INTER-AMERICAN TROPICAL TUNA COMMISSION 92TH MEETING

Mexico City, Mexico 24 July-28 July 2017

DOCUMENT IATTC-92-04c

RECOMMENDATIONS OF THE EIGHTH SCIENTIFIC ADVISORY COMMITTEE MEETING

The eighth meeting of the Scientific Advisory Committee (SAC) makes the following recommendations to the Commission:

- 1. **Spatial-temporal modelling of CPUE data:** The SAC recognizes the important work and collaborative efforts on spatial-temporal modelling of CPUE data, and highlights that IATTC efforts in this area are at the cutting edge of complex approaches to stock assessments. The SAC recommends continued Commission support for future research efforts in this area.
- 2. **Strategic Science Plan:** The SAC recommends that the scientific staff prepare a strategic science plan for the 2018-2022 period, which includes clear objectives, specific priorities, strategies, actions, responsibilities, and resources, including a tentative budget. The SAC also recommends that this strategic science plan include, *inter alia*, a stock assessment schedule, an action plan for implementation of Management Strategy Evaluation (MSE) with priority to tropical tunas, and a shark research plan.
- 3. **Management Strategy Evaluation** (MSE): The SAC recommends continued and expanded Commission support for the staff's work and collaborative efforts in the area of MSE. Specifically, the SAC recommends further efforts to identify priorities for further research and progress, along with a calendar for a plan of work and an accounting of the necessary resources.
- 4. **Dorado** (*Coryphaena hippurus*): The SAC recognizes the importance of the dorado resource for coastal CPCs, and recommends that the Commission continue to support the participation of IATTC staff in data collection and research efforts, and consider financial support for such efforts, as appropriate.
- 5. **Tagging:** The SAC reiterates its recommendation to establish and continue tagging programs, for which the staff should develop a sampling design, indicating the target species, budget, and potential sources of financing
- 6. **Sorting grids**: The SAC recommends continuing the research efforts into sorting grids for juvenile tuna, developing an experimental plan in accordance with Resolution C-17-01
- 7. **Observers on purse-seine vessels of less than 364 t capacity:** The SAC reiterates recommendation 5 of its seventh meeting in 2016: "Establish observer coverage for purse-seine vessels of less than 364 metric tons carrying capacity, and evaluate the use of electronic monitoring systems."
- 8. **Limits on FADs:** The SAC recommends establishing a limit on the number of FADs. To that end, the SAC also recommends that the scientific staff perform some dedicated work to enable future discussions by the Commission.
- 9. **Data on well volume of longline vessels:** The SAC recommends that the well volume of longline vessels, in cubic meters, be included in the data fields to be collected by longline observers.

- 10. **Support for developing countries:** The SAC recognizes the contribution of the projects presented with regard to support for developing countries and recommends that they be strengthened and continued, seeking financial resources.
- 11. **IATTC office in Costa Rica:** The SAC acknowledges the offer of Costa Rica to host and support the establishment of an IATTC field office in their country.
- 12. **Pacific bluefin tuna:** To further its work on the recovery of Pacific bluefin tuna, the SAC supports the continued coordination between the IATTC and WCPFC to develop a rebuilding plan including how the second rebuilding target will be calculated, any assumptions about recruitment that need to be made, and the required probability of reaching that target.
- 13. **Conservation of tropical tunas:** The SAC recommends that the scientific staff prioritize work on the analysis of various options for the management and conservation of tropical tunas such as maintaining the 62-day closure, maintaining the "corralito", establishing a limit on the number of FADs deployed and the manufacture of these devices using biodegradable and non-entangling materials. The SAC requests the scientific staff to evaluate fishing effort for calculating the days of closure on a different basis from capacity in cubic meters. This request is based on the imperfect correlation between fleet capacity and fishing mortality.
- 14. **Minimum data standards for longline observer programs:** The SAC adopts the following minimum standards for collecting and reporting data to the Commission by the CPCs' longline observer programs, pursuant to paragraph 7 of Resolution C-11-08. CPCs that choose to use the longline observer forms and manuals available on the IATTC web site should collect and report all the relevant data found on those forms. Observer programs not using the IATTC forms should collect and report to the Commission the data specified in Annex 1 of Document SAC-08-07e, excluding those fields highlighted in yellow that are not currently included in the WCPFC list of minimum standard data fields.
- 15. **Fin-to-carcass ratio for sharks:** The SAC recommends that the scientific staff review the provisions of Resolution C-05-03 related to the fin-to-carcass ratio for sharks.
- 16. **Shark research:** The SAC recommends that shark-related scientific work is aligned with the requirements of Resolutions <u>C-05-03</u>, <u>C-16-05</u>, and <u>C-16-06</u>.
- 17. **SAC documents:** To allow SAC members sufficient time to prepare for the meetings of the SAC, the SAC recommends that all meeting documents are posted on the IATTC website at least three weeks ahead of every meeting.
- 18. **Analysis of catch limits:** The SAC requests that the scientific staff assess catch limits based on the update of the 3-year period 2014-2016, pursuant to resolution <u>C-17-01</u>.
- 19. **Analysis of impacts of juvenile mortality:** The SAC recommends that the scientific staff assess the impact of the fishing mortality of juveniles on future spawning biomass of yellowfin and bigeye tunas¹.

The following recommendations are based on advice received from the 2^{nd} Meeting of the Ad Hoc Working Group on FADs:

1. **Data on FADs:** The SAC agrees with the *Ad Hoc* Working Group regarding the need to set minimum data requirements and standards for the collection of the data specified in Resolution C-16-01. The SAC recommends that efforts to revise data collection on FADs continue intersessionally, using the *Basecamp* virtual forum and with the help of IATTC staff, with a goal of submitting a revised form for consideration by the next meeting of the *Ad Hoc* Working Group scheduled for July 2017, which will in turn pass the document to the Commission for consideration at its 92nd Meeting

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¹ This recommendation was adopted without the participation of the European Union.

- 2. FAD database: The SAC also recommends that the Commission request that the IATTC staff develop a common database for the management of FAD data collected pursuant to Resolution C-16-01. This work should be informed through an informal workshop to be held in 2017 with broad participation of relevant CPCs and IATTC scientific staff. The SAC recommends that, following the development of a common database, CPCs designate a representative responsible for transmitting the relevant data to IATTC.
- 3. **Workshops on FAD data:** The SAC acknowledges that some fleets may have difficulty in complying with FAD data collection requirements, and therefore recommends that CPCs, IATTC staff and staff from national observer programs should organize training workshops that will help vessel captains and crew learn how to properly fill out FAD data forms.
- 4. **Collection of data on FADs:** The SAC recommends that the Commission consider the appropriate levels of observer coverage (using both observers and electronic monitoring systems) in various fleet categories with the goal of improving FAD-related data collection.
- 5. **Definitions of FAD-related terms:** The SAC recommends that the Commission, through the *Ad Hoc* Working Group on FADs, develop definitions for a suite of terms related to FAD fishing operations, within the context of Resolution C-16-01, taking into consideration the definitions used by other tuna RFMOs, as appropriate. The terms recommended for definition include: floating object, log, FAD, interaction with floating object, set on floating object, set on unassociated school, set on whale shark, biodegradable FAD and non-entangling FAD. The development of a definition for "interaction with floating object," should take into account the definition of "interaction" provided in the Antigua Convention. Regarding the definition of "floating object set", the Working Group should explore the possibility of developing a checklist that would allow the validation of the definition based on the fulfillment of some specific criteria. The Working Group should also work with the staff of the IATTC to review the biological information of population structure associated with floating objects to support the development of this definition. Legal aspects of this definition should also be evaluated, including, among others, ownership of the floating object. The current definition of floating object sets used for data reporting should also be taken into consideration.
- 6. **FAD research:** The SAC recommends that the Commission support the research plan prepared by the *Ad Hoc* Working Group (Appendix 1) and work to identify priority areas for research. The research should proceed with the support of those that can contribute to the elaboration and implementation of the Commission's management measures for FADs.
- 7. **Biodegradable FADs:** The SAC recommends that future work on the development of biodegradable FADs take into account the social, economic and environmental sustainability of the materials evaluated.
- 8. **Funding for FAD research:** The SAC recommends the development of work plans and budgets for priority FADs research, and identify possible sources of alternative funding for initiatives that cannot be covered by the regular budget of the IATTC. Project leads should be identified to oversee the development of these priority research projects.
- 9. **Future actions on FADs:** The SAC agrees with the key areas for future action identified by the Joint Tuna-RFMO FADs Working Group Meeting. Accordingly, the SAC recommends that the IATTC FAD Working Group, in collaboration with the SAC and the Commission staff, develop a planning roadmap for future actions to be taken in support of progress on these key areas. The roadmap should identify the necessary participants and actors, timelines for progress, and budgets, including identification of potential funding sources.
- 10. **FAD questionnaire:** The SAC recommends that the Commission circulate an additional request to the FAD Working Group members, asking them to complete the questionnaire designed to inform its work.

The following recommendations are based on advice received from the Working Group on Bycatch:

The SAC recommends:

- 1. **Observers on longline vessels:** Consistent with the advice of IATTC scientific staff, that the observer coverage on longline vessels be increased to 20% in order to collect more data on bycatch by longline vessels, and that the resulting operational-level data be submitted to the Commission.
- 2. **Mortality of sea turtles:** The development and adoption of a format for CPC reports on the implementation of FAO Guidelines to reduce sea turtle mortality in fishing operations, as mandated by Resolution C-07-03, and compliance with this reporting requirement should be improved.
- 3. **Online access to national reports:** That the national reports submitted pursuant to Resolution C-07-03 be made available online to all CPCs through a controlled-access portal on the IATTC web site.
- 4. **Bycatches of sea turtles:** That the Commission analyze the extent of implementation by CPCs of the measures to reduce sea turtle bycatch in Resolution C-07-03, with a view to updating the measure, if necessary.
- 5. **Cooperation with the IAC:** Continued and enhanced cooperation and collaboration with the Inter-American Convention for the Protection of Sea Turtles (IAC), and in particular:
 - i. strengthened cooperation between the two organizations in sea turtle protection activities, including IAC participation in the meetings of the SAC and IATTC participation in relevant meetings of the IAC.
 - ii. that the IATTC and IAC Secretariats work together to continue supporting training regarding best practices for safe handling and release of sea turtles.
 - iii. joint collaboration on sea turtle bycatch mitigation research (*e.g.* the use of illuminated nets and reductions in set duration).
 - iv. joint collaboration between the IATTC and the IAC scientific committee to identify bycatch hotspots associated with leatherback inter-nesting areas.
- 6. **Seabirds:** That the existing guidelines and other tools relating to the removal of fishing hooks from incidentally caught seabirds be made available to CPCs through the IATTC web site.
- 7. **Seabird data:** Improvement in seabird data and interaction information provided in annual reports by CPCs pursuant to paragraph 7 of Resolution C-11-02 (*e.g.* identification to species of seabirds interacted with, confirmation of "zero interactions" as opposed to leaving fields blank, stratified data, and any other relevant information available from an observer or other monitoring program).
- 8. **Seabird mitigation measures:** That the Commission analyze the extent of implementation by CPCs of the measures contained in Resolution C-11-02 (*e.g.* regarding mitigation measures used, materials used, etc.) with a view to updating the measure, if necessary.
- 9. **Seabird mitigation measures:** That the Commission consider revising the suite of mitigation measures in Resolution C-11-02 to include additional options, such as hook shielding devices.
- 10. **EMS:** That pilot projects be developed to examine the use of electronic monitoring systems, particularly on longline vessels, and that CPCs include in their national reports any relevant information on their use of electronic monitoring systems at the national level.
- 11. **Meetings of the Bycatch Working group:** Regular meetings of the Working Group on Bycatch, preferably on an annual basis.