

NPFC-2025-COM09-OP09

Observer Paper submitted by the Deep Sea Conservation Coalition (DSCC) to the 9th Meeting of the NPFC Commission 24-27 March 2025

**Abstract:** An observer paper from the Deep Sea Conservation Coalition with recommendations for actions by Members at the 9th Meeting of the Commission



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## The Observer Paper of the Deep Sea Conservation Coalition (DSCC) to the 9th Annual Session of the North Pacific Fisheries Commission meeting in Osaka, Japan

On the 10th Anniversary of the establishment of the NPFC, the Deep Sea Conservation Coalition (DSCC) encourages the 9th Meeting of the Commission to take the opportunity to identify and overcome obstacles to enable effective implementation by the NPFC of the relevant paragraphs of UN General Assembly Resolutions 61/105, 64/72, 66/68, and 71/123 to protect vulnerable marine ecosystems from the significant adverse impacts of destructive fishing practices. It can do so by:

- Closing the Northwest Hawaiian Ridge (NWHR) and Emperor Seamount Chain (ESC) to all bottom trawling fishing activities until the Small Scientific Committee on Bottom Fish and Marine Ecosystems (SSC BF-ME) completes its program of work and additional scientific work called for in UNGA resolutions, specifically: conducting habitat Suitability Modeling (HSM) and mapping VME connectivity, including all associated and dependent species; adopting a robust vulnerable marine ecosystem (VME) restoration plan; and ensuring the full rebuilding and recovery of target fish stocks.
- 2. Updating bottom fisheries impact assessments on the basis of the above, including conducting comprehensive surveys of the NWHR/ESC for the identification, description and mapping of VMEs known or likely to occur in the fishing area, as required under Annex 2.5(5) of CMM 2024-05.
- 3. Mandating the Scientific Committee to evaluate and consider all possible approaches for identifying VMEs, ensuring consistency with CMM 2024-05 and the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.
- 4. Adopting a VME closure for the entire Yuryaku Seamount to protect the full extent of its ecologically vulnerable communities, as proposed by the United States during the 5th SSC BF-ME and the 9th Scientific Committee meeting (NPFC-2024-SC09-Final Report, Annex H),

### The Global Context for NPFC action

Since 2006 significant progress has been made in the implementation of conservation measures and regulations to manage the impacts of bottom-contact fishing, including bottom trawling, on seamounts on the high seas across all ocean regions. Nonetheless, the Second UN World Ocean Assessment, adopted in 2021, concluded that "Fishing, especially bottom trawling, constitutes the greatest current threat to seamount ecosystems" (UN World Ocean Assessment II, Volume 1, Chapter 7L: Seamounts and pinnacles). This finding, coming seventeen years after the

adoption of UN General Assembly (UNGA) Resolution 59/25 and fifteen years after the adoption of Resolution 61/105, underscores the urgent need for further actions to be taken to sustainably manage deep-sea fish stocks and protect marine biodiversity.

A key commitment made by States under the UNGA resolutions is to conduct impact assessments of deep-sea fisheries on the high seas. These assessments are essential to ensuring that bottom fisheries are managed to prevent damage to deep-sea ecosystems and biodiversity. States and RFMOs are to ensure that the impact assessments "are reviewed periodically and are revised thereafter whenever a substantial change in the fishery has occurred or there is relevant new information" (UNGA resolution 77/118; Paragraph 213 (b)). This and other commitments, along with the International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, have been incorporated in the NPFC's CMM 2024-05 on bottom fisheries. The CMM requires that the best available scientific and technical information on the current state of fishery resources is obtained alongside baseline information on the ecosystems, habitats and communities in the fishing area, against which future changes are to be compared; and the identification, description and mapping of VMEs known or likely to occur in the fishing area (FAO Guidelines para 47 ii & iii).

Over recent years, three major global agreements have been adopted by consensus to protect, conserve and ensure the sustainable use of marine biodiversity in areas beyond national jurisdiction. These are:

- 1. **The UNGA Sustainable Fisheries resolution 77/118** adopted in December 2022. It highlights the importance of protecting deep-sea biodiversity by protecting VMEs "including their associated and dependent species" and "protecting and conserving biodiversity, including beyond vulnerable marine ecosystems".
- 2. The **Kunming-Montreal Global Biodiversity Framework,** adopted by the 15<sup>th</sup> Conference of Parties of the Convention on Biodiversity in December 2022. It calls on States to take urgent action to halt and reverse biodiversity loss by 2030 (Section B. Purpose).
- 3. The Agreement on Marine Biodiversity of Areas beyond National Jurisdiction (BBNJ Agreement) adopted in June 2022. It establishes as an objective "(ensuring) the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction" and calls for Parties to the Agreement to be guided by "an approach that builds ecosystem resilience, including to adverse effects of climate change and ocean acidification, and also maintains and restores ecosystem integrity, including the carbon cycling services that underpin the role of the ocean in climate" (Articles 2 and 7(h) of the Agreement A/CONF.232/2023/4).

Additionally, the UN Fish Stocks Agreement (UN FSA) Resumed Review Conference (May 2023) stressed the importance of the implementation of the UNGA bottom fishing resolutions, including assessing impacts on VME associated and dependent species in the context of the implementation of the UN FSA obligations. Protecting biodiversity in the marine environment is a key obligation under the UN Fish Stocks Agreement (Article 5(g)) and the NPFC convention text (3(e)), as are additional obligations to assess impacts of fisheries on associated and dependent

species and species belonging to the same ecosystems where fishing is permitted to occur, and to protect habitats of special concern, as well as to take measures to prevent overfishing.

Also of relevance to the work of the NPFC is the UN Decade on Ecosystem Restoration (2021–2030) designated by the UN General Assembly, and Sustainable Development Goal 14, Target 2 which commits states to strengthening the resilience of marine ecosystems and taking action for their restoration.

## **Proposed Lines of Action**

### I. Updated NPFC Impact Assessments

NPFC member states have endorsed the multiple commitments outlined above. In addition, members have legal obligations under the UNFSA and the NPFC Convention text, both of which establish the basis for the adoption of further measures to prevent damage to deep-sea ecosystems and biodiversity.

Several global studies have highlighted the high ecological significance and conservation value of the Emperor Seamount Chain as a biodiversity hotspot. Furthermore, the region has been recognized as an ecologically or biologically significant area (EBSA) by the Conference of the Parties to the Convention of Biological Diversity.

In 2008, four Contracting Parties to the NPFC conducted impact assessments of bottom fishing activities. Since then, numerous scientific surveys have shown that VMEs and VME indicator species occur, are likely to occur, or have occurred throughout the Northwest Hawaiian Ridge and Emperor Seamount Chain where bottom fishing is currently permitted. These surveys have also documented significant adverse impacts (SAIs) on VMEs, along with evidence of coral ecosystem regeneration in areas previously bottom trawled but closed to such activities for several decades.

The post 2008 surveys and research, including those of Dr Amy Baco-Taylor, have significantly advanced the scientific understanding of the impacts of deep-sea fisheries along the Northwest Hawaiian Ridge and Emperor Seamount Chain. Dr Baco-Taylor's presentations to the NPFC, including at the 2024 meetings of the SSC BF-ME and the Scientific Committee, have provided evidence both of how deep-sea fisheries impact ecosystem integrity and the potential for recovery in areas that have been closed to fishing activities for extended periods.

# In light of all of the above, the DSCC urges NPFC Parties to recognize the need to conduct updated impact assessments of the bottom fisheries on the NWHR and Emperor Seamount Chain.

Updated impact assessments are essential if political commitments and legal obligations to conserve biodiversity in areas beyond national jurisdiction are to be fulfilled in the North Pacific. The DSCC recommends closing all along the Emperor Seamount Chain to bottom trawl fishing until new impact assessments are completed and reviewed in light of the new scientific information that has emerged since 2008. Such actions would represent a significant and

meaningful contribution by the NPFC to implementation of global agreements aimed at conserving marine biological diversity in areas beyond national jurisdiction.

#### II. Proposed Yuryaku VME closures

As noted by the United States at the Scientific Committee meeting in December 2024, the small closures proposed by Japan for Yuryaku Seamount do not reflect the extensive, peer-reviewed scientific studies that have identified VMEs across many areas of this seamount. Surveys conducted by U.S. scientists in 2021 and 2022 for example, revealed extensive reef areas just outside Japan's proposed closure zones, raising concern about the criteria and methodology Japan has used to determine which areas to protect and which to exclude.

A key issue is the methodology and scientific rationale presented in Japan's paper (NPFC-2024-SSC BFME05-WP11 (Rev. 1)). For example, visible VME patches were observed in GoPro footage but not considered to be VMEs worthy of protection, despite the camera's highly restricted field of view. This suggests that Japan's approach may not be as comprehensive as other methods previously presented to the SSC BF-ME, such as those outlined in NPFC-2022-SSC BFME03-OP02.

The SWG has reviewed Global Habitat Suitability Models and concluded that the Tong et al. (2023) habitat suitability model for scleractinian corals had a strong correlation with observed data, indicating that it is a reliable tool for predicting suitable habitat in unexplored areas of the NPFC Convention Area. According to the model, nearly the entire area of Yuryaku at depths shallower than ~750 m consists of highly suitable habitat (defined as >75% suitability) for at least two of the four reef-forming Pacific scleractinian coral species analyzed. In certain areas, the model predicted high suitability for three to four species. This strongly suggests that an extensive portion of Yuryaku constitutes a "likely VME," warranting protective action in accordance with UNGA resolutions and FAO Guidelines. This quite possibly would be reinforced if the distribution of additional habitat forming species were modeled. The methodology and expert-derived thresholds applied by Japan appear to have overlooked the significant VME areas noted in the 2023 report - not only on Yuryaku but also on Koko and Kammu Seamounts.

Furthermore, Japan's failure to identify VMEs in its surveys from 2021 to 2024 raises significant concerns. Peer-reviewed scientific literature based on Autonomous Underwater Vehicle (AUV) surveys conducted in 2014–2015 recognized VMEs on Koko, Kammu, and Yuryaku Seamounts. The discrepancy between these findings and Japan's suggests that the VMEs documented in earlier studies may have been lost to fishing activities over the 7-9 years between survey periods. If true, the discrepancy between 2014-2015 and 2021- 2024 surveys would constitute SAIs on these sites, suggesting the urgent need for conservation measures to protect all of Yuryako seamount.

#### iii. The Recovery of Overfished Stocks

Current research confirms that NPFC stocks targeted by bottom trawlers are overfished, reinforcing the need for sustained protective measures (NPFC, 2023, 2024). A recent SSC BF-ME presentation by invited experts Maite Pons, Ricardo Amoroso, and SWG NPA-SA Chair Kota Sawada (NPFC-2024-SSC BFME05-WP09) highlighted another significant issue: trawl fishing for slender armorhead disproportionately captures reproductively immature

individuals, resulting in a pronounced size-selective gear curve. A fundamental principle of fisheries science is that targeting fish before they can reproduce undermines population sustainability. While the expert-led discussion focused on gear selectivity, the key concern remains—bottom trawling for slender armorhead directly impacts stock recovery by removing immature fish.

Article 3 (f) of the NPFC convention text clearly establishes the obligation to take action, individually or collectively, to prevent or eliminate overfishing and ensure that levels of fishing effort or harvest levels are based on the best scientific information available and do not exceed those commensurate with the sustainable use of the fisheries resources. Articles 3(a) and 3(b) further obligate the NPFC to ensure the optimum utilization and long term sustainability of fisheries resources and measures and the maintenance or restoration of fisheries resources to levels capable of producing maximum sustainable yield.

# The DSCC believes that NPFC obligations and scientific findings of overfishing align and support the proposal to close bottom trawling on the Emperor Seamount Chain and Northwestern Hawaiian Ridge.

### iv. Enhancing Integration of Best Available Science and Transparency

As noted above, the research of Dr. Amy Baco-Taylor has provided comprehensive assessments of areas where VMEs are known or likely to occur along the Emperor Seamount Chain. The DSSC urges the NPFC to recognise the methods used by Dr Baco-Taylor, formally mandating their adoption as an approved methodology by the Scientific Committee.

In doing so, the Commission will ensure a science-based approach to VME identification.

Furthermore, the DSCC urges the Commission to enhance transparency by directing the Scientific Committee to:

- Make publicly available the underlying data from scientific surveys used to identify VMEs, including those utilized by Japan in the study NPFC-2024-SSC BFME05-WP11 (Rev. 1).
- Grant full access to scientists and observers to any existing VME data compilations, including data from surveys, historical and current VME indicator data, and information on associated and dependent species collected from bottom fisheries.

Ensuring full transparency and accessibility of VME data will strengthen scientific collaboration, improve conservation efforts, and support data driven and evidence-based decision-making within the NPFC framework.

#### Conclusion

Like the global ocean governance community, the NPFC stands at a crossroads. As it marks the 10th anniversary of its establishment and reflects on the 20th anniversary of UN General Assembly Resolution 59/25—which laid the foundation for the NPFC—it faces a choice. The Commission can adopt a forward-looking, precautionary approach to the protection of vulnerable marine ecosystems, aligned with global commitments to both sustainably manage fish stocks and halt and reverse biodiversity loss, or it can continue to take an approach to VME protection that will only

ever result in small closures amidst the continued destruction of SAIs. The NPFC has before it a proposal for protection that would align its measures with UNGA resolutions, the text of the NPFC Convention, and international law. On the celebration of its 10th anniversary, the DSCC calls on the NPFC to demonstrate leadership by strengthening its conservation mandate through the meaningful protection of vulnerable marine ecosystems in the North Pacific.