

INTER-AMERICAN TROPICAL TUNA COMMISSION

SCIENTIFIC ADVISORY COMMITTEE

15<sup>TH</sup> MEETING

La Jolla, California (USA)

10-14 June 2024

DOCUMENT SAC-15 INF-D

IMPLEMENTATION OF RECOMMENDATIONS ADOPTED AT THE PREVIOUS SAC  
MEETING: PROGRESS AND OUTCOMES

At its annual meetings, the Scientific Advisory Committee (SAC) makes recommendations to the Commission, many of which involve actions by the staff. This document lists the recommendations currently requiring action by the staff and/or the Commission, and their current status: **green**: completed; **yellow**: in progress, incomplete; **orange**: planned, but pending funding; **red**: no action. For the full recommendations made by SAC-14, see [here](#).

	Recommendation, SAC-14	Status (17 May 2024)	
<b>1. GENERAL CONSIDERATIONS</b>			
a)	That the Commission and the SAC reconsider the way in which the Committee conducts its work, so that future SAC meetings are more oriented towards responding more effectively to the needs of the Commission, and to this end include this topic on the agenda of SAC15.	A <a href="#">new format for the SAC meeting</a> proposed by the SAC Chair (IATTC Director) has been implemented for SAC-15. This new structure aims to address the Commission's immediate priorities (i.e., topics directly related to conservation and management) and includes ample time for discussion.	
b)	That CPCs work in close collaboration with the Director and the Chair of the Commission for the discussion of proposals for practical improvement to the operation of the SAC meetings.	The new format proposed by the SAC Chair received support from CPCs as a practical first step toward enhancing the functioning of SAC meetings (see Director's Memorandums 05557-410 (Dec 1, 2023), 0601-410 (Dec 20, 2023), 0037-419 (Jan 21, 2024), 0062-410 (9 Feb, 2024)).	
c)	Considering, among others, the importance of the coastal fisheries in Central America, in particular for sharks, and the need for constant improvement of sampling and landings data, as well as the strengthening of capacities in the region, that the Commission review the updated proposal to be developed and presented by the Commission staff for establishing an additional IATTC field	As a background information, it may be recalled that at its 101 <sup>st</sup> Meeting in 2023, the Commission adopted Resolution C-23-07 which consolidates and replaces resolutions C-05-03, C-16-04 and C-16-05. Paragraph 14 of C-23-07 requires that: " <i>in 2024, the IATTC scientific staff, in consultation with the IATTC SAC and EBWG shall implement a data collection program for sharks associated with fisheries managed by the Commission, making use of existing research and data collection mechanisms and programs where possible. The</i>	

	Recommendation, SAC-14	Status (17 May 2024)	
	office in Central America, with the objective of strengthening scientific activities and ensuring coordination with this sub-region.	<i>program will include the monitoring of shark catches by small scale fisheries in coastal countries...</i> Regarding this recommendation itself, Document SAC-15-10 outlines considerations for the staff's proposed shark data collection workplan, which includes plans for establishing an additional IATTC regional office in Central America, as recommended by the SAC.	
d)	The SAC endorses, in general terms, the recommendations on tunas presented by the commission staff (SAC-14-14).	The Commission followed the SAC's recommendations on tunas by generally endorsing the staff's recommendations. For tropical tunas, this involved maintaining the provisions in the current Resolution ( <a href="#">C-21-04</a> ) and continuing the Enhanced Monitoring Program (EMP) for bigeye catches. For temperate tunas, the Commission supported maintaining the provisions outlined in Resolution <a href="#">C-21-05</a> .	
<b>2. RESEARCH PLANNING:</b>			
	That the current Strategic Science Plan (SSP) be extended for one year, to align with the assessment schedule for tropical tunas.	Given that the 5-year cycle (2019-2023) of the last SSP concluded in 2023, the staff had initially planned to propose the elements of the next SSP to the Commission in 2024. However, considering the heavy assessment workload for tropical tuna in 2024, the Commission supported delaying the presentation and discussion of the new SSP until 2025.	
<b>3. TROPICAL TUNA (YELLOWFIN, SKIPJACK AND BIGEYE)</b>			
<b>3.1 Bigeye</b>			
a)	That the IATTC staff be requested to evaluate the effectiveness of BET measures established in Resolution C-21-04, especially for the annual BET catch limits for individual purse seine vessels, and report results of the evaluation to the SAC in 2024.	The staff has investigated the effects of the individual vessel threshold (IVT) scheme on tropical tuna catches and fleet behavior (SAC-15 INF-K). In addition, the staff investigated the impact of the "corralito" on tuna fisheries and ecosystems of the EPO ( <a href="#">SAC-15 INF-M</a> ).	
<b>3.2 Skipjack tuna</b>			
a)	That the Commission consider and adopt interim reference points for Skipjack Tuna, based on the staff's proposed methodology (SAC-14-09).	The Commission adopted Resolution <a href="#">C-23-06</a> amending Resolution <a href="#">C-16-02</a> on Harvest Control Rules for tropical tunas. The amendment incorporated the staff's proposed methodology ( <a href="#">SAC-14-09</a> ) to adopt interim proxy reference points for skipjack.	
<b>3.3 Yellowfin tuna</b>			
a)	That the Commission staff include in its research activities on yellowfin, the dynamics of the fleet and its impact on the post-pandemic data.	The staff has investigated multiple hypotheses to explain the record catches of yellowfin tuna on floating object sets in 2022. The hypotheses are: 1) recruitment (SAC-15-03), 2) change in fishing strategies (SAC-15 INF-K), 3) increased availability due to environmental conditions (SAC-15 INF-L).	
<b>4. TEMPERATE TUNAS</b>			

	Recommendation, SAC-14	Status (17 May 2024)	
<b>4.1 North Pacific albacore tuna</b>			
a)	That the Commission adopt HCRs for North Pacific albacore tuna, based on the results of the MSE.	<a href="#">Resolution C-23-02</a> (amending Resolution C-22-04) was adopted at the <a href="#">101<sup>st</sup> Meeting of the Commission</a> in 2023. The Resolution outlines the elements of the harvest strategy for North Pacific Albacore in the eastern Pacific Ocean. The Harvest Control Rules (HCRs) are detailed in paragraphs 1.f-j.	
b)	That the Commission consider advice from the ISC on the criteria for identifying exceptional circumstances for inclusion in the harvest strategy.	Following the request under paragraph 1.e of <a href="#">Resolution C-23-02</a> , the IATTC staff has collaborated with ISC in developing criteria for identifying exceptional circumstances for NP albacore tuna ( <a href="#">SAC-15 INF-S</a> ).	
<b>4.2 South Pacific albacore tuna</b>			
a)	That the Commission request the WCPFC to plan a joint effort between IATTC scientific staff and SPC to explore management strategies for South Pacific Albacore tuna.	The IATTC staff participated virtually in the Workshop on South Pacific Albacore: Science, Data and Climate Change, held on 29-30 April 2024, in Wollongong, Australia and delivered two presentations (SP Albacore fishery and management in the EPO, and data available in the EPO). The workshop was co-organized by SPC, Shanghai Ocean University, and the Australian National Centre for Ocean Resources. The agenda included the development of harvest strategies for South Pacific albacore and opportunities for collaboration between the IATTC staff and SPC. Additionally, a virtual meeting between WCPFC and IATTC staff is being planned to discuss common topics of interest, including management strategies for South Pacific albacore tuna.	
b)	That the Commission endorse the continuation of joint work between IATTC scientific staff and SPCs on the stock assessment of South Pacific Albacore tuna, emphasizing the provision of data from all CPCs This reporting catches in the IATTC area.	The Commission has endorsed that recommendation. Accordingly, the staff continues to work collaboratively with SPC on the stock assessment of South Pacific Albacore tuna. The staff participated virtually in the 2024 SPC Pre-assessment Workshop, 25-28 March. Day 1 session focused on the 2024 South Pacific Albacore assessment.	
c)	Based on a joint MSE results, that the IATTC scientific staff propose reference points based on the methodology described in document SAC-14 INF-O.	A joint MSE for South Pacific Albacore is not available. However, opportunities for collaboration between the IATTC staff and SPC are under consideration (see 4.2.a.)	
d)	That the Commission considers providing support to IATTC staff participation in this MSE process by ensuring multiannual financial support and providing the necessary human resources	Although the Commission approved the permanent appointment of a Harvest Strategy Scientist to the scientific staff at its 101 <sup>st</sup> Meeting in 2023, the current priorities are focused on conducting the MSE and developing harvest strategies for tropical tunas. Additional resources will be needed to support the staff's participation in the MSE process for SP Albacore.	

	Recommendation, SAC-14	Status (17 May 2024)	
<b>4.3 Swordfish</b>			
a)	Continue to monitor the south EPO SWO population (for example, using population status indicators and conducting baseline assessment again in 3 – 5 years).	This recommendation will be considered in 2025 as part of the discussions for the next Strategic Science Plan (SSP).	
b)	That the Commission consider the interim reference points developed for South EPO Swordfish for the Commission, taking into consideration document SAC-14 INF-O.	At SAC-15, the staff is recommending interim reference points for South EPO Swordfish based on <a href="#">SAC-14 INF-O</a> .	
c)	That the Commission coordinate with the WCPFC and adopt reference points for North Pacific Swordfish.	WCPFC and IATTC are coordinating on common areas of interest and potentially collaboration among the secretariats. Reference points for NP Swordfish are among these.	
<b>5. Mahi-Mahi</b>			
a)	That the Commission consider assessing and managing the mahi- mahi stock.	At the 101 <sup>st</sup> Meeting of the IATTC in 2023, the Commission adopted Resolution <a href="#">C-23-09</a> on Research for Management of Dolphinfish (dorado). According to paragraph 2.b.i, the scientific staff will update, to the extent possible, the stock assessment of Dolphinfish and present it to the SAC in 2026.	
<b>6. TROPICAL TUNA MANAGEMENT STRATEGY EVALUATION (MSE) THIS</b>			
a)	That the Commission continue support and secure funding for MSE for tropical tunas in 2024 and beyond, following the guidance of C-16-02 and C-19-07;	At its 101 <sup>st</sup> Meeting in 2023, the Commission approved the permanent appointment of a Harvest Strategies Scientist to the scientific staff. This ensures the continuation of the MSE process for tropical tunas in 2024 and strengthens it for future years.	
b)	That the Commission considers providing permanent support to the MSE process by ensuring multiannual financial support and providing the necessary human resources, including to work also on other species, as determined by the Commission.	See 6.a.	
c)	That the Commission consider the Science-Management Dialogue (SMD) or informal workshops approach to continue the MSE process and provide the appropriate funding and human resources to complete the technical and communications components of the MSE.	A Science-Management Dialogue approach related to MSE has not been undertaken; instead, the dialogue component of the MSE work will continue through workshops in 2024 and beyond. The establishment of the new permanent harvest strategies staff position (see 6.a) ensures the continuation of the MSE process for tropical tunas.	
<b>7. DATA COLLECTION AND PROVISION</b>			
<b>7.1 Resolution C-03-05</b>			

	Recommendation, SAC-14	Status (17 May 2024)	
a)	That the Commission review and update Resolution C-03-05 on "Data Provision", taking into consideration document SAC-14 INF-Q.	A staff recommendation is included in SAC-15-13 to encourage CPCs to update the data provision Resolution <a href="#">C-03-05</a> to better align data provision and submission requirements with the Antigua Convention's mandate to include non-target, dependent and associated species, and the effects of the fishery on the ecosystem, while considering the recommendations provided in <a href="#">SAC-14 INF-Q</a> . Additional actions planned to support the Commission's review and update of C-03-05 are described in item 7.2(a).	
<b>7.2 Bycatch data collection</b>			
a)	That the Commission develop the necessary efforts to improve the collection of non-target species catch data in 1 to 5 class purse seine vessels and longline vessels without observers on board.	A virtual workshop on improving data collection for longline vessels was held in January 2023 and a set of recommendations based on participant feedback was provided to the 14 <sup>th</sup> SAC (see <a href="#">SAC-14 INF-Q</a> ) including that the Commission draft a revised Resolution C-03-05 based on the recommendations provided therein. Preparations for the next workshop in the series, on small purse-seine vessels, began in 2023 and will continue through 2024, including a draft background document summarizing data sources, data gaps, and incentives for improving data collection. This workshop is planned for the latter half of 2024.	
<b>7.3 Regional Tuna Tagging Program</b>			
a)	Conduct tagging cruises at regular intervals for the next five years. These cruises should focus on developing stronger relationships with the tuna industry, fostering collaboration to improve project outcomes;	A research proposal which seeks funding for the next phase of the Regional Tuna Tagging Project (RTTP) has been prepared by the staff for SAC-15 (Document SAC-15 INF-E.b). This proposal outlines various ways the industry can contribute to the program's execution and success. One such suggestion is cooperative access to dFADs throughout the fishing areas of the EPO.	
b)	Continue the tropical tuna tagging programs, especially skipjack, in the EPO, with stable financial support through the regular budget.	As traditional longline indices of abundance (standardized CPUE) become more sparse in the EPO and less precise, there is an urgent need to develop alternative indices of abundance (relative or absolute). A recent approach developed for SKJ has shown great promise, it however relies on current tagging data (SAC-15 INF-G). See 7.3.a on a research proposal for the next phase of the RTTP.	
c)	Ensure a greater interaction with the fishing sector, including education and promotion activities, so that tagging campaigns and tag recovery are more effective.	See 7.3.a and b.	

	Recommendation, SAC-14	Status (17 May 2024)	
<b>7.4 Enhanced Monitoring Program (EMP)</b>			
a)	Continue the Enhanced Monitoring Program (EMP) for bigeye catches through, among others, securing financing for the continuation of PRM operations in 2024 considering that the resolution on tuna conservation extends to 2024;	The Commission approved the funding of the EMP for 2024. The EMP has continued with the sampling of individual trips, and it will provide BSE of BET catch per trip of individual vessels for 2024.	
b)	That the IATTC staff be asked to provide in 2024, a cost-benefit analysis and options for reducing the uncertainty associated with the EMP estimates of bigeye catches by individual vessels;	A cost-benefit analysis is included on SAC-15 INF-H as part of the EMP 2023 report. This analysis provides options for reducing uncertainty to various levels by increasing the number of wells sampled per trip in catch strata of primary interest. With input from the SAC, additional options could be explored between the SAC and the 102nd Meeting of the IATTC.	
c)	Ensure the improvement of port sampling protocols to estimate the proportion of bigeye tuna catch, including, among others, including This mechanisms for data transmission between IATTC staff and the CPC, so as to have greater accuracy in the bigeye catch estimates based on Resolution C-21-04.	In June 2023, a webpage was launched featuring a dynamic table that allows CPCs to access real-time BET catch estimates per trip from various sources (cannery, logbook, observer, EMP). Further collaboration is required to increase and improve the data the IATTC staff receives from some of these sources.	
<b>7.4 Longline vessels observer program</b>			
a)	That the countries with longline fleets update, in the IATTC Regional Vessel Registry, the list of vessels over 20 meters that operate in the EPO, as well as report the number of trips made by the different vessels during the previous year in order to calculate the percentage of observer coverage on longliners and assess compliance with Resolution C-19-08;	As of April 2024, there are still a number of longline vessels on the IATTC RVR that do not have a length listed, which is a required parameter; although one CPC recently provided lengths for 22 of their longline vessel that were previously missing. Resolution <a href="#">C-18-06</a> , paragraph 5, also requires CPCs to notify by June 30 of each year a list of vessels that actively fished in the previous year. However, the deadline for the summary reporting under C-19-08 is due March 31, and so IATTC staff continues to struggle to determine which CPCs had longline vessels greater than 20m LOA active in the previous year. Of the eight CPCs that reported having longline observer programs in 2023, six of them reported meeting the 5% minimum requirement for coverage and the remaining two CPCs summary reporting are characterized as “preliminary.” Thus, once all of their 2023 observations are accounted for, it is possible that all reporting CPCs will have met 5%. This	



	Recommendation, SAC-14	Status (17 May 2024)	
		marks an improvement of the longline observer coverage since the end of the COVID-19 pandemic.	
b)	That CPCs submit all operational longline observer data collected from 1 January 2013 to present, consistent with the minimum data standards contained in Annex B of C-19-08 or provide a clear and complete explanation as to why the missing datasets have not been submitted;	This situation has improved markedly in the last year. All but one CPC has now either reported their longline observer data to IATTC for the relevant years or have provided a clear indication that they have no longline observer data to report from some years, along with an explanation as to why. Three CPCs have longline observer data submissions marked as “pending”, meaning that they have informed IATTC staff that they have data to report, but have not yet set it.	
c)	That the Commission examine once again the percentage for observer coverage on LL vessels;	The IATTC staff maintained its recommendation that LL observer coverage should be increased to a minimum of 20%, but the Commission did not decide to increase the requirement above 5%, with some CPCs expressing the opinion that they cannot go beyond 5% coverage with human observers, and that the only possibility for increasing coverage rates is through implementation of electronic monitoring.	
<b>7.6 Transshipment observer program</b>			
a)	That the IATTC staff be asked to study, in close contact with flag CPC and other stakeholders, the possibility of guaranteeing greater accuracy regarding the fish that is transshipped and reported in the declaration of transshipments.	The Secretariat requested observers to carefully monitor and report details of all transshipments, verifying, for each one, the difference between their calculations of transshipped fish and that reported on the transshipment declaration. A review of all carrier vessel trips in 2023 was conducted to determine how many carrier vessels and how many transshipments had differences of more than 10% (23 trips, 483 transshipments). For 81% of these trips there was no difference of more than 10% between the two estimates. For 18% of these transshipments, the 10% difference was exceeded. Details on this analysis are presented in Document <a href="#">SAC-15 INF-C rev.</a>	
<b>8. FADS</b>			
a)	Taking into account the importance of FAD recovery, the SAC requests that the Commission clarify if vessels other than authorized purse seiners could carry out this recovery and under what circumstances, and considers, should it be necessary, an update of Resolution C-99-07 on FADs.	The Commission adopted Resolution <a href="#">C-23-03</a> and amended C-99-07 on FADs. The Resolution encourages CPCs to initiate recovery programs of drifting FADs through cooperative initiatives among fishing vessels operating in the Convention Area or vessels implementing projects for the recovery of such FADs. Without restricting regular fishing operations of purse seine vessels fishing with FADs, such recovery activities shall be limited to the collection of drifting FADs for final disposal and not to perform any type of maintenance or adjustment. Except for authorized tuna purse seine	

	Recommendation, SAC-14	Status (17 May 2024)	
		vessels, these vessels shall not deploy FADs. Drifting FADs collected under the voluntary recovery program shall be taken on board and brought to port for recycling or disposal. The provisions of this paragraph shall be in effect until 31 December 2028, while the initial results are analyzed.	
<b>9. VULNERABLE SPECIES AND BEST HANDLING AND RELEASE PRACTICES (BHRPs)</b>			
a)	Unless or until official BHRPs are adopted, implement methods that prevent injuries as a minimum, in purse seine fisheries and leaving as little trailing gear on discarded species as possible in longline fisheries;	In response to <a href="#">C-23-07</a> paragraph 12 the staff developed draft BHRPs for sharks ( <a href="#">SAC-15-11</a> ). The staff also compiled a workplan towards the development of BHRPs for all vulnerable taxa (EB-02-03).	
b)	That CPCs and other relevant stakeholders support the IATTC staff in a survey to gather details on national efforts or programs that can help elucidate post-release survival rates in fisheries and the identification of BHRPs for vulnerable species;	A memorandum was sent by the Director to the CPCs requesting this information (Reference: 0473-410). Several CPCs responded with relevant content and identified subject matter experts to assist with the development of BHRPs.	
c)	That the Commission tasks the scientific staff with the preparation of guidelines for good handling and release practices for vulnerable species and development of standards pursuant to the relevant resolutions, including for other species, as appropriate;	Draft standards and a framework for the development and adoption of BHRPs for all vulnerable species were developed by the staff for review and endorsement by the Commission in <a href="#">EB-02-03</a> .	
d)	Prohibit the removal of shark fins on board vessels, requiring fins be naturally attached to the shark carcass until the first point of landing for consistency and compatibility throughout the Pacific Ocean, taking into account the measures adopted by the WCPFC (CMM 2022-04);	Adopted in Resolution <a href="#">C-23-07</a> .	
e)	Carry out further analysis on the length of trailing fishing gear within the EBWG with practical handling and release practices including crew safety during fishing operation;	Data from the WCPO is available and reviewed in <a href="#">EB-01-01</a> and <a href="#">SAC-15-11</a> . These papers provide recommendations on trailing gear.	
f)	Regarding good practices on bycatch and bycatch fauna, that the IATTC scientific staff be asked to define for the tropical zone:	BHRP for seabirds were developed and provided in <a href="#">EB-01-01</a> and <a href="#">EB-02-03</a> . These can apply to all hook and line fisheries that interact with seabirds and contain resuscitation practices for all fisheries where seabirds	



	Recommendation, SAC-14	Status (17 May 2024)
	<ul style="list-style-type: none"> <li>Where it will be necessary to develop release procedures for seabirds in longline vessels greater than 20 meters in length and purse seine nets;</li> <li>Where it will be necessary to develop release procedures for marine mammals incidentally retained on longline vessels greater than 20 meters in length.</li> </ul>	may be captured. A workplan towards the development of BHRP for all vulnerable species taxa including marine mammals captured in longline vessels was developed in Document <a href="#">EB-02-03</a> .
<b>10. FISH SORTING GRIDS</b>		
a)	That observer programs record the use (or not) of fish excluder grids in each fishing set by tuna purse seine vessels, as well as any complementary information they may obtain, so that this information is available to the scientific staff and the SAC for their consideration and analysis;	<p>The staff implemented a survey in the IATTC observer program to evaluate the use of fish sorting grids on all purse seine vessels in the fleet. The survey gathered complementary information such as the number of sets with the sorting grid in use, the location of the sorting grid, and the percentage of the grid submerged during sets. The staff noted that around half of the Ecuadorian fleet has been using this method of fish exclusion. Vessels that have installed the sorting grid use it during all sets.</p> <p>As of April 23, 2024, observers reported 11,042 sets made on 498 surveyed trips. Vessels with sorting grids, representing 24% of the surveyed vessels, accounted for 36% of these sets, mostly in OBJ sets. The analysis of the distribution of the operation of the grid showed that only on 16% of those trips the grid operated completely underwater for the duration of the set, while in 42% of the occasions, the net was underwater 50% or less.</p> <p>No fleets from other flags have installed sorting grids in their nets.</p>
b)	Continue with the methodological improvement workshops among scientific personnel, CPC, industry, captains, and experts to extend the results of the first workshop;	The staff developed an IATTC seminar for scientific personnel, CPCs, industry, and captains, which included the fish sorting grid method as one of the topics. The staff will continue analyzing any available data on the use of this method and evaluating the pros and cons of this experimental fish exclusion technique.
<b>11. CLIMATE CHANGE</b>		
	That climate change be included as a standing agenda item for SAC Annual Meetings going forward.	At its 101 <sup>st</sup> meeting in 2023, the Commission adopted Resolution <a href="#">C-23-10</a> on Climate Change. The Resolution establishes that the SAC in 2024 and annually thereafter shall include climate change as an agenda item at their annual meeting. An agenda item on climate change was

	Recommendation, SAC-14	Status (17 May 2024)	
		included in the SAC-15 agenda (item 8.b), and <a href="#">Document SAC-15-12</a> , presents the staff's climate change proposed workplan for the IATTC.	