

INTER-AMERICAN TROPICAL TUNA COMMISSION

95th MEETING

(By videoconference)

30 November – 4 December 2020

RECOMMENDATION PROPOSED BY ECUADOR

PROGRESS AND IMPROVEMENTS IN THE DECISION MAKING

The Inter-American Tropical Tuna Commission (IATTC), virtually gathered during the 95th Meeting:

Recognizing the importance and requirement to reinforce the scientific advice necessary for the tropical tunas fisheries management;

Aware the new reference models developed by staff scientific have a better performance and predictive capacity for the input data and biological processes (growth, births) than previous models, providing greater precision in population variables estimates (e.g., spawning biomass and fishing mortalities);

Recognizing the association between the new reference models and the tropical tunas harvest control rules (C-17-02), and also the linkage with the decision-making process based on risk analysis;

Aware that CPC must attain a proper education and internalization on the benefits for the decision-making of using the harvest control rules and the objective and limit reference points;

Noting that diverse CPC interpretations of key variables derived from reference models (e.g., fishing mortality) could impact the use of harvest control rules;

Considering the relevance of the Scientific Advisory Committee (SAC) in identifying proposals of conservation measures for tropical tunas in the Eastern Pacific Ocean (EPO);

Taking into account that these recommendations could include ancillary information provided by the stock status indicators (SSI);

Recognizing this auxiliary information requires a homologous reference point framework to the current harvest control rules defined in resolution C-16-02; and

Building on the analytical advances developed by scientific staff;

Recommend:

1. Perform scientific analysis necessary to reduce the uncertainty in the decision-making process, emanating from:
 - i. the bimodal exploitation condition (FACT/FRMS) of bigeye tuna raised from the risk analysis and its relationship with the reference models. This bimodal pattern could drive two conflicting scenarios, one highly optimistic and another pessimistic one which should trigger management and regulation actions;
 - ii. the ambiguities in the harvest control rules about which management measures could be adopted when the reference points have been surpassed, as is the case under the bigeye pessimistic scenario;
 - iii. the uncertainties of how to relate the current trend and levels of SSIs with the fishing mortalities in the tropical tuna stocks.

2. The relevance of reducing uncertainty in the scientific advice for fisheries management of tropical tunas and the role of scientific staff, acknowledging that:
 - i. bullet point 1.i. claims a sensitivity analyses of the weighting procedure for the reference models grid taking into account in the risk analysis. These analyses should allow members to provide feedback about the number and level of weighting based on field expertise opinions and demonstrable information;
 - ii. Regarding bullet point 1.ii., the SAC during 2021, as well as the Commission, will benefit from the establishment of a three-year cycle for the management of the tropical tuna fishery (2022-2024) as long as the analyses and proposals about which possible management measures could be adopted when the reference points have been surpassed;
 - iii. point 1.iii. requires analytical evidence on the relationship between SSI and the fleets fishing mortality, in order to determine SSI thresholds that could be used to provide strategic inputs for the harvest control rules and their integration in the resolution C-16-02.
3. Consider how to initiate a scientific work towards identifying the necessary baseline guidelines for a population assessment in Skipjack, which recognize:
 - i. the most recent knowledge in dynamic population, individual biology, and modern stock assessment methods;
 - ii. the current SSI used for the description of the tunas fishery;
 - iii. the potential cooperation with CPC for identifying and define an SSI-based empirical harvest control based.
4. Initiate scientific research works indicated in numeral II.A.i. of the SSA recommendations (IATTC-95-02), which advice taking into account the environment as a driver of changes in the population dynamics of tropical tunas. One potential area of development could be the causal relationship between environmental variables and the fleets fishing strategies across the EPO, helping to elucidate whether the operational variables (e.g., effort and catches) are driven by the environment, the stocks status, or a mixture between both.