TECHNICAL AND COMPLIANCE COMMITTEE

Third Regular Session

27 September – 2 October 2007
Pohnpei, Federated States of Micronesia

CONSIDERATION OF SEA TURTLE BY-CATCH MITIGATION MEASURES

WCPFC-TCC3-2007/27
26 September 2007

Paper prepared by the Secretariat

Previous discussions

Second Regular Session of the Scientific Committee, Manila, Philippines, 7-18 August 2006

33. Regarding sea turtles, the Scientific Committee recommended to the Commission that the Commission adopt the proposed sea turtle data collection and research programme (Attachment M of the main Scientific Committee meeting report).

34. Advice on circle hooks

a) New information presented at the Ecosystem and Bycatch SWG confirms previous understanding of the efficacy of circle hooks in reducing hook ingestion by sea turtles and the efficacy of large sized circle hooks in reducing turtle bycatch.

b) Some of the new results have indicated variations in catch rates with some sizes of circle hooks (e.g. reduced target species catch rates. This is also similar to previous findings).

c) The magnitude of impacts on sea turtle bycatch and target species catch varies between the studies conducted to date.

d) Notwithstanding the above, results presented to the Ecosystem and Bycatch SWG clearly show that a specifically designed management regime employing sea turtle bycatch mitigation measures, such as circle hooks and fish baits, applied to a fishery sector with a turtle bycatch problem can substantially reduce sea turtle bycatch while maintaining viable target species catch rates.

35. Advice on sea turtle mitigation: Based on the above, and information that other measures (e.g. fish bait, deep setting) may also reduce turtle bycatch, the Scientific Committee recommended that the Commission adopt a flexible approach to sea turtle bycatch mitigation based on scientific experiments/observations testing a range of mitigation techniques to determine the appropriate mitigation measures for a particular fishery.

Second Regular Session of the Technical and Compliance Committee, Manila, Philippines, 28 September – 3 October, 2006, Brisbane, Australia

117. TCC2 endorsed the SC2 recommendation to establish a research programme and encouraged CCMs to continue their own research on this issue.

Third Regular Session of the Scientific Committee, Honolulu, USA, 13-24 August 2007

35. The Scientific Committee provided advice on effective strategies to reduce sea turtle interactions (Table 1). Column A in the table contains articles that vessels should carry to safely release hooked sea turtles, and the consensus was reached that these tools would be effective in all longline fisheries, if used according to guidelines. Column B contains sea turtle bycatch mitigation measures that have been shown to reduce the capture or injury of turtles, while maintaining target species catch based on research conducted around the world.

Table 1. Effective strategies to reduce sea turtle interactions in fisheries (Discussion was not completed on the items in Column B due to reservations by Japan and will continue at further meetings of the WCPFC and its committees.)

A: All longline fisheries	B: Optional methods for longline fishing
• Carry and use dipnets (where appropriate), line cutters and dehookers to handle and release sea turtles using guidelines to be established by WCPFC	For shallow-set fisheries (majority of hooks < 100 m) targeting swordfish, with possible bycatch of loggerhead or leatherback turtles: • Use large circle hooks[1] • Use fish bait as a replacement for traditional use of squid bait For other fishery sectors than that described above (if applicable): • Replace non-circle hooks with circle hooks[1] that are at least as wide (minimum width) as those replaced • Replace non-circle hooks with hooks[1] (any style) that are at least 20% wider (minimum width) • Use only fish for bait • Eliminate the shallowest-set hooks (i.e. <100 m) in deep set fishing • Replace the shallowest set hooks (i.e. <100m) with circle hooks[1]
[1] For all methods, hooks should not have points offset any greater than 10^{o}. Review has shown that greater offsets can have negative effects in increasing the frequency of deep hooking as opposed to mouth hooking.	

The Third Regular Session of the Commission, 11-15 December, Apia, Samoa

98. ….CCMs were urged to contribute to the work of TCC3 by providing the Commission with technical specifications for sea turtle interaction mitigation methods or devices currently employed by their vessels in highly migratory species fisheries.

99. The Commission will consider the adoption of specific sea turtle interaction mitigation measures at its annual session in 2007, based on the recommendations of SC3 and the technical specifications developed by TCC3.

Guidance

The Third Regular Session of the Technical and Compliance Committee is invited to:

- to contribute to the work of TCC3 by providing the Commission with technical specifications for sea turtle interaction mitigation methods or devices currently employed by their vessels in highly migratory species fisheries; and

- consider recommendations and advice in relation to technical specifications sea turtle interaction mitigation methods that might support the Commission's possible consideration of the measures to address sea turtle mitigation at its annual session in 2007.