

INTER-AMERICAN TROPICAL TUNA COMMISSION

SCIENTIFIC ADVISORY COMMITTEE

ELEVENTH MEETING

La Jolla, California (USA)

11-15 May 2020<sup>1</sup>

DOCUMENT SAC-11-02

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-10, see [here](#).

	Recommendation, SAC-10	Status (15 May 2020)
<b>A. RECOMMENDATIONS OF THE SCIENTIFIC ADVISORY COMMITTEE (SAC)</b>		
<b>1. TROPICAL TUNAS</b>		
<b>1.1. Conservation</b>		
	IATTC staff present to the meeting of the SAC in 2020 a set of options for management measures for tropical tunas, consistent with the staff's work plan to improve the stock assessments of tropical tunas	The staff developed a risk-analysis framework to evaluate the probabilities of alternative management measures exceeding the target and limit reference points for yellowfin and bigeye tunas ( <a href="#">SAC-11-08</a> ) and estimate the effects on the stocks of alternative durations of the temporal closure of the purse-seine fishery. In 2020, the staff is also recommending additional precautionary measures for the floating-object fishery ( <a href="#">SAC-11 INF-M</a> ).
<b>1.2. Stock assessment</b>		
a.	SAC supports the staff's work plan to improve the stock assessments of tropical tunas in time for the Commission to consider management measures for 2021 and subsequent years.	External reviews of the staff's stock assessments of <a href="#">bigeye</a> and <a href="#">yellowfin</a> were conducted in 2019. The staff has completed the planned work, and the assessments of bigeye ( <a href="#">SAC-11-06</a> ) and yellowfin ( <a href="#">SAC-11-07</a> ), which are now included in a risk-analysis framework ( <a href="#">SAC-11 INF-F</a> ), are considered reliable as a basis for management advice ( <a href="#">SAC-11-15</a> ).
b.	IATTC staff develop, and present to the SAC, an alternative assessment schedule, with benchmark or update assessments scheduled in coordination with the management schedule, and indicator	A proposal for an improved assessment/indicator schedule, synchronized with the management schedule, will be presented at SAC-11 as part of the Staff Activities and Research Plan report (SAC-11-01).

<sup>1</sup> Postponed until a later date to be determined

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	analyses in the intervening years to assess whether additional management measures are required.		
c.	IATTC staff continue working with CPCs to review data reporting, in terms of the quantity and quality required for the improved stock assessments	As in previous years, the staff sent a reminder to CPCs about their obligations regarding the provision of data and reports. The staff is reviewing current procedures, including Resolution <a href="#">C-03-05</a> , with the aim of updating and improving data collection, reporting, and analysis, in line with the responsibilities and objectives of the Antigua Convention and the <a href="#">Strategic Science Plan</a> .	
d.	IATTC staff continue its collaboration with the WCPFC in stock assessments	Three collaborations with SPC, the science provider for WCPFC, are included in the staff's planned stock assessment schedule: South Pacific albacore, South Pacific swordfish in 2021, and Pacific-wide bigeye in 2022.	
<b>1.3. Management Strategy Evaluation (MSE)</b>			
a.	SAC supports the IATTC staff's work plan (SAC-10-01a) to move forward with Management Strategy Evaluation workshops in 2019 and 2020 for tropical tunas with stakeholders, scientists, and managers. Therefore, that the Commission continue providing funds to support the work	Resolution <a href="#">C-19-07</a> , adopted in July 2019, establishes the terms of reference for MSE workshops. The first workshop on MSE for tropical tunas was held in December 2019; a second workshop, scheduled for May 2020, has been postponed due to the Covid-19 crisis.  The staff's <a href="#">MSE work plan</a> is currently funded through December 2020; funds are needed to continue the work through 2023 (see unfunded proposal).	
<b>2. DORADO</b>			
a.	IATTC staff continue working with CPCs on research on the stock status of dorado ( <i>Coryphaena hippurus</i> ) in the EPO.	A collaborative tagging study is planned with the Sustainable Fisheries Partnership (SFP) and <a href="#">COREMAHI</a> to improve knowledge of the stock structure of dorado in the EPO (see unfunded proposal).	
<b>3. DATA</b>			
<b>3.1. Electronic monitoring (EM)</b>			
a.	EM initiatives implemented on purse seiners, both Classes 1-5 and Class 6, which will improve data collection for the purse-seine fleet, are also tested in the longline fleet.	A pilot study is needed to test EM in the longline fleet (see unfunded proposal). Cooperation from the industry is essential to implementing the study.	
b.	Staff prepare a proposal on EM minimum standards and data collection and reporting requirements for both purse-seine and longline fleets, to be reviewed at the next meeting of the SAC	See Document <a href="#">SAC-11-10</a> , <i>Minimum standards for the implementation of EMS for vessels fishing for tunas in the EPO</i>	
<b>3.2. FAD data</b>			
a.	SAC reiterates the importance of all CPCs providing to the IATTC staff the same raw	In general, despite repeated requests, these data are not being provided, although a Spanish industry	

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	buoy data received by the original users, in accordance with the recommendation of the <i>Ad Hoc</i> Working Group on FADs of May 2018, adopted by the SAC at its 9th meeting	organization (OPAGAC-AGAC) and a US company (Cape Fisheries) did provide access to historical data for a pilot project on alternative abundance indices based on echo-sounder buoy data (Project J.3.a). In addition, an Ecuadorian industry organization (TUNACONS) voluntarily started to provide 20% of their data, starting in 2020.
b.	IATTC staff review the data collection procedures associated with the fishery on floating objects, to identify indicators that adequately represent the number of effective floating objects, levels of deployment, and losses.	The IATTC staff has reviewed and assessed FAD data to identify suitable indicators for the fishery. Document <a href="#">FAD-05 INF-A</a> on FAD fishery statistics includes recommendations for improving data collection and procedures.
c.	The information on <a href="#">FAD form 09-2018 Ver. 2</a> be recorded by the observer on purse-seine vessels with an observer aboard, and that the captain be required to provide the observer with the identification code of the FADs and, as appropriate, the other information in Annex 1 of Resolution C-18-05. On purse-seine vessels without an observer aboard, the captain shall be responsible for recording the information on the form.	Resolution <a href="#">C-19-01</a> , adopted in July 2019, incorporates this requirement (paragraph 2).
<b>3.3. Longline CPUE</b>		
a.	Staff continue investigating with CPCs issues related to longline CPUE, and to continue investigating the joint longline standardized CPUE index	Two scientists from CPCs - Drs. Keisuke Satoh (Japan) and Sung Il Lee (Korea) - conducted research at IATTC headquarters in late 2019 and early 2020 with the staff. Their work contributed to the benchmark assessment of bigeye ( <a href="#">SAC-11-06</a> ), the indicators for both bigeye and yellowfin ( <a href="#">SAC-11-07</a> ), a manuscript for publication in a peer-reviewed journal, and two other documents for SAC-11 ( <a href="#">SAC-11 INF-K</a> and <a href="#">SAC-11 INF-L</a> ). No joint index has been produced yet because there were no length-frequencies associated with the Korean data. Future collaborative work may include a comparison of the length data for Korea and Japan and the estimation of indices for other species.
<b>4. PROGRESS REPORTS ON RECOMMENDATIONS BY WORKING GROUPS</b>		
a.	The report on the progress and outcomes of recommendations adopted by previous SAC meetings (SAC-10-02) was found to be very useful by the SAC. However, that the IATTC staff also include in future reports the progress and outcomes of the recommendations by working groups	Progress on the recommendations of the working groups on FADs and bycatch adopted by the SAC is reported in Section B below.

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	adopted by the SAC.		
<b>B. RECOMMENDATIONS BY THE WORKING GROUP ON BYCATCH ADOPTED BY THE SAC</b>			
<b>GENERAL</b>			
1.	IATTC scientific staff to develop a list of minimum standards for electronic monitoring on purse-seine and longline vessels, for the consideration of the SAC (redrafted and incorporated in the recommendations of the SAC).	See Document <a href="#">SAC-11-10</a> , <i>Minimum standards for the implementation of EMS for vessels fishing for tunas in the EPO.</i>	
2.	IATTC scientific staff to analyze the available operational-level longline observer data for bycatch at the 2020 WG meeting, during the "Summary Report on Bycatch in the EPO" presentation.	See Document <a href="#">SAC-11-04</a> , <i>Synopsis of longline observer data reporting pursuant to Resolution C-19-08 (amending and replacing C-11-08).</i>	
<b>BYCATCH MITIGATION</b>			
3.	Encourage collaboration of CPCs to supply data for IATTC Class 1-5 purse-seine vessels and artisanal fisheries according to procedures currently being developed by IATTC scientific staff in collaboration with other organizations	A voluntary observer program for Class 1-5 vessels has been implemented by TUNACONS in Ecuador, with the collaboration and support of the IATTC staff. The resulting data will be made available to the staff. The FAO-GEF-funded project to improve shark fishery data collection in the EPO was completed in 2019. The project has been extended for one additional year with funds from the European Union (Project C.4.a).	
4.	Encourage additional research on Mobulids, including post-release survival, genetics, and population studies	A visiting scientist from the AZTI research institute in Basque Country (Spain) carried out research related to Mobulids. That funding has ended, and no other resources are currently allocated to this work. However, the staff is in the final steps of formalizing a collaboration in a genetics and post-release survival project, including best handling and releasing practices, with the Manta Trust, the Monterey Bay Aquarium, and the University of California at Santa Cruz.	
5.	Support the IAC (Inter-American Convention for the Preservation and Conservation of Sea Turtles) in the development of IATTC conservation measures to reduce bycatches and mortality of leatherback turtles ( <i>Dermochelys coriacea</i> ), including circle hooks, fish bait, spatial management and safe handling and release.	Resolution <a href="#">C-19-04</a> , adopted in July 2019, paragraph 4c states that "by 2021, the BYC WG and SAC shall analyze scientific information regarding different circle hooks sizes and their effectiveness at mitigating sea turtle bycatch (decreasing catch and increasing post-release survival) and provide a recommendation to the Commission for a minimum hook size as well as a schedule for implementing this recommended minimum hook size through a revision to this resolution."	
6.	IATTC staff work with the IAC to assess the vulnerability of leatherback turtles in the EPO using different management scenarios	In a collaboration led by IATTC and IAC staff ( <a href="#">BYC-10 INF-B</a> ), the vulnerability status and efficacy of potential conservation and management measures for the east Pacific leatherback turtle stock were evaluated, using a	

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		spatially-explicit ecological risk assessment (ERA) approach developed by the IATTC staff ( <a href="#">EASI-Fish</a> ).	
7.	The WG encourages additional studies to determine impacts of gillnet illumination on catch composition in additional locations	The staff interpreted item 7 not as a request for a specific action by the staff but rather to highlight types of research which can be valuable to identify solution for bycatch mitigation.	
<b>PURSE-SEINE BEST PRACTICES</b>			
8.	In the near future, move toward the use of non-entangling FADs without any netting and encourage research on biodegradable materials	Resolution <a href="#">C-19-01</a> , adopted in July 2019, includes in section 3 provisions to reduce entanglements through appropriate materials, design and deployment of FADs.	
9.	Promote the application of proven best practices of bycatch release on purse seiners and encourage research to develop safe-handling techniques to improve the post-release survival rates of sensitive fauna	Resolution <a href="#">C-19-04</a> , adopted in July 2019, stipulates many actions for the rescue and release of sea turtles by purse seiners. Similarly, the staff is collaborating in a project to identify best handling and release practices for mobulids.	
10.	Additional electronic tagging experiments should be conducted in order to evaluate post-release survival rates	Project M.2.b ( <i>Evaluating best handling practices for maximizing post-release survival of silky sharks in longline fisheries</i> ) has been completed. The staff is in the final steps of formalizing a collaboration in a genetics and post-release survival project, including best handling and release practices, with the Manta Trust, the Monterey Bay Aquarium, and the University of California at Santa Cruz.	
<b>SEABIRDS</b>			
11.	The WG requests a review and update of the mitigation options in Resolution <a href="#">C-11-02</a> , including potential harmonization with WCPFC seabird regulations and ACAP guidelines	A proposal by USA delegation has been presented in the past but could not be thoroughly considered and approved; it might serve as a basis for further discussion with inputs from members and relevant stakeholders which might lead to the adoption of revised and updated mitigation options as requested by the WG.	
<b>MARINE MAMMAL SAFE HANDLING AND RELEASE GUIDELINES</b>			
12.	Marine mammal identification guides and safe handling and release guidelines be posted on the IATTC website	These documents are being prepared by US fisheries authorities (NOAA). The safe handling guidelines are not yet finalized, and the marine mammal identification guide covers only species found off the west coast of the United States and is also available in English only; therefore, neither document has yet been posted.	