INTER-AMERICAN TROPICAL TUNA COMMISSION

SCIENTIFIC ADVISORY COMMITTEE

16TH MEETING

La Jolla, California (USA)
02-06 June 2025

SUMMARY REPORT

1. Opening of the Meeting

The 16th Meeting of the SAC was opened by the Chair, Dr. Arnulfo Franco with a welcome to all attendees. Participants were reminded to submit via email comments, presentations, or declarations for formal inclusion in the minutes. A list of attendees of SAC-16 can be found in Appendix A.

2. Adoption of Agenda

The provisional agenda was presented, outlining the week's work plan, with morning sessions dedicated to presentations and afternoon sessions to discussions. The agenda included discussions on tropical tunas (stock assessments, data collection, development of harvest strategies), FADs, temperate tunas and other species, ecosystem and bycatch, and management strategies, culminating in SAC recommendations. A proposal to circulate a compilation of all staff recommendations and in this and future meetings of the SAC was made. That was approved without revision.

3. The fishery in the EPO

a. The tuna fishery in 2024 (SAC-16-01)

The IATTC Coordinator of Scientific Research, Dr. Alexandre Aires-da-Silva, provided an overview of the tuna fishery in the Eastern Pacific Ocean (EPO) in 2024, serving as background for discussing staff recommendations for management. Over the last 10 years, average total retained catches of tuna were approximately 745,000 tons, composed primarily of skipjack tuna (SKJ, 43%), yellowfin tuna (YFT, 35%), and bigeye tuna (BET, 12%). Preliminary estimates for 2024 indicated a historic record high of over 1 million tons of tuna caught, 40% higher than the 10-year average. This is largely due to SKJ catches being 100% above the 10-yr average.

The purse seine fishery dominated among all fishing gear types, accounting for about 86% of total tuna catches over the last decade, with the longline fishery contributing about 9%. Longline effort has been relatively stable or slightly declining over the last 15 years. Historically, BET comprised about 90% of longline catches before the expansion of the floating-object fishery in the mid 1990s, but this has shifted to 30-40% over the last 20 years. Purse seine fleet capacity, after a post-COVID reduction, was at about 260,000 cubic meters in 2024, nearing its pre-COVID peak. Total fishing effort (number of sets) increased by 5% in 2024, reaching around 32,000 sets. While floating object sets have shown an increasing trend, there was a 12% drop in 2024 due to a strong increased number of unassociated sets (+77%).

In 2024, Ecuador accounted for 43% of total tuna catches, Mexico 19%, and Panama 15%. Species-specific catches in 2024 showed YFT at 294,000 tons (20% higher than the 10-year average), mainly from dolphin-associated fisheries (61%), with 2025 expected to be an "extraordinary year" due to strong 2021 recruitment. SKJ reached a historic record of about 645,000 tons (doubling the average), mostly from floating object sets (72%). BET catches were 52,000 tons (43% lower than average), greatly attributed to the effectiveness of the Individual Vessel Threshold (IVT) measure implemented in 2022 to reduce BET catches on floating-object sets.

Discussion:

- Mexico suggested including South Pacific Albacore in future presentations to the SAC under this heading, and other participants agreed that the submission of longline from the SPA fishery was important.
- The SAC participants also discussed efforts to improve longline CPUE and indices of abundance, as well as the impacts of El Niño on aspects recruitment- particularly yellowfin tuna.

4. Tropical tunas: stock assessments and data collection

a. Stock Status Indicators (SAC-16-02)

Dr. Mark Maunder presented stock status indicators for BET, YFT, and SKJ, using data from purse seine and longline fisheries from 2000 onwards. Indicators included number of sets, catch by species and set type, catch per set, and average length. YFT in the dolphin associated fishery showed an increasing CPUE trend since 2018. BET catch from longline fisheries was reduced to 60% of its 2000 average. A new joint longline index (Japan and Korea) showed an increasing trend for YFT since 2018 and improved precision for both YFT and BET.

Discussion:

- Japan inquired about the online availability of the joint longline indices document and differing trends between joint and nominal YFT indices. Dr. Carolina Minte-Vera explained that combining Japanese and Korean data improved the precision of the YFT relative abundance trend, decreasing both the variance and the mean of the trend in the latest period.
- The United States asked if BET longline CPUE had increased due to reduced juvenile mortality. Dr. da Silva confirmed that there has been a recent decline in BET fishing mortality (*F*) coinciding with the implementation of the Individual Vessel Threshold (IVT) measure. A pulse would be expected to start to show in the longline fishery in late 2024 and 2025.
- Participants also discussed YFT/SKJ CPUE increases and whether these were more likely due to increases in biomass or targeting shifts. Dr. da Silva indicated that the staff is carefully looking into these trends. At this stage, it appears that the most likely source of increase in YFT CPUE was favorable environmental conditions and strong recruitment.

b. Yellowfin (YFT) benchmark assessment (SAC-16-03)

Dr. Carolina Minte-Vera presented the 2025 YFT benchmark assessment, an integrated statistical age-structured assessment using Stock Synthesis. Spatial structure is the main uncertainty. The assessment included two hypotheses of spatial structure, one that considered the whole EPO, fit to a purse-seine based index of abundance, and another that split the EPO into a northeast (NE) and a southwest (SW) region, with separate models for each region, fit to purse-seine and longline indices of abundance respectively. The regions were delimited using length composition data and catch per set of small fish. Models for each hypothesis further incorporates spatial information through an "areas-as-fleet" approach. Other key developments included new growth and natural mortality models fitted to otolith and tagging data, and updated reproductive biology. Emphasis was placed on weighting abundance indices and length frequency data. New indices included a suite of dolphin associated purse seine indices and, for the first time, a multi-fleet (Japan and Korea) longline index, a combination that reduced uncertainty in the longline index and allowed it to be used to fit the SW model. Risk analysis results indicated a 0% probability of breaching the limit reference point for fishing mortality or spawning biomass, with biomass well above the limit for all scenarios considered. A comprehensive tagging program was suggested for future improvements, given the strong spatial structure of yellowfin tuna in the EPO.

Discussion:

- Japan questioned how it was concluded that the spatial structure assumption improved model performance given that was no direct metric to compare the EPO-wide models versus the region

specific models for NE and SW and in the EPO-wide models. there Dr. Minte-Vera noted there was conflict between size composition data (preferring higher biomass) and CPUE (supporting lower biomass). In addition, she clarified that if the biomass estimated from region-specific models were combined, it was lower than that estimated biomass for the models for whole EPO, indicating that a much larger abundance was needed to accommodate conflicting data sets in the EPO-wide models. The region-specific models estimated different recruitment trends from the regional length frequencies. For precautionary management, it is important to consider the regional models and recognize that the high biomass estimated in the EPO-wide models maybe results from model misspecification.

- The European Union expressed concern that length composition data might be increasing the scale of the EPO-wide models and questioned the realism of high natural mortality scenarios and the arbitrary nature of the 1% effort creep level.
- Mexico agreed with spatial differences in YFT parameters but stressed that "stock" is an administrative, not biological, definition, making separate management for mixed regions challenging.

c. Skipjack (SKJ) risk assessment (SAC-16-04)

Dr. Rujia Bi presented the risk assessment for skipjack in the EPO. The risk analysis is based on the 2024 SKJ benchmark assessment results. The risk analysis indicated a 4% probability that the spawning biomass at the start of 2024 was below 30% of the unexploited level, according to the dynamic SBR ($dSBR_{MSY\text{-}proxy}$). Also, it indicated zero probability that average fishing mortality during 2021-2023 exceeded the level associated with the target biomass ($F_{MSY\text{-}proxy}$). With respect to the limit reference points, the risk assessment indicated less than 1% probability that the spawning biomass at the start of 2024 was below the limit reference point (S_{limit}). There was no discussion.

d. Improving the IATTC traditional purse-seine port sampling program (SAC-16-05)

Dr. da Silva presented the staff's proposal for an Integrated Port Sampling Program (IPSP), aiming to merge existing programs and improve data collection based on Resolution C-24-01 and external review recommendations. The IPSP proposes a probability sampling protocol, increased flexibility in trip/well selection, and enhanced within-well sampling coverage. Goals include providing fleet-level data with variance estimates, developing new catch estimation methods, maintaining services to support the Individual Vessel Threshold (IVT) measure to reduce BET catches, and refining morphometric relationships. The proposed budget for IPSP is similar to the 2025 EMP budget ($460,000 USD).

Dr. Cleridy Lennert-Cody provided further details on the proposed IPSP, clarifying its purpose to improve species and size composition data for fleet-level catch estimation and provide trip-level BET catch estimates to support the IVT measure. Improvements include probabilistic sampling, removing area/month constraints, and increased within-well coverage. The IPSP aims for ~70% trip coverage and ~20% well coverage. Data from IPSP can be post-stratified for comparability with data collected under traditional port sampling activities.

Discussion:

- Guatemala expressed serious reservations, citing a lack of clarity in financial objectives and the relationship between the Individual Vessel Threshold (IVT) measure and the proposed integrated sampling program. They also questioned the low sampling time allocated to current field office staff and suggested transferring sampling protocols to CPCs. Panama and Nicaragua indicated sharing many of these concerns. Guatemala provided the following statements for inclusion in the SAC-16 report:

  Guatemala strongly believes that this program would be acceptable if its sole purpose is scientific, provided that other lower-cost alternatives (such as CPCs managing the program) are also considered. Guatemala is convinced that the enhanced sampling has no essential value in terms of control, given that under current management provisions, the responsibility for catch

estimates lies with the CPCs. Port Sampling estimates are only one of several valuable inputs and have proven to be statistically close to the data in the Note of Sale. Therefore, due to financial constraints, Guatemala does not prioritize this project and would only consider it if external (non-budgetary) support is available.

Guatemala cannot join the consensus for the approval of this project due to its financial impact. It was noted that the Enhanced Sampling program had a lower cost (despite our concerns regarding the reasonableness of certain expenses and labor-related issues). Instead of reducing costs, the Integrated Program implies an increase of $60K in field office-related expenditures, raising the total from $400K to $520K.

- The United States supported the IPSP as a necessary update for data modernization and its potential to support the EM program, tagging program, and understanding the effects of the IVT measure.

5. Tropical tunas: development of harvest strategies

a. BET Management Strategy Evaluation (MSE) (SAC-16-06)

Dr. Mark Maunder presented the IATTC staff's proposed candidate harvest strategy for BET, clarifying reference points and guiding the consideration of alternative strategies. The approach is based on best available science and MSE from other tuna stocks. Reference points include Target (S_{msy}, F_{msy}, with 30% of unexploited spawning biomass (S_0) as a proxy target) and Limit (7.7% of equilibrium virgin spawning biomass). The 30% S_0 target is proposed as more globally consistent level and offering a larger buffer from the limit.

The Antigua Convention mandates maintaining or restoring populations to produce MSY. For BET, reducing catches is a likely objective. A model-based approach is recommended for the Harvest Control Rule (HCR) due to objectives tied to target reference points. A 3-year management period is suggested for stability. The staff-recommended HCR is simple, designed to achieve objectives, and ensures biomass fluctuates around the target, with action taken well before the limit. Fishing mortality would reduce linearly to zero as spawning biomass declines from 20% S_0 to 0% S0. Maximum change in closure days is 10 days. Exceptional Circumstances (ECs) are proposed as safeguards for unforeseen factors, including breaching the limit reference point, fishing mortality exceeding historical levels, or if the harvest strategy is no longer appropriate. Reduced BET closures would increase SKJ fishing mortality, making a new tagging program essential for maintaining a reliable SKJ assessment.

Discussion:

- Several delegations expressed concern regarding the IATTC staff recommendation that a harvest strategy be adopted in 2025, indicating that, in their view, adequate testing and consideration of the proposed strategy had not yet occurred. Multiple delegations also expressed concern with the proposed approach that breaching of limits would be treated as “exceptional circumstances.”

b. Staff recommendations for conservation and management: tropical tunas (SAC-16-11)

Dr. da Silva presented the staff's recommendations. The SAC’s view on these topics are reflected in Section 1 of the SAC’s recommendations to the Commission (SAC-16-11).

c. Strategic Science Plan (2026-2030): workplan for stock assessments and development of harvest strategies for the tropical tunas (SAC-16-07)

Dr. da Silva presented the proposed investigations for the staff under the next Strategic Science Plan (SSP) cycle (2026-2030).

Discussion:

- Some participants questioned whether the scope of the SACs consideration of the SSP (and other topics) should include matters of budget, or whether the proper role of the SAC should be to

help prioritize the work of staff with the understanding that endorsement of various programs and components are necessarily conditional upon the approval of funding through the budget process or otherwise.

6. FADS

Dr. da Silva presented the proposed staff's workplan on FAD research, focusing on improving data collection, understanding FAD effects on tuna populations and ecosystems, and developing management options. Dr. Jon Lopez detailed the plan, including optimizing FAD recovery programs and incentive systems.

a. Report of the FADs WG

The report and recommendations of the FAD WG were presented by the Chair, Dr. Josu Santiago and can be found in Appendix B

Discussion:

The methodology for approving recommendations from the ad hoc FADs working group was discussed. Dr. Santiago explained the SAC could endorse recommendations as is, or with modifications if consensus was reached. Documentation of minority positions was considered. Recommendation 5.6 on FADs was provisionally bracketed. The remainder of the Working Group's recommendations were endorsed by the SAC.

7. Temperate tunas and other species

a. Pacific bluefin tuna (PBF): MSE and harvest strategies (ISC and IATTC-WCPFC-NC JWG)

Dr. Josh Madeira, IATTC co-chair of the IATTC-WCPFC NC Joint Working Group on Pacific Bluefin Tuna (PBF), provided an update, noting the success of the previous year's meeting and significant progress in the PBF MSE. Dr. Shuya Nakatsuka, Chair of the ISC Bluefin working group, confirmed the MSE work was virtually concluded, pending final ratification by ISC. Dr. Hiromu Fukuda presented the PBF population projections which indicated an increase in spawning biomass with a high probability of exceeding the rebuilding objective. Participants took note that a recorded presentation by Dr. Desiree Tomasi is available online.

Discussion:

- China requested more detailed information on changes in catch and fishing effort and inquired about the notable decrease in average PBF tuna weight in 2022. Dr. da Silva explained that PBF availability in the EPO is subject to fluctuations influenced by environmental conditions and migratory patterns. Dr. Michelle Dreyfus (Mexico) added that the Mexican fleet's pursuit of larger tuna for fattening operations has contributed to increased average size in recent years.

b. North Pacific albacore (NP-ALB): harvest strategies (ISC)

Dr. da Silva presented an overview of North Pacific Albacore catches, mostly from the western and central Pacific, with recent EPO catches averaging approximately 8,000 tons, a notable decrease. Trolling is the predominant gear. The latest ISC stock assessment confirmed the population's healthy status. Staff recommendations focused on maintaining fishing intensity at or below fishing mortality reference points and considering criteria for exceptional circumstances.

Discussion:

- Canada and the United States expressed general support, emphasizing updating the harvest strategy to include exceptional circumstances.

c. South Pacific albacore: harvest strategies (SP-ALB): Harvest Strategies (WCPFC)

Dr. da Silva reported a considerable increase in recent SP-ALB catches within the EPO, primarily by longline. The latest SPC stock assessment concluded a healthy population status. IATTC staff

recommended continued population monitoring in collaboration with the SPC and favorably considering efforts to establish a joint working group with the WCPFC to coordinate management strategies and development of harvest strategies.

Discussion:

- Mr. Brad Wiley updated on the possible formation of an IATTC-WCPFC joint working group (JWG) for SP-ALB, with proponents of its creation highlighting the success of IATTC-WCPFC NC JWG for PBF as a precedent. Terms of reference and a detailed work plan are being developed jointly through an informal process that includes CPCs of both commissions.

Discussion:

- China, Canada, and the United States expressed strong support for establishing the joint working group. Canada also expressed interest in developing a specific data form for South Pacific Albacore.

d. Staff recommendations for conservation and management: temperate tunas (SAC-16-11)

Dr. da Silva presented the IATTC staff's recommendations for temperate tunas found in document SAC-16-11.

e. Strategic Science Plan (2026-2030): workplans for the temperate species (SAC-16-07)

Dr. da Silva outlined proposed strategic objectives for temperate species, including continuing stock assessments and monitoring shark species, dorado, and swordfish.

8. Ecosystem and bycatch

a. Sharks and rays

i. List of Ray species under the purview of the IATTC (SAC-16-08)

Dr. Shane Griffiths presented a preliminary list of 17 ray species interacting with IATTC fisheries prepared by IATTC staff, proposing 7 oceanic and epipelagic species as a provisional list due to higher interaction with tuna fleets.

Discussion:

- China questioned if high interaction implied vulnerability and inquired about next steps for monitoring. Dr. Griffiths clarified that vulnerability assessment is the next stage.
- Guatemala expressed concern about including gillnet fisheries and reaffirmed their stance to exclude them from related proposals. Mexico emphasized that the listed species interact with fisheries under Commission authority, but are not "under the authority" of the Commission per se, stressing that the Commission can take conservation but not management measures.
- No consensus was reached during the initial discussions, but the SAC revisited this topic in the context of the development of recommendations to the Commission and in Recommendation 6.1 endorsed, pursuant to Article VII of the Antigua Convention, the list of seven species recommended by IATTC staff.

ii. Characterization of longline fleets in the Convention Area (SAC-16-09)

Leanne Fuller presented a characterization of longline fleets in the Convention area, proposing three broad categories: large-scale, medium-scale, and small-scale coastal fisheries, detailing their general characteristics.

Discussion:

- Guatemala praised the work and committed to providing additional information, suggesting the work continue.
- China inquired about including hook numbers and somehow distinguishing for tuna species in the classification.

- Japan questioned considering mother ship operations separately.
- The United States showed interest in small-scale coastal fisheries, asking about gear-switching proportions and impact on sharks/bycatch. Staff explained they lack information on time proportion between gears and expect impact data from the ongoing ABNJ project.
- Peru asked about vessels fitting between categories. Ecuador suggested extending trip duration for medium-scale longliners and clarifying that shark is not a target species in Ecuador.
- Corimahi supported Ecuador's stance, emphasizing the negative socioeconomic impact of circular hooks in artisanal dorado fisheries.

iii. Guidelines for best handling and release practices for sharks (update) (SAC-16-10)

Dr. Melanie Hutchinson presented best practices for shark handling and release, noting their effectiveness in reducing mortality rates. Key recommendations for purse seine fisheries included prioritizing visible shark release using stretchers/cradles, and keeping whale sharks in the water. For all longline fisheries, recommendations focused on reducing vessel speed, keeping sharks in the water for gear removal, using dehookers, or cutting lines close to the hook. Prohibited practices included using towing lines or hooks on live sharks. An update to Resolution C-24-05 was recommended, as well as funding for training and education.

Discussion:

- Guatemala stressed reviewing language for stakeholder understanding, prioritizing crew safety, and reiterated their proposal for the use of "velcro" devices for release of large sharks. The European Union and Nicaragua supported the idea of a pilot program to investigate the effectiveness of "velcro" or harness gear, with an emphasis on crew safety. The United States deemed continued work on tail-lifting and safe handling protocols important. Dr. Hutchinson noted that studying post-release survival of sharks following use of "velcro" devices implies long-term tagging studies with the use of satellite tags, which will be expensive. Staff was asked to develop a research plan and budget for such a study in order to inform further discussion.

b. Climate change

i. Report on 1st Workshop on climate change

Dr. Dan Crear summarized the first virtual climate change workshop, which had 80 participants from 17 countries and 8 NGOs. The workshop addressed the main objective, scope, and framework of the climate change work plan. Key recommendations included ensuring climate resilience for fisheries, developing science-based conservation measures, and promoting implementation led by IATTC staff and relevant working groups. Priorities cover tuna, associated species, and vulnerable bycatch. The geographical scope is the entire IATTC Convention area, with multiple temporal scales. Implementation should be participatory, and IATTC should secure necessary resources, including extrabudgetary funding. The proposed framework has 7 steps, from defining objectives to monitoring effectiveness.

Discussion:

- Mexico suggested changing "ensure" in the main objective to "contribute".
- Japan asked about the relationship between the workshop and the Ecosystem and Bycatch Working Group, and the approval process. The Chair clarified that SAC prepares a response to the Commission after its analysis, and the Commission makes final decisions. The SAC later recommended that the Commission continue supporting and implementing the proposed climate change work plan.

c. Staff recommendations for conservation and management: ecosystem and bycatch (SAC-16-11)

Dr. da Silva presented the staff recommendations under the ecosystem and bycatch heading from Document SAC-16-11)

Discussion:

Japan provided the following statements for inclusion in the SAC-16 meeting report under this heading:

Seabirds:

Japan does not support the staff recommendation regarding the amendment of seabird measures. This is because this amendment is based on a proposal from a certain member at last year's WCPFC, which was opposed and not supported by many members at last year's WCPFC Commission meeting due to practical and safety concerns. While recognizing the need for revision of the seabird measures, Japan proposes to continue discussions between IATTC staff and relevant CPC scientists through means such as intersessional workshops, in order to consider appropriate measures that take into account practicality, safety, and the status of seabird populations.

Sea turtles:

Japan does not support the staff recommendation regarding the amendment of sea turtle bycatch mitigation measures. This is because, in the bycatch risk assessment of leatherback turtles using EASI-FISH, the analysis has made unrealistic assumptions about the effectiveness of bycatch mitigation measures, as Japan has frequently pointed out at the past Bycatch Working Group. Despite IATTC staff also acknowledging this issue, it is neither reasonable nor acceptable to propose revisions to the measures based on these results. Furthermore, at the 2nd circle hook workshop in this year, it was presented that changes to bait and hook types may not result in a reduction of leatherback turtle bycatch—as is the case with hardshell sea turtles—and that these combinations could have negative effects on other species, such as shortfin makos. In assessing the effectiveness of bycatch mitigation measures, it is essential to conduct a comprehensive evaluation that takes all of this information into account.

d. Strategic Science Plan (2026-2030): workplans on ecosystem and bycatch

Dr. da Silva continued his presentation of the proposed SSP for 2026-2030 without further discussion by participants.

e. Report of the Ecosystem and Bycatch WG

Dr. Manuel Correia, co-chair of the Permanent Working Group on Ecosystems and Bycatch (EBWG), presented EBWGs preliminary report and recommendations (Appendix C).

Discussion:

- SAC participants discussed at length the role of the EBWG and process for consideration of its recommendations and were not able to reach a clear, common understanding. The key point of discussion was whether all EBWG recommendations go directly to the SAC for possible endorsement for consideration by the Commission, whether EBWG recommendations not endorsed by the SAC were still sent to the Commission as EBWG recommendations, and whether and under what circumstances the EBWG could make recommendations directly to the Commission without consideration or endorsement by the SAC. Japan indicated that their interpretation of the EBWG TORs was that the EBWG could only make recommendations directly to the Commission in exceptional circumstances. The United States expressed doubt about that interpretation but said that they would need to check with their legal counsel before SAC-17 in order to have a more formal and definitive opinion. Guatemala expressed during the EBWG that their delegation could consider joining consensus on SAC endorsement of some of the EBWG recommendations, provided that the discussion could continue in the SAC, and with the understanding that the EBWG recommendations are intended for the consideration of the SAC; and that if this condition was not met, they would not be able to join consensus on the endorsement of any EBWG recommendations by the SAC.

- The SAC endorsed EBWG recommendations 1, 2, 3, 5, 8, 10 and 12 as presented. The SAC was unable to reach consensus to endorse EBWG recommendation 6 on best handling and release practices for sharks. Discussion of EBWG recommendation 4 on the list of 7 ray species recommended by IATTC staff (SAC-16-08) was deferred to Friday during the development of SAC recommendations, where it was ultimately endorsed by the SAC. The SAC also endorsed EBWG recommendations 7, 9 and 11 as well, after introducing some editorial changes to be reflected in the document containing the SAC recommendations to the Commission.

9. Staff recommendations (SAC-16-11)

Dr. da Silva presented the remaining staff recommendations contained in document SAC-16-11.

10. Other business

Canada requested that IATTC staff draft a brief paper for SAC-17, based on any additional input coming from the 103rd Meeting of the Commission, outlining the process for the SAC to review, edit and potentially endorse recommendations coming to the SAC from working groups. They also requested that the staff give a brief presentation on this topic at the start of SAC-17.

Guatemala stated that for future meetings, any scientific action or project presented to the SAC must include an assessment of its budgetary implications so that it can be properly considered by the CAF.

11. SAC recommendations

The SAC-16 recommendations to the Commission are attached in Appendix D.

12. Adjournment

The 16th Meeting of the SAC was adjourned at approximately 6:00 pm on 6 June 2025.

Appendix A

ASISTENTES - ATTENDEES

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Appendix B

INTER-AMERICAN TROPICAL TUNA COMMISSION

AD HOC PERMANENT WORKING GROUP ON FADS

9TH MEETING

La Jolla, California (USA)
28-29 May 2025

CHAIR'S SUMMARY REPORT

AGENDA

1. Opening of the meeting 2. Adoption of the agenda 3. Review of recommendations from the 8th meeting of the FAD Working Group 4. FAD data reporting established in Resolutions C-19-01 and C-21-04 5. FAD fishery indicators 6. Advances on biodegradable FADs in the EPO 7. FAD Register: potential benefits and modalities 8. Initiatives to reduce impacts of FADs fishing 9. Conclusions and recommendations 10. Other business 11. Adjournment the	FAD-09-01 FAD-09-02

The 9th meeting of the IATTC*'s ad hoc* Permanent Working on FADs was held in La Jolla, California (USA) on May 28 and 29, 2025. The meeting was chaired by Dr. Josu Santiago, in his capacity as Chair of the Working Group.

The list of participants is included in **Annex 1**.

The list of documents presented and discussed during the meeting is included below and can be found on the website of the 9th meeting of the Working Group, along with the corresponding presentations.

Meeting documents:

- FAD-09-01 - Floating object fishery indicators a 2024 report
- FAD-09-02 - Dynamics of Biodegradable and Conventional FADs in the EPO
- FAD-09-03 - Options for a FAD register

Informational documents:

- INF-A. Analyses of the regional database of stranded Drifting Fish Aggregating Device (dFADs) in the Pacific Ocean – 2024 update

Presentations:

- 9th Meeting of the Ad Hoc Working Group on FADs
- A novel deposit-refund system to reduce lost fishing gear impacts in the world's BioFAD impacts
- Characterizing drifting fish aggregating device design in the Hawaiian Archipelago from 2009-2025
- CIAT- ECOFADS TUNACONS Avances 2024 y 2025 ES
- FAD-09-01 Floating object fishery indicators - 2024 report
- FAD-09-02 Dynamics of Biodegradable and Conventional FADs in the EPO
- FAD-09-03 Options for a FAD register
- IATTC Naming System
- INF-A Stranded FADs
- Options to mitigate dFAD loss and abandonments
- RD-C Initiatives for the recovery of plantations in the Eastern Pacific Ocean-TUNACONS
- RD-E Programa Recogida Plantados ES
- RD-F Data Collection for Assessing Impacts of FAD Stranding Events
- Regional data collection program on FAD strandings an update

Under **item 8 of the agenda** on **initiatives to reduce the impact of fishing on FADs**, Mr. Gibbons Fly, Executive Director of the American Tuna Vessel Association (ATA), made a statement (see **Annex 3**) in which he proposed that FADs should not be deactivated when drifting south of 10 degrees south, considered the southern limit of the fishing zones, since deactivation prevents them from being tracked and monitored to see if they are heading for ecologically sensitive areas; and that these FADs should not be counted as active for the purposes of implementing the limits established, provided that no sets are made on them.

This statement was welcomed by the Group and the proposal was supported by several participants who took the floor.

On the issue of FAD recovery, the option of considering financial incentives (e.g., payment of a fee per FAD deployed) was also mentioned, but with the need to avoid a race to recover FADs even when they are not at risk of stranding.

Under **item 9 of its agenda**, the Working Group adopted several **conclusions and recommendations** for consideration by the Scientific Advisory Committee (SAC), the text of which is reproduced in the table in **Annex 2** of this summary report.

With no other matters to consider, the Working Group noted that its next meeting would be held in the days immediately preceding the 17th meeting of the Scientific Advisory Committee in May-June 2026.

Annex 1
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Annex 2

RECOMMENDATIONS OF THE 9TH MEETING OF THE AD HOCPERMANENT WORKING ON FADS

Consistent with its terms of reference established in Resolution C-19-01, Annex III, **the Ad Hoc Permanent Working Group on FADs**, in reporting to the Scientific Advisory Committee on the results of its 9th meeting, and in the framework of the process of coordination with that Committee and with the scientific staff in the identification and review of feasible FAD management measures, as a preliminary step prior to the presentation of recommendations to the Commission, **wishes to recommend that:**

1. On FAD data reporting

1.1. The IATTC scientific staff develop and propose improvements to the characterization of the causes for remote deactivation and reactivation established in Resolution C-24-01.

1.2. The IATTC scientific staff analyze in greater detail the data from observers and satellite buoys to propose methods to help adequately evaluate the uses/record of the causes for remote deactivation and reactivation to identify possible opportunities for improvement or updates.

2. On FAD fishery indicators

2.1. The IATTC scientific staff continue to refine the indicators, including additional indicators of interest (e.g., last buoy positions, quantification of strandings and collections) and prepare a guide with a description of each indicator that facilitate the interpretation and assessment of the implications of each indicator.

2.2. The Commission consider urging flag CPCs to ensure that fishing companies and buoy suppliers provide the IATTC with available historical information on vessel acoustic buoys received from the original users, including trajectory and biomass information, to prevent losing this data of enormous value to science, and particularly to stock assessments. The processing of this data will be subject to the Commission's rules on confidentiality

3. On biodegradable FADs

3.1. The SAC recommend that the Commission consider adopting measures to obtain the necessary data and resources, including by exploring strategic partnerships and alternative sources of funding, to enable analysis to be carried out to determine more accurately the final destination of unrecovered FADs.

3.2. Progress be made in analyzing the useful life of biodegradable FADs ("BioFAD"), or that, in addition to the information provided by observers in the EPO, the IATTC scientific staff provide the Group with a more in-depth analysis, taking into account the information on the positions of buoys associated with FADs as well as relevant information from WCPFC observers.

3.3. The IATTC scientific staff continue to deepen their analysis of the useful life of BioFADs in collaboration with the industry.

3.4. (a) Interested parties be encouraged to continue pursuing technical studies on biodegradable, natural, or bio-based materials, useful for the construction of FADs,
(b) The exchange of experiences be promoted through participatory workshops.

3.5. The IATTC scientific staff present to the Working Group an analysis derived from the compilation and evaluation of the certification options for bio-based materials which are used in FADs, and which will ensure that the new material and the final product do not contribute to the pollution of the marine environment.

3.6. CPCs and other entities be encouraged to engage in BioFADs trials provide more BioFAD data from broader regions of the EPO in a random fashion more adequate to making scientific comparisons.

3. On the FAD register
(a) Considering the review of the suitability of a FAD Registry in the IATTC area, no need has been identified by the Working Group to implement such a registry in the region (b) The pros and cons of the implementation of different methods for marking FADs be explored.
3. On FAD retrieval
5.1. (a) The SAC consider the relevance of recommending to the Commission that it assess the value of adopting the form and database for collecting data on stranded FADs to be developed by the scientific staff, as harmonized as appropriate with the form developed by the SPC-WCPF, including the identification of possible adjustments. (b) if a form is adopted for this purpose, its use be preceded by some type of workshop or practical training 5.2. The SAC consider the relevance of recommending to the Commission to evaluate or assess the adoption of the creation of stranding data collection programs as well as the analysis of the convenience and operability of a network of these programs in the EPO. 5.3. The IATTC scientific staff, with the support of the FAD Working Group, work on the development of indicators to enable monitoring of the performance of FAD retrieval programs over time, to recommend improvements. 5.4. For the purpose of assisting in the retrieval of FADs and without prejudice to the active buoy limits established by the Commission, the scientific staff analyze ways to manage deactivations, such as consider expanding the areas for requiring buoy activations (i.e., par. 23 of C-24-01) to assist with FAD recoveries, with the understanding that FADs south of 10° S and west of 100°W would not count towards active FAD limits. 5.5. The Commission consider assessing the value of establishing an incentive system for CPCs to establish funds to support projects and entities dedicated to the tracking, recovery, and retrieval of drifting FADs, in particular those with the highest risk of drifting into ecologically sensitive areas such as coral reefs and related shoreline habitats. 5.6. The Commission consider amending Resolution C-24-01, as appropriate, so that, to assist FAD recovery efforts, FAD satellite buoys that are deactivated pursuant to paragraph 23 of Resolution C-24-01 and drifting south of 10°S Latitude and west of 100°W maintain their signal active exclusively to transmit their position to FAD recovery programs, and remain excluded from buoy limits.

Annex 3

Statement by Mr. Gibbons-Fly
Executive Director of the American Tunaboat Association (ATA)

PURSE SEINE SECTOR FAD RECOVERY INITIATIVE

Representatives of the purse seine sector have been working to establish a fund to support projects dedicated to the tracking, recovery, and retrieval of drifting FADs, in particular those with the highest risk of drifting into ecologically sensitive areas such as coral reefs and related shoreline habitats.

This initiative has included purse seine industry associations from the United States, Ecuador, the EU, particularly Spain, and others. I can assure you that the purse seine industry is committed to addressing the issue of drifting FADs in a serious way. But to do so, we need the Commission's help. And in that regard, we have a specific request for a recommendation from this Working Group to the broader Commission.

The current tropical tuna measure allows deactivation of FADs when they drift south of 10 degrees, which is considered the southern limit of viable fishing grounds. However, deactivation would not allow those FADs to be tracked for the purpose of knowing if and when they head into ecologically sensitive areas, for example in French Polynesia, Cook Islands, and elsewhere. The ability to monitor FADs south of 10 degrees south is a necessary component of any effort to track and recover these FADs.

At last year's annual meeting, the United States submitted a proposal that would have allowed, or perhaps even required, FADs to remain active south of 10 degrees, with the added provision that such FADs would not count against an individual vessel's active FAD limit. At the time, we heard the U.S. proposal described as an "exception" or a "loophole". But this is not the case given that, under the current rules, those FADs can simply be deactivated. If these FAD will continue to count against the active FAD limit once they drift south of 10 degrees for tracking purpose, this Commission is creating a disincentive for vessels to participate in any FAD recovery efforts.

The purse seine sector should not suffer adverse consequences for trying to do the right thing. Therefore, we are requesting that this working group include a recommendation that the Commission support allowing FADs to remain active for tracking purposes only south of 10 degrees, provided that such FADs would not count against the limit. We are prepared to consider safeguards to ensure no fishing set takes place on any such FAD.

Thank you for your consideration of this request. I am happy to answer any questions.

Appendix C

INTER-AMERICAN TROPICAL TUNA COMMISSION

WORKING GROUP ON ECOSYSTEMS AND BYCATCH

3RD MEETING

La Jolla, California (USA)
(hybrid)
26-27 May 2025

CO-CHAIR'S SUMMARY REPORT

The 3rd meeting of the IATTC Permanent Working Group on Ecosystem and Bycatch was held in a hybrid format in La Jolla, California (USA) on May 26, 27, and part of May 29, 2025. It was chaired by Dr. Yonat Swimmer and Mr. Manuel Correia, in their capacity as co-chairs of the Working Group. The list of participants is included in **Annex 1**.

The meeting agenda is as follows:

AGENDA

1. Opening of the meeting
2. Adoption of agenda
3. Review of recommendations from the 2nd meeting of the EBWG
3a. Brief discussion on recommendations from 2nd Circle Hook Workshop and aim to complete Res C-19-04 (Co-chairs)
4. Updates on Ecosystem and Bycatch Activities
- *i. SAC-16-09 Characterization of longline fleets in IATTC Convention area (IATTC Staff)*
- **ii.** *EB-03 RD-B Information about "Ring-shaped branchline (Meka-Ring) in pelagic longline fisheries and research plan (Japan Fisheries Research and Education Agency, D. Ochi)*

5a. Ecosystems
- *i. EB-03-01 Ecosystem considerations report (IATTC Staff)*
- *ii. EB-03-04 EB-03-04 Progress of the Ecocard workplan: Purpose and Development of Framework (IATTC Staff)*
- *iii. Updates on deep sea mining impacts (University of Hawaii)*

5b. Climate Change
- *i. SAC-16 INF-P Climate change staff recommendations: updated (IATTC Staff*)

5c. Elasmobranchs
- *i. SAC-16-08 List of ray species of purview to IATTC (IATTC Staff)*
- *ii. Mobulid Sorting Grids update (C. Heberer, Nature Conservancy)*
- *iii. EB-03 RD-A Trialing shark bycatch release devices on board purse seiners in the Pacific Ocean to enhance shark survival (AZTI, ISSF)*
- *iv. Considerations for a shark data collection program in the IATTC (IATTC staff)*
- *v. A shark research plan for the IATTC strategic Science Plan (IATTC staff)*

5d. Seabirds
- *i. EB-03-02 IATTC seabird action plan: Seabird distribution and associated fishery impacts (IATTC Staff)*

ii. *EB-03-03 IATTC seabird action plan: A review of bycatch mitigation options, measures and use (IATTC Staff)*
iii. *Predicting albatross bycatch hotspots across the North Pacific Ocean (EDF/ Tommy Clay)*
iv. *Metapopulation distribution shapes overlap with fisheries for a circumpolar seabird (EDF/ T. Clay)*
v. *EB-03-RD-E Black petrel distribution and range-wide overlap with pelagic longline fisheries (J Quiñones Davila Peru, NZ)*
vi. Testing low-coast mitigation measures to reduce albatrosses and petrels' bycatch in the Peruvian artisanal longline fisheries in southern Peru (J. Quiñones, Peru & NZ) *(J. Quiñones, Peru & NZ)*
vii. *EB-03-RD-C* ACAP Best Practice Advice for Reducing the Impact of IATTC Pelagic Longline Fisheries on Seabirds (ACAP, D. Gianuca)

5e. Best Handling and Release Practices (BHRP)

i. *SAC-16-10 Updated best handling and release practices for sharks in IATTC Fisheries (IATTC)*
ii. *EB-03-06 Seabird best handling and release practice guidelines (IATTC)*
iii. *EB-03-05 rev Best handling and release practices for sea turtles captured in IATTC fisheries (IATTC)*
iv. *Updates on a manual for handling sea turtles incidentally captured in fisheries (IAC, V. Cáceres)*
v. *EB-03-RD-D Can releasing sharks by the tail be a best release practice? (J. Murua, AZTI)*

6. Recommendations to the Scientific Advisory Committee
7. Other business
8. Adjournment

The documents of the meeting and their corresponding links, as well as the presentations made, are listed below and are available on the IATTC website.

Presentations

Twenty-four topics were presented and discussed, encompassed within seven main themes.

PRESENTATIONS	**PRESENTACIONES**	
Review of recommendations from the 2nd meeting of the EBWG	Revisión de las recomendaciones de la 2ª reunión del GTECI	**1**
Updates on activities on ecosystems and bycatch	Actualizaciones de las actividades sobre ecosistemas y capturas incidentales	**2**
Ecosystem	Ecosistema	**3**
Climate change	Cambio climático	**1**
Elasmobranchs	Elasmobranquios	**5**
Seabirds	Aves marinas	**7**
Best Handling and Release Practices (BHRP)	Mejores prácticas de manipulación y liberación (MPML)	**5**
TOTAL PRESENTATIONS	**PONENCIAS TOTALES**	**24**
NON-IATTC SPEAKERS	**PONENTES EXTERNOS A LA CIAT**	**9**

Meeting documents

2nd Circle Hook Workshop Report -- iattc.org/en-US/Event/DetailMeeting/Meeting-WSHKS-02

EB-03-01 - Ecosystem considerations

EB-03-02 - Seabird distribution and bycatch rates

EB-03-03 - Seabird action plan - A review of bycatch mitigation options measures and implementations

EB-03-04 - Progress of the EcoCard Workplan

EB-03-05 - Best handling and release practice guidelines (BHRP) for sea turtles

EB-03-06 - Seabird Best Handling and Release Practice Guidelines

SAC-16 INF-P - Climate Change Recommendations

SAC-16-08 - Ray species under the purview of the IATTC

SAC-16-09 - Characterizing and classifying longline fleets in the IATTC

SAC-16-10 - Shark Best Handling and Release Practice guidelines for sharks in IATTC fisheries - updated

Related documents:

RD-A. Trialing shark bycatch release devices on board purse seiners in the Pacific Ocean to enhance shark survival

RD-B. Ring shaped branch lines (meka-ring) in pelagic longline fisheries

RD-C. ACAP Best Practice Advice Pelagic Longline

RD-D. Lifting sharks tail BRDs be a best practice for improved crew safety and shark survival

RD-E. Black petrel distribution and range-wide overlap with pelagic longline fisheries

RD-F. Predicting albatross bycatch-risk hotspots across the North Pacific Ocean

Background documents:

Murua et al. 2025 – Bycatch Release Devices for elasmobranch mitigation
Metapopulation distribution shapes year-round overlap with fisheries for a circumpolar seabird

Presentations:

4.ii Information about Ring-shaped branchline (Meka-Ring) in pelagic longline fisheries and research plan

4i - Characterization of longline fleets

5a.i - Ecosystem Considerations

5a.ii - Progress of the Ecocard workplan

5c.ii Mobulid Sorting Grid

5c.iv Considerations for a shark data collection program in the IATTC

5c.v IATTC shark research plan

5d.iii Predicting albatross bycatch hotspots across the North Pacific Ocean

5d.iv Metapopulation distribution shapes overlap with fisheries for a circumpolar seabird

5d.vi Low coast mitigation measures

5dvi - Testing low coast mitigation measures to reduce albatrosses and petrels bycatch in the Peruvian artisanal longline fisheries targeting sharks in southern Peru

5dvii ACAP Best Practice Advice for Reducing the Impact of IATTC Pelagic Longline Fisheries on Seabirds

5e.i Best Handling and Release Practices for Sharks, Seabirds and Sea Turtles in IATTC Fisheries

5e.ii Updates on IAC Manual Best Practices for Safe handling and release for Sea Turtles Incidentally Caught in fishing Operations

5ev - Can lifting large sharks by the tail be a best handling and release practice?

EB-03-02 Seabird distribution and associated fishery impacts

EB-03-03 SAP mitigation options

RD-A - Trialing shark bycatch release devices on board purse seiners in the Pacific Ocean to enhance shark survival

RD-E - Black petrel distribution and range-wide overlap with pelagic longline fisheries

SAC-16 INF-P Climate change staff recommendations updated

SAC-16-08 - Ray species under the purview of the IATTC

As a result of the group's work, several recommendations were agreed upon for consideration by the Scientific Advisory Committee (SAC). These are as follows:

1. Gear Innovation	**1. Innovación de artes de pesca**
The EBWG recommends CPCs to make available to the SAC, through the IATTC Scientific Staff, any information they may have on the annular branches, including information on catch rates of target and non-target species, as well as other factors that can be used to assess this modification to longline fishing gear.	El GTECI recomienda que los CPC pongan a disposición del CCA, a través del personal científico de la CIAT, toda la información que puedan tener sobre las ramales anulares, incluyendo información sobre las tasas de captura de especies objetivo y no objetivo, así como otros factores que puedan utilizarse para evaluar esta modificación de las artes de pesca de palangre.
2. Organize workshops regarding Shark Conservation	**2. Organización de talleres relacionados a Conservación de los Tiburones.**
Recommends that the IATTC Scientific Staff evaluate the need to organize workshops to facilitate information sharing, as aligned with the objectives of the research plan for sharks referred to in Paragraph 15 of Resolution C-24-05, for discussion at the next EBWG.	Recomienda que el personal científico de la CIAT evalúe la necesidad de organizar talleres para facilitar el intercambio de información, en línea con los objetivos del plan de investigación de tiburones referido en el párrafo 15 de la Resolución C-24-05, para su discusión en el próximo GTECI
3. Seabird Action Plan	**3. Plan de Acción para las Aves Marinas**

Recommends that the IATTC staff develop a seabird mitigation reporting template relative to compliance with Resolutions in force regarding mitigation measures for seabirds for consideration by the SAC, with due consideration to the operational feasibility of data collection.	Se Recomienda que el personal de la CIAT elabore una plantilla para la presentación de informes relativos al cumplimiento de las Resoluciones vigentes sobre mitigación de aves marinas para su consideración por el CCA, considerando debidamente la viabilidad operativa de la recopilación de datos.
4. Rays	**4. Rayas**
In response to recommendation 6.1(b) by the IATTC SAC at its 15th meeting in 2024, the EBWG considers that the 7 ray species in Appendix A to these recommendations correspond to the species that have the greatest interactions with the fisheries under the competence of the IATTC in order to be considered for possible adoption by the Commission (Appendix X).	En respuesta a la recomendación 6.1(b) del CCA de la CIAT en su 15.ª reunión en 2024, el GTECI considera que las 7 especies de rayas de la Lista B de la Tabla 4 del documento SAC-16-08 corresponde a las especies que tienen las mayores interacciones con las pesquerías bajo la competencia de la CIAT a efecto de que pueda ser considerada su posible adopción por la Comisión. (Apéndice X)
5. Climate Change	**5. Cambio climático**
The SAC recommend to the Commission to continue to support and implement the proposed Climate Change workplan, in collaboration with the IATTC staff, the EBWG and the SAC	Que el CCA recomiende a la Comisión que continúe apoyando e implementando el plan de trabajo propuesto sobre cambio climático, en colaboración con el personal de la CIAT, el GTECI y el CCA.
6. Shark Best Handling and Release (NOT AGREED UPON BY CONSENSUS)	**6. Mejores practicas de manejo y libración de tiburones (NO ACORDADO POR CONSENSO)**
1. Recommends that, in response to the need to implement efficient and safe mechanisms for handling and releasing sharks and management of sharks, the Scientific Staff, in collaboration with CPC researchers, can continue undertaking research on the use of tools for lifting sharks from their caudal peduncles. for consideration as a possible good practice for handling and releasing sharks, improving non-traumatic release practices. For these studies and tests, and given the restrictions established in current measures, consider protocols to guarantee their appropriate use, marking of specimens and	Se recomienda que, en respuesta a la necesidad de implementar mecanismos eficientes y seguros para el manejo y la liberación de tiburones, el personal científico, en colaboración con los investigadores del CPC, continúe investigando el uso de herramientas para levantar tiburones de sus pedúnculos caudales. Se recomienda considerarlo como una posible buena práctica para el manejo y la liberación de tiburones, mejorando las prácticas de liberación no traumática. Para estos estudios y pruebas, y dadas las restricciones establecidas en las medidas vigentes, se consideren protocolos que garanticen su uso adecuado, el marcaje de especímenes y el acompañamiento de

accompaniment of observers, among others. [The scientific staff can review research form CPCs to consider updating best handling and release practices]. **(NOT AGREED UPON BY CONSENSUS)**	observadores, entre otros. [El personal científico puede revisar los formularios de investigación del CPC para considerar la actualización de las mejores prácticas de manejo y liberación.] **(NO ACORDADO POR CONSENSO)**
7. Fleet characterization	**7. Caracterización y Clasificación de la Flota Palangrera en la CIAT**
Recommends that the work initiated and described in document SAC-16-09 be continued, so that in coordination with the CPCs, field work and more precise evaluations on individual aspects of each fleet, the different segments exclusively of the longline fleets targeting the species under the Commission's mandate can be distinguished.	Se recomienda que se continúe el trabajo iniciado y descrito en el documento SAC-16-09, para que en coordinación con las CPC, trabajos de campo y evaluaciones más precisas sobre aspectos individuales de cada flota, se distingan los diferentes segmentos exclusivamente de las flotas palangreras dirigidas a las especies bajo el mandato de la Comisión.
8. Ecocards	**8. Ecocards**
The Working Group recommends continuing collaboration with other tRFMOs to establish criteria for delineating ecoregions and to develop indicators, including socioeconomics.	El Grupo de Trabajo recomienda continuar la colaboración con otros OROP para establecer criterios para delinear ecorregiones y desarrollar indicadores, incluyendo socioeconómicos
9. Collection of information	**9. Colecta de Información**
Continue the process of collecting information, in particular on mortality and utilization of sharks and other non-tuna species, relative to coastal fisheries in the EPO, related to the Presentation “Considerations for an IATTC Shark Data Collection Program” (Presentation 5c.iv).	Continuar el proceso de colecta de información, en particular de mortalidad y aprovechamiento de tiburones y otras especies distintas de los túnidos, relativos a las pesquerías costeras en el OPO, relacionado en la Presentación “Consideraciones para un programa de recolección de datos de tiburones en la CIAT” (Presentación 5c.iv).

Appendix X. Ray species recommended by IATTC scientific staff to be considered as an interim list of ray species to be considered under the purview of the IATTC

Apéndice X. Especies de rayas recomendadas por el personal científico de la CIAT para ser consideradas como una lista provisional de especies de raya que deben considerarse bajo su competencia.

Family	Species	Common name	Nombre común
Dasyatidae	*Pteroplatytrygon violacea*	Pelagic stingray	Raya látigo violeta
Mobulidae	*Mobula alfredi*	Alfred manta	Manta de Alfred
Mobulidae	*Mobula birostris*	Giant manta	Manta voladora
Mobulidae	*Mobula mobular*	Spinetail manta	Manta de aguijón
Mobulidae	*Mobula munkiana*	Munk's devil ray	Raya diablo de Munk
Mobulidae	*Mobula tarapacana*	Chilean devil ray	Manta cornuda o Raya diablo chilena
Mobulidae	*Mobula thurstoni*	Smoothtail manta	Manta diablo

EBWG3 Recommendations regarding the 2nd Circle hook Workshop /

Recomendaciones del GTECI3 respecto al 2do Taller sobre de Anzuelos circulares

1. Circle Hook Minimum Size:	**1. Tamaño mínimo de los anzuelos circulares:**
The Working Group acknowledged, in response to the Commission's request regarding Resolution C-19-04, to determine a minimum size for large circle hooks, that it is currently difficult to agree upon a single, appropriate minimum size. That the SAC consider urging each CPC to continue to collect information, in the format of their choice, on the size (including manufacturer standards) of circle hooks, impacts of circle hooks on target and non- target species (including catch rates and post-release mortality), and other relevant information, and report updates on this information to the IATTC scientific staff, through the Director, with a view to considering a comprehensive bycatch management strategy in the future, if possible.	El grupo de trabajo reconoció, en respuesta a la solicitud de la Comisión sobre la Resolución C- 19-04 de determinar un tamaño mínimo para los anzuelos circulares grandes, que actualmente es difícil acordar un tamaño mínimo único y apropiado. Que el CCA considere instar a cada CPC a que continúe recopilando información, en el formato que elija, sobre el tamaño de los anzuelos circulares (incluyendo las normas del fabricante), el impacto de estos en las especies objetivo y no objetivo (incluyendo las tasas de captura y la mortalidad posterior a la liberación), y otra información pertinente, y a que informe sobre las actualizaciones al personal científico de la CIAT, a través del Director, con miras a considerar una estrategia integral de gestión de la captura incidental en el futuro, si fuese posible.
2. Third mitigation option:	**2. Sobre una Tercera opción de mitigación:**

The EBWG recommends the IATTC Scientific Staff will collaborate with the EBWG, SAC and CPCs to provide options for the development of a third mitigation measure to reduce sea turtle bycatch, that takes into consideration the needs of different fleets and impacts on different taxa, for consideration by the SAC at its future meetings.	Con base en la información proporcionada por los CPC y el personal de la CIAT, el GTECI recomienda que el personal científico colabore con el GTECI, el CCA y los CPC para desarrollar opciones para una tercera medida de mitigación para reducir la captura incidental de tortugas marinas, que tome en consideración las necesidades de las diferentes flotas y los impactos en diferentes taxones, para su consideración por el SAC en sus futuras reuniones.
3. Best Handling and Release Practices for sea turtles	**3. Mejores prácticas de manipulación y liberación para las tortugas marinas**
That as soon as possible, the working group consider, if necessary, making recommendations regarding the updating of best practice guidelines for sea turtle handling and release practices for all IATTC fisheries.	A la mayor brevedad posible, que el grupo de trabajo considere, de ser necesario, hacer recomendaciones en relación a la actualización de las directrices de las mejores prácticas de manipulación y liberación de las tortugas marinas para todas las pesquerías de la CIAT.

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Appendix D

THE INTER-AMERICAN TROPICAL TUNA COMMISSION

103rd MEETING

Panama City, Panama
01-05 September 2025

DOCUMENT IATTC-103-02

REPORT AND RECOMMENDATIONS OF THE 16th MEETING OF THE SCIENTIFIC ADVISORY COMMITTEE

1. TROPICAL TUNAS

That the Commission consider taking actions bearing in mind, among other elements, the measures proposed by the scientific staff described in document SAC-16-11.

1.1. Bigeye tuna

(a) That the Commission consider instructing that the candidate harvest strategy for bigeye tuna, described in document SAC-16-11 – Staff Recommendations 2025 (prepared in compliance with paragraph 8 of Resolution C-24-01; see also document SAC-16-06), be tested as a candidate rule in the management strategy evaluation process in 2025-2026 alongside other proposed candidates (see the report of the 1st meeting (Informal) of the Ad Hoc Working Group on MSE) and that the performance results be reviewed and analyzed by the Ad hoc Working Group on Management Strategy Evaluation (WGMSE)..

(b) That the Commission consider requesting the WGMSE to submit its recommendations to the Scientific Advisory Committee (SAC) in 2026 for adoption of an MSE-tested management procedure/harvest strategy so that the SAC may formulate the corresponding proposals to the Commission, without excluding that their implementation may take place in any of the years of the current management cycle adopted by Commission.

(c) That the IATTC scientific staff provide the CPCs, by correspondence, at least 30 days prior to the next annual meeting of the Commission, with a technical analysis of the impact of catches by class 4 vessels on the bigeye tuna stock and juvenile yellowfin tuna.

(d) That, taking into account the multispecies nature of the IATTC tropical tuna fisheries, the scientific staff also evaluate the potential impacts of the implementation of catch strategies for bigeye tuna on the other tropical tuna stocks caught by the IATTC tropical tuna fisheries,

1.2. Yellowfin tuna

That the IATTC staff continue with, and the Commission support, the yellowfin tuna (YFT) research plan, especially with regards to YFT stock structure in the Eastern Pacific Ocean (EPO).

2. TEMPERATE TUNAS

2.1. Pacific Bluefin tuna

Considering that the SAC endorsed the Staff recommendations on Pacific bluefin tuna in document SAC16-11, that the Commission consider taking actions such as resolutions or recommendations based on these recommendations.

2.2. South Pacific albacore tuna

(a) That the Commission encourage CPCs to participate in the IATTC-WCPFC Joint Working Group on the Management of South Pacific Albacore Tuna, once it is established.

(b) That the IATTC Staff continue to collaborate with the Pacific Community (SPC) to monitor the stock status of South Pacific albacore tuna.

2.3. North Pacific albacore tuna

(a) That the Commission, when updating the harvest strategy, note that the change in fishing intensity can potentially be translated into catch and effort measures according to the relationships described in document SAC-15 INF-T.

(b) That the Commission consider the criteria developed by the ISC ALBWG for identifying exceptional circumstances for North Pacific albacore tuna (see document SAC-15 INF-S).

3. MANAGEMENT STRATEGY EVALUATION (MSE)

That the IATTC scientific staff expand the MSE work to test candidate harvest strategies for both purse-seine and longline fisheries, to assist the Commission with the implementation of a procedure for the management of tropical tunas and ensure balance among different fisheries.

4. DATA COLLECTION AND PROVISION

4.1. Tuna Tagging

(a) That the Commission support and prioritize the development of the tropical tuna tagging project in the EPO and recommend its implementation (see document SAC-16 INF-E.b).

(b) That the scientific staff submit to the Commission, at its next annual meeting, alternative proposals to the current design of the tropical tuna tagging programme, giving priority to cost-efficient schemes that allow scientific objectives to be achieved and reduce the risk of failure in future baseline assessments, especially for skipjack and yellowfin tuna.

4.2. Longline data reporting

That the Commission consider amending Resolution C-03-05 to enable the IATTC scientific staff to access operational set by set level logbook data from the longline fleet, or at a minimum, data aggregated at a 1 by 1 degree spatial resolution by vessel, month, and hooks per basket (or hooks between floats) for the construction of abundance indices and other useful information for stock assessments of tropical and temperate tunas. This may be currently achieved through a memorandum of understanding between the CPCs and the IATTC to make the data available during the development of the stock assessment.

6. ECOSYSTEM CONSIDERATIONS

6.1. Elasmobranchs (sharks and rays)

As a follow-up to its recommendation as adopted by the Commission, the SAC endorses the list of 7 ray species as recommended by the IATTC staff in the context of Paragraph f) Article VII of the Antigua Convention (see document SAC-16-08 Ray species under the purview of the IATTC).

6.2. Pilot Study for shark release devices

(a) With the aim of strengthening efficient and safe mechanisms for the handling and release of sharks, it is recommended that the scientific staff, in collaboration with researchers associated with CPCs, continue to evaluate through a controlled pilot study the use of specific tools such as Velcro and harnesses and associated protocols for lifting large sharks from the caudal peduncle (except for whale sharks).

(b) It is suggested that this pilot study be designed with a rigorous experimental approach, in line with the objective of determining the effectiveness and safety of these tools, the survival of individuals, and the safety of the crew and it is considered essential to include the fishing industry and specialists with experience in the handling and tagging of large sharks

(c) It is recommended that the scientific staff submit the results of the pilot study to the Working Group on Ecosystem and Bycatch (WGECB) and the SAC for consideration as a possible good practice for the management and release of incidentally caught sharks, in order to contribute to their survival.

(d) Given that the conduct of this study could be subject to restrictions arising from existing measures, the SAC requests the Commission to clarify whether this pilot study could be carried out and under what circumstances, and consequently consider, if necessary, an update of Resolution C-24-05 on sharks to that effect.

6.3. Sorting grids

That the Director, in coordination with interested CPCs, organize a second regional workshop on the use of tuna sorting grids to consider all relevant information presented in document SAC-16 INF-M and existing literature, and ensure the participation of all relevant stakeholders, including global experts, fishermen, fleet owners, and net engineers and manufacturers.

7. CLIMATE CHANGE

(a) That the Commission consider for adoption the list of revised IATTC staff recommendations of the main goal, scope, and framework (see document SAC-16 INF-P) of the IATTC's proposed climate change workplan (document SAC-15-12).

(b) That the Commission consider adopting the Terms of References proposed by the IATTC staff (see document IATTC-102 INF-B) to guide the series of climate change workshops aimed to facilitate staff and stakeholder engagement during the development of the proposed climate change workplan (document SAC-15-12).

RECOMMENDATIONS OF THE 9th MEETING OF THE AD HOC WORKING GROUP ON FADS AS ENDORSED BY THE SCIENTIFIC ADVISORY COMMITTEE

Consistent with its terms of reference established in Resolution C-19-01, Annex III, **the Ad Hoc Permanent Working Group on FADs**, in reporting to the Scientific Advisory Committee on the results of its 9th meeting, and in the framework of the process of coordination with that Committee and with the scientific staff in the identification and review of feasible FAD management measures, as a preliminary step prior to the presentation of recommendations to the Commission, **wishes to recommend that:**

1. On FAD data reporting

1.1. The IATTC scientific staff develop and propose improvements to the characterization of the causes for remote deactivation and reactivation established in Resolution C-24-01.

1.2. The IATTC scientific staff analyze in greater detail the data from observers and satellite buoys to propose methods to help adequately evaluate the uses/record of the causes for remote deactivation and reactivation to identify possible opportunities for improvement or updates.

2. On FAD fishery indicators

2.1. The IATTC scientific staff continue to refine the indicators, including additional indicators of interest (e.g., last buoy positions, quantification of strandings and collection of stranded buoys) and prepare a guide with a description of each indicator that facilitate the interpretation and assessment of the implications of each indicator.

2.2. The Commission consider urging flag CPCs to ensure that fishing companies and buoy suppliers provide the IATTC with available historical information on vessel acoustic buoys received from the original users, including trajectory and biomass information, to prevent losing this data of enormous value to science, and particularly to stock assessments. The processing of this data will be subject to the Commission's rules on confidentiality

3. On biodegradable FADs

3.1. The SAC recommend that the Commission consider adopting measures to obtain the necessary data and resources, including by exploring strategic partnerships and alternative sources of funding, to enable analysis to be carried out to determine more accurately the final destination of unrecovered FADs.

3.2. Progress be made in analyzing the useful life of biodegradable FADs ("BioFAD"), or that, in addition to the information provided by observers in the EPO, the IATTC scientific staff provide the Group with a more in-depth analysis, taking into account the information on the positions of buoys associated with FADs as well as relevant information from WCPFC observers.

3.3. The IATTC scientific staff continue to deepen their analysis of the useful life of BioFADs in collaboration with the industry.

3.4. (a) Interested parties be encouraged to continue pursuing technical studies on biodegradable, natural, or bio-based materials, useful for the construction of FADs,
(b) The exchange of experiences be promoted through participatory workshops.

3.5. The IATTC scientific staff present to the Working Group an analysis derived from the compilation and evaluation of the certification options for bio-based materials which are used in FADs, and which will ensure that the new material and the final product do not contribute to the pollution of the marine environment.

3.6. CPCs and other entities be encouraged to engage in BioFADs trials provide more BioFAD data from broader regions of the EPO in a random fashion more adequate to making scientific comparisons.

4. On the FAD register

(a) Considering the review of the suitability of a FAD Registry in the IATTC area, no need has been identified by the Working Group to implement such a registry in the region

(b) The pros and cons of the implementation of different methods for marking FADs be explored.

5. On FAD retrieval

5.1. (a) The SAC consider the relevance of recommending to the Commission that it assess the value of adopting the form and database for collecting data on stranded FADs to be developed by the scientific staff, as harmonized as appropriate with the form developed by the SPC-WCPF, including the identification of possible adjustments.
(b) if a form is adopted for this purpose, its use be preceded by some type of workshop or practical training

5.2. The SAC consider the relevance of recommending to the Commission to evaluate or assess the adoption of the creation of stranding data collection programs as well as the analysis of the convenience and operability of a network of these programs in the EPO.

5.3. The IATTC scientific staff, with the support of the FAD Working Group, work on the development of indicators to enable monitoring of the performance of FAD retrieval programs over time, to recommend improvements.

5.4. For the purpose of assisting in the retrieval of FADs and without prejudice to the active buoy limits established by the Commission, the scientific staff analyze ways to manage deactivations, such as consider expanding the areas for requiring buoy activations (i.e., par. 23 of C-24-01) to assist with FAD recoveries, with the understanding that FADs south of 10° S and west of 100°W would not count towards active FAD limits.

5.5. The Commission consider assessing the value of establishing an incentive system for CPCs to establish funds to support projects and entities dedicated to the tracking, recovery, and retrieval of drifting FADs, in particular those with the highest risk of drifting into ecologically sensitive areas such as coral reefs and related shoreline habitats.

5.6. The Commission consider amending Resolution C-24-01, as appropriate, so that, to assist FAD recovery efforts, FAD satellite buoys that are deactivated pursuant to paragraph 23 of Resolution C-24-01 and drifting south of 10°S Latitude and west of 100°W maintain their signal active exclusively to transmit their position to FAD recovery programs, and remain excluded from buoy limits,, provided that sets on these FADs are prohibited for vessels registered with the IATTC, and they are only maintained active for scientific recovery and analysis purposes.

RECOMMENDATIONS OF THE 3rd MEETING OF THE WORKING GROUP ON ECOSYSTEM AND BYCATCH AS ENDORSED BY THE SCIENTIFIC ADVISORY COMMITTEE

PRELIMINARY NOTE

(a) The Scientific Advisory Committee (SAC) reviewed the report of the 3rd meeting of the Working Group on Ecosystem and Bycatch (EBWG), including its recommendations. Although SAC generally supported the recommendations, several suggestions and clarifications were raised and as a result SAC did not endorse the recommendations of EBWG3 as its entirety. Instead, SAC took all the recommendations from EBWG3, made necessary modifications, and adopted them as part of SAC recommendations.

(b) The SAC noted that the Terms of Reference of EBWG (Resolution C-22-06) states that EBWG recommendations may be submitted to the Commission directly, whenever they could not be considered and/or endorsed by the SAC or upon the request of the Commission itself (para. 3ii).

(c) Given that all the EBWG3 recommendations were reproduced as part of SAC recommendations with necessary modifications, the SAC agreed that it is not necessary for the original EBWG3 recommendations to be submitted to the Commission directly. The original EBWG3 report

including its recommendations can be found in its meeting website.

(d) The SAC also noted that there is ambiguity in paragraph 3 of C-22-06 and, in fact, there were differences of opinion in its interpretation and implementation. The Commission may wish to clarify the intention of the said paragraph if deemed necessary.

(e) One member did not agree with the interpretation that the EBWG could not send forward recommendations to the Commission in the present circumstance and considers provision to allow direct forwarding to Commission in event that SAC does not reach consensus on endorsement because one or members do not join consensus.

The EBWG recommends that:

1. Gear Innovation

The Commission consider requesting CPCs to make available to the SAC, through the IATTC Scientific Staff, any information they may have on the annular branches, including information on catch rates of target and non-target species, as well as other factors that can be used to assess this modification to longline fishing gear

2. Organization of workshops regarding Shark Conservation

The Commission consider instructing the Director to ensure that the scientific staff consider developing regional workshops for the exchange of data and information, with the aim of strengthening available scientific knowledge and promoting fisheries management practices based on results derived from population models, which contribute to the conservation of silky, blue, hammerhead and thresher sharks in the EPO.

3. Seabird Mitigation

The Commission consider requesting that the IATTC staff develop a seabird mitigation reporting template relative to compliance with Resolutions in force regarding mitigation measures for seabirds for consideration by the SAC, with due consideration to the operational feasibility of data collection.

4. Characterization and classification of longline fleets in the Antigua Convention area

The Commission consider recommending that the work initiated and described in document SAC-16-09 be continued, so that in coordination with the CPCs, field work and more precise evaluations on individual aspects of each fleet are carried out, distinguishing the different segments exclusively of the longline fleets targeting the species covered under the Antigua Convention.

5. Ecocards

The Commission consider the IATTC staff to continue collaborating with other tRFMOs to establish criteria for delineating ecoregions and to develop indicators, including socioeconomics.

6. Collection of shark information

The Commission consider continuing the process of collecting information in coordination with CPCs, in particular on mortality and utilization of sharks and other non-tuna species, relative to coastal fisheries in the EPO targeting species covered by the Antigua Convention, related to the Presentation "Considerations for an IATTC Shark Data Collection Program" (see Presentation 5c.iv).

7. Sea Turtles

7.1. **Circle Hook Minimum Size**:
Considering that both the GTECI and the SAC, in response to the Commission's request regarding Resolution C-19-04, to determine a minimum size for large circle hooks, acknowledged that it is currently difficult to agree upon a single, appropriate minimum size, that the Commission consider urging each CPC to continue to collect information, in the format of their choice, on the size (including manufacturer standards) of circle hooks, impacts of circle hooks on target and non-target species (including catch rates and post-release mortality), and other relevant information, and report updates on this information to the IATTC scientific staff, through the Director, with a view to considering a comprehensive bycatch management strategy in the future, if possible.

7.2. **About a third mitigation option**:
The Commission consider recommending that the scientific staff of IATTC and the SAC develop, as necessary, alternatives for the development of a third mitigation option, taking into account the needs of the different fleets and the impacts on the different taxa, as well as measures that have proven to be effective in reducing sea turtle catches, and that do not affect the catch of the target species

7.3. Best Handling and Release Practices for sea turtles:

The Commission consider urging the EBWG, as soon as possible, if necessary, to make recommendations regarding the updating of best practice guidelines for sea turtle handling and release practices for all fisheries under the competence of the Commission.

Annex

Evaluation of the financial resources needed to implement specific recommendations as listed below

SAC-Recommendation 4.1.	**Tuna tagging**	1st year US$ 1,497,683 2nd year US$ 181,243 3rd year US$ 116,823
SAC-Recommendation 6.2.	**Pilot Study for shark release devices**	US$ 175,000
SAC-Recommendation 6.3.	**Sorting grids**	US$ 50,000
EBWG Recommendation 2	**Organization of workshops regarding Shark Conservation**	US$ 30,000