments be determined in the future given that work to develop a new age-structured model is ongoing. SC also recommended that data update stock assessment be conducted annually because of their short lifespan.

- For chub mackerel, the SC recommended the frequency of benchmark stock assessments be every three years, again because of its relatively short lifespan. Thus, the next benchmark stock assessment will be in 2028 and the data update stock assessments should be conducted annually.

Key outcomes – Fisheries-dependent and fisheries-independent indicators of trend for stocks without NPFC stock assessments

NPFC-2025-SC10-Final Report

- The SC recommended fisheries-dependent indicators for:
  NPA, SA, NFS, JFS, BM, Sablefish

- The SC recommended fisheries-independent indicators for:
  NPA, NFS, BM, JS

- For detailed list of indicators, see Agenda Item 3.5, paragraphs 36-43 of **NPFC-2025-SC10-Final Report**

Scientific Committee (SC)

Chair: Dr. Janelle Curtis (Canada); **Vice-Chair:** Dr. Jie Cao (China)

Key outcomes – Process for selection of external experts and contract renewal

NPFC-2025-SC10-Final Report

- The SC adopted the policy for the selection and extension of invited experts for supporting the SC and its expert groups (see Annex G of **NPFC-2025-SC10-Final Report**).
- The SC recommends extending the consultancies of all invited experts during the coming year.

Key outcomes – Independent reviews of scientific advice (PR Recommendation 3.4.2.)

NPFC-2025-SC10-Final Report

- China proposed to establish a formal peer-review process for stock assessments **(NPFC-2025-SC10-WP17)** and a Terms of Reference (TOR) for the external peer review process **(NPFC-2025-SC10-WP18)**.
- The SC requested China to work intersessionally through SWG Milestones and present an updated proposal to SC11 with a detailed description of the proposed process potential cost implications.
- The SC requested the EU to work intersessionally through SWG Milestones to review of best practices from other organizations for implementing peer-reviews for stock assessments.

Key outcomes – Advice on science-based management options for operationalizing the precautionary approach (PR Recommendation 4.1.2)

NPFC-2025-SC10-Final Report

- The SC convened an NPFC workshop on "Science-based management options available for operationalizing the precautionary approach as outlined in the Convention for NPFC priority species"
- The SC discussed science-based management options for NPFC during SC10:
  - The SC reminds the Commission that it can take action according to the best available science (e.g. using catch and effort data, peer-reviewed literature, or domestic stock assessments).
  - The SC recommends that the Commission develop a general framework for the application of the PA by a SWG that is led by managers and composed of both managers and scientists.
  - The SC tasked its subsidiary bodies without stock assessments in place to provide science-based options for operationalizing the PA with clear scientific rationales to facilitate the Commission's decision-making.

Scientific Committee (SC)

Chair: Dr. Janelle Curtis (Canada); **Vice-Chair:** Dr. Jie Cao (China)

Climate change - Effects on NPFC's priority species and associated ecosystems

NPFC-2025-SC10-Final Report and SC's and subsidiary groups' workplans
NPFC-2025-SC10-OP03, NPFC-2025-SC10-OP05

- The Pew Charitable Trusts presented a review of recent progress by selected RFMOs towards climate-informed governance. (**NPFC-2025 SC10-OP03**).

- Dr. Kathryn Berry provided an overview and an update on the Basin-scale Events to Coastal Impacts (BECI) project. (**NPFC-2025-SC10-OP05**). The BECI project can support the NPFC by:
  - enhancing access to environmental information
  - facilitating NPFC's coordination with other RFMOs
  - supporting the NPFC with developing and implementing its climate workplan

- The SC tasked its subsidiary bodies with considering including in their workplans:
  - identification of possible vulnerabilities and management implications
  - integration of data about climate-related effects on biological or fisheries parameters into analyses
  - recommendations of ways to help adapt to climate change and promote resilience

Key outcomes – Observer program – Guidance to the TCC

NPFC-2025-SC10-Final Report

- The SC agreed that in accordance with Article 10, paragraph 4(b) of the NPFC Convention, that one of the scientific objectives of an observer program could be to collect more data to support the stock assessments of NPFC's priority species.

- The SC reviewed and revised draft responses from the SC to five questions from the TCC Chair regarding the scientific aspects of an NPFC regional observer programme (**NPFC-2025-SC10-WP03 (Rev. 2)**).

    - The SC also reviewed and revised draft responses about data types that could be collected as part of an ROP to help improve its stock assessments of priority species (NPFC-2025-SC10-WP03 (Rev. 2)).

    - The SC responses were forwarded to the TCC Chair in January 2026.

Key outcomes and recommendations - Data Management System

NPFC-2025-SC10-Final Report, NPFC-2025-SC10-WP12

- SWG Data advanced the development of the NPFC SC database, including database architecture, user roles, confidentiality provisions, and harmonized templates (**NPFC-2025-SC10-WP12**).
- SWG also reviewed the draft CMM on Minimum Data Standards, and achieved significant progress on defining data types, developing reference code lists, and outlining implementation steps (**NPFC-2025-SC10-WP12**).
- The SC recommends further revising the draft CMM on Minimum Data Standards while considering SWG Data's review and Members feedback (see Annex L of **NPFC-2025-SC10-Final Report**)

Key outcomes and recommendations - Data Management System

NPFC-2025-SC10-Final Report, NPFC-2025-SC10-WP15, NPFC-2025-SC10-WP12

- SC adopted a centralized data call for submission deadlines for stock assessment analyses and will work on operationalizing it for use in 2027 after reviewing details at SC11 (**NPFC-2025-SC10-WP15**).
- The SC Chair has requested a new 3-alpha asfis code from the FAO for managing Japanese sardine data.
- The SC recommends Members update the data shared by the SC and its subsidiary bodies in accordance with their work plans
- The SC seeks guidance from the Commission on making all annual catch and effort data publicly available

– even data that are from fewer than three vessels –

to enhance the NPFC's transparency and make the data more accessible for domestic stock assessments, including Japan's domestic assessments of Blue mackerel (BM) and Japanese flying squid (JFS).

Key proposed Scientific Projects for 2026-27

Annex M, NPFC-2025-SC10-Final Report

Project	Details	Time	Funding	Priority
SC Database	Database for scientific data	2026-2027	**VCF fund**: Up to 50,000 EUR (confirmed) (Or **SC fund**: Up to 9.2 mil JPY)*	Highest
PICES Annual Meeting	Travel support for an SC participant to participate in PICES Annual Meeting	Annual	SC fund: 0.75 mil JPY (5,000 USD)	Medium
PICES/ICES/FAO Small Pelagic Fish Symposium	Co-sponsorship of the symposium (travel support for an SC participant)	2026-2027	SC fund: 0.75 mil JPY (5,000 USD)	High
Other science meetings / capacity development	Training for capacity building or travel support to attend relevant science meetings	Annual	SC fund: 0.75 mil JPY (5,000 USD)	Lowest

Key outcomes - Collaboration with PICES

NPFC-2024-SC09-OP06, NPFC-2025-SC10-OP05, NPFC-2025-SC10-Final Report

- NPFC – PICES Framework for Enhanced Scientific Collaboration in the North Pacific for 2025–2029
- NPFC representation on:
  - PICES Working Group on Ecology of Seamounts (WG 47) – disbanded at PICES 2025
  - PICES Working Group on Deep-sea Connectivity among Seamounts(WG 56)
  - joint PICES/ICES Working Group on Sustainable Pelagic Forage Communities (WG 53)
  - SC endorsed the invitation to co-sponsor the PICES/ICES/FAO International Symposium, entitled “Navigating Changes in Small Pelagic Fish and Forage Communities: Climate, Ecosystems, and Sustainable Fisheries,” on May 4–8, 2026, in La Paz, Mexico (**NPFC-2024-SC09-OP06**).

- The SC re-affirmed its support for implementation of the BECI project, which will provide valuable information for the SC’s analyses, including those related to climate change (**NPFC-2025-SC10-OP05**).

Key Outcomes – Collaboration with FAO

NPFC-2025-SC10-09-OP01, NPFC-2025-SC10-09-OP02, NPFC-2025-SC10-Final Report

2025 Highlights:

- symposium on Applying the Ecosystem Approach to Fisheries Management in ABNJ (March 2025)
- Workshop on Cross-Sectoral Interactions with Deep-Sea Fisheries in ABNJ (September 2025)
- conservation of deepwater sharks ● mapping of deep-sea fisheries ● data-limited stock assessments
- climate change consultancies ● workshops on the precautionary approach

2026 Anticipated Activities:

- a publication on VME identification methods
- a publication on the precautionary approach
- the development of data-limited assessment methods
- an in-person workshop on EAFM, climate change, and the precautionary approach
- digital deepwater shark identification guide

Key Outcomes – Collaboration with FAO

NPFC-2025-SC10-Final Report

- The SC Chair participated in the **Workshop on Cross-Sectoral Interactions with Deep-Sea Fisheries in ABNJ** (September 2025)

Key workshop topics for NPFC:

- meaning of the Agreement on Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Agreement) “not undermining the effectiveness and objectives” of RFMOs
- potential interactions between deep-sea fishing and deep-sea mining

- As a representative of the NPFC, the SC Chair emphasized the importance of coordination with NPFC and the value of **applying spatial-optimization software** for identifying key areas to protect biodiversity while allowing deep-sea fisheries and potentially other sector activities in the NPFC Convention Area.

Scientific Committee (SC)

Chair: Dr. Janelle Curtis (Canada); **Vice-Chair:** Dr. Jie Cao (China)

Key recommendations

NPFC-2025-SC10-WP02 (Rev 1), NPFC-2025-SC10-WP19, NPFC-2025-SC10-WP06(Rev1), NPFC-2025-SC10-Final Report

- Endorse SC's minor revisions to its TOR (**NPFC-2025-SC10-WP02(Rev 1)**).
- Endorse SC's 2025-2029 rolling 5-year research plan (**NPFC-2025-SC10-WP19**).
- Endorse SC's 2025-2029 rolling 5-year work plan (**NPFC-2025-SC10-WP06(Rev 1)**).
- Endorse the proposed scientific activities and projects (**Annex M of NPFC-2025-SC10-Final Report**).
- Agree to share data for scientific activities in accordance with the SC Research Plan and SC Work Plan.
- Endorse Dr. Jie Cao (China) as incoming SC Chair.
- Consider adoption of the SC10 report.
- Consider the species summary documents (https://www.npfc.int/species-summaries) and stock status summaries as reference information when taking decisions on the management of the NPFC priority species.

Key recommendations – SC Meeting Time and Location

NPFC-2025-SC10-Final Report

Consider SC's suggested meeting schedule for 2026-27:

- The SC agreed to change the annual timing of data preparation and stock assessment meetings to reduce the period of time between when fishery data become available and stock assessments are completed.
- The SC's subsidiary bodies will hold informal virtual meetings as needed to check progress, prepare data for stock assessments, and plan intersessional work.
- Members are invited to consider hosting scientific meetings in the 2027 operational year and inform the Secretariat, preferably by summer 2026.

Tokyo, Japan (Hybrid)

- **SSC JS01:** 26-28 July
- **SSC NFS04:** 28-30 July

Kobe, Japan (Hybrid)

- **TWG CMSA13**: 11-14 January
- **SSC BFME07:** 15-17 January
- **SSC PS18:** 19-22 January
- **SC110**: 23-26 January

Virtual (WebEx)

- **TWG CMSA12:** early November
- **SSC JS02:** October-December, TBD
- **SSC PS17:** 15-17 December

Scientific Committee (SC)

Chair: Dr. Janelle Curtis (Canada); **Vice-Chair:** Dr. Jie Cao (China)

SC10, 16-19 December 2025
Nagoya, Japan

Comments? Questions? Suggestions?