



ISC24 Activities Since SC19

John Holmes and Robert Ahrens

ISC Chair and Vice-Chair

<https://isc.ac.affrc.go.jp>

SC20

August 14-21, 2024

Manila, Philippines



Outline

- Stock status & conservation information
 - New assessments:
 - Pacific Bluefin Tuna – [SC20 Agenda #4.3.1](#)
 - Shortfin Mako Shark – [SC20 Agenda #4.5.3](#)
 - Existing information:
 - NPO ALB, WCNPO MLS, NPO SWO, BUM, NPO BSH
- Responses to requests for scientific information
 - Includes projections to support WCNPO MLS rebuilding plan – [SC20 Agenda #4.4.2.2](#)
- WCNPO MLS external peer review process – [SC20 Agenda #4.4.2.1](#)
- Incorporating Climate Change Information into Stock Assessment Information and Advice
- ISC Chair and Vice-Chair Election Results



Other Species – Forwarding ISC23 Information

Stock	Last Assessment	Reference Points	Stock Status
NPO ALB	2023	Yes	Not overfished, not experiencing overfishing relative to dynamic SSB_0 reference points
BSH	2022	No	Not overfished, not experiencing overfishing relative to MSY-based reference points
NPO SWO	2023	Yes	Not overfished, not experiencing overfishing relative to MSY-based reference points
NPO BUM	2021	No	Not overfished, not experiencing overfishing relative to MSY-based reference points
WCNPO MLS	2023	Yes	Overfished and experiencing overfishing relative to dynamic SSB_0 reference points

These stocks were not assessed in 2023-24. No new information is available. Stock status and conservation information is from their last assessments is forwarded by the ISC24 Plenary



Requests for Science Information

North Pacific Albacore

- Define exceptional circumstances leading to the suspension or modification of the adopted harvest strategy - Preliminary results in 2023, completed in 2024 (see **ISC24/ANNEX/08/Attachment 5**). Three elements:
 1. Stock and/or fleet dynamics beyond previously observed ranges,
 2. Data needed for assessment no longer collected or not appropriate,
 3. Implementation differs from prescribed by HCR.
- Advice on how fishing intensity should be translated to management controls (catch or effort) under the adopted harvest strategy - Changes in fishing intensity can be translated to catch for all fleet groups; changes in fishing intensity can be translated to effort for surface fleets only (see **ISC24/ANNEX/08/Attachment 6**).
- Pacific Bluefin Tuna – **NC20 Agenda #2.1**
 - 6 additional harvest scenarios requested by JWG included as appendix in stock assessment (**ISC/24/ANNEX/13, 13A**) to assist JWG discussions
- WCNPO Striped Marlin – **SC20 Agenda #4.4.2.2**
 - 10 projection scenarios (6 catch, 4 fishing mortality) to support rebuilding plans for the WCNPO MLS stock based on 2023 assessment (see **ISC/24/ANNEX/09** for projection results)
 - 8/10 scenarios can meet the rebuilding target (rebuild to 20%SSB_{F=0} by 2034 with a 60% probability) with small decreases in catch relative to recent average levels;
 - F_{MSY} and $F_{2018-2020}$ failed to meet the rebuilding target
 - New projection scenarios do not change existing stock status and conservation information provided in 2023.



WCNPO MLS external peer review process

- 2023 WCNPO MLS benchmark stock assessment reviewed by Drs. Hiromu Fukuda, Simon Hoyle, and Ian Stewart (IPHC) supported by the review chair Dr. Robert Ahrens (**ISC/24/ANNEX/11**).
- Goal was to improve the stock assessment and the presentation of the stock assessment results. Guided by comprehensive Terms of Reference focusing on technical aspects of the model, inputs, outputs, research needs and communication of the package through the assessment report.
- In-person review meeting took place April 15-19, 2024, at the Institute of Oceanography, National Taiwan University (IONTU), Chinese Taipei.
- The BILLWG has compiled responses to reviewer recommendations and was tasked by ISC24 Plenary to present their responses and action plan to the ISC25 Plenary.
- ISC24 Plenary discussed institutionalization of this external process and noted the close coordination with the WCPFC Secretariat as a potential model. The current ad hoc approach to funding requires a more permanent approach.
- Next peer review to focus on PBF; sometime between completion of the MSE in 2025 and the start of the next benchmark stock assessment currently scheduled for 2027. This scheduling imposes a heavy workload on members of the PBF WG.



Climate Change

- All ISC Member Countries engaged in climate change research & adaptation; some countries more advanced than others
- WG efforts to incorporate climate change related information into their work.
 - Differences in effects related to differing life histories were recognized.
 - Lack of data is a major concern and may become more acute as fishery-dependent data becomes more limited for a variety of reasons.
 - Need for greater collaboration in data gathering to bridge these gaps.
- ISC Working Groups tasked by ISC24 Plenary with compiling information on:
 1. the ways in which they have begun to incorporate climate considerations into ISC stock assessments; and
 2. the data they believe would be required in order to do so in the future.
- Information will support framework development at ISC25.



ISC Chair and Vice-Chair Elections

Incoming Chair: Robert Ahrens
(USA – NOAA/PIFSC)

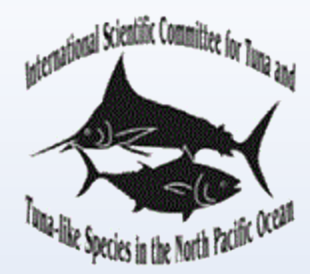


Incoming Vice-Chair: Shuya
Nakatsuka, (JPN – JFR&EA/FRI)



ISC Workplans, 2024-25

- BSH indicator analysis conducted and results reported to ISC25
- First iteration of MSE for Pacific Bluefin Tuna to be conducted and results reported to ISC25 and the Joint WG
- Exploring and formalizing the use of 'Open Science' tools and approaches in conducting stock assessment and other activities
- Continuing to work on incorporating climate change considerations into stock status and conservation information
- All Working Groups exploring improvements to stock assessment modeling and process
- ISC25: June 17-20, 2025; Republic of Korea



QUESTIONS?