

Inter-American Convention for the Protection and Conservation of Sea Turtles

CIT-CC11-2014-Tec.8

Recommendations of Manuals for Best Practices for Handling Sea Turtles Onboard Fishing Boats

This document was prepared by the Fisheries Working Group of the IAC Scientific Committee. It contains information and recommendations of existing manuals about techniques and best practices for handling sea turtles incidentally captured onboard of fishing boats. The working group made an exhaustive literature revision concerning this topic, and compiled and analyzed recommendations from those manuals that better represent the characteristics of the IAC region. The document was produced to provide guidance to IAC Parties and to promote capacity building and training, both to the fisheries sector that directly interact with the sea turtles, and to the government sector, scientists and the civil society in general.

Introduction

According to Article IV, of the IAC Convention Text, the Parties should look for appropriate measures needed to conserve and to protect sea turtles and their habitats. Among these needed measures are environmental education and diffusion of specific information and recommendations to minimize sea turtle injuries or death during fishing activities. Incidental captures from several fishing gears is, perhaps, the major threat to the juvenile and adult sea turtle populations globally, as it has been shown in the document entitled "Fisheries and Sea Turtles" published by the IAC Secretariat (2006).

Besides the management and mitigation measures that can be implemented during trawling, long-lines or net fishing techniques to avoid sea turtle bycatch, it is important that fishermen are well informed and trained in how to handle onboard those sea turtles incidentally captured. International guidelines to reduce the incidental catch of sea turtles were proposed in the technical consultation on sea turtle conservation held in Bangkok in 2004 (FAO), which included the need of a release timely and correctly of all sea turtles onboard and the need to have the right tools to do it. On the other hand, it was also recognized the need to develop educational material to train fishermen by teaching workshops about the release procedures.

Considering the IAC obligations and the FAO recommendations, during the 10th Scientific Meeting Committee held in Honduras, the Fisheries Working Group agreed to compile and analyze information from existing manuals about the safe handling on board of incidentally caught sea turtles, focusing on fishing gear used in the IAC region. The objective of this analysis was to produce a document to help the standardization of these sea turtle safe

release techniques in the IAC region, and to facilitate the availability of technical information to various users.

Results

The literature search was done on line and it was complemented by consulting several specialists and organizations working on these issues. Fifteen documents were pre-selected for further consideration. The final selection took into consideration up to date information, the clarity in describing the procedures, the applicability for the fisheries in the region, their recommendations and their correlation with other Conventions including IATTC and ICCAT. At present, there is not a single manual available or technical document that compiles standardized sea turtle release techniques onboard of fishing boats that is being used by Regional Fisheries Management Organizations (RFMO). The following manuals were selected from this analysis:

The following four documents about sea turtles handling techniques onboard, which included handling of drowned turtles and de-hooking were selected. Despite the de-hooking techniques suggested in documents 2 and 4, it is important to mention the recent conservation recommendations proposed during the 87th IATTC meeting held in Lima in July 2014 highlighted the item H.3 about sea turtles in the long-line fishery, in which "prohibits the intents to remove ingested hooks and require to leave the hook where it is, or to cut the line as close to the hook without further damage to the animal." On the other hand, ICCAT has produced a series of recommendations to advise that in case of a turtle that has swallowed a hook to cut the line as close to the animal as possible. They do not recommend the removal of the hooks.

- 1. Guideline to reduce sea turtle mortality in fishing operations. FAO, Roma 2009. 128 pp.
- 2. Careful release protocols for sea turtle release with minimal injury. *Epperly S., Stokes L. and Dick S.* NOAA Technical Memorandum NMFS-SEFSC-524, 42pp (2004).
- 3. Guía para Pescadores sobre el Manejo de Tortugas Marinas. *Guido Gerosa y Mónica Aureggi*. Programa de las Naciones Unidas parta Medio Ambiente. Plan de Acción del Mediterráneo PNUMA. 2001. 32 pp.
- 4. Apostila para Observadores de Bordo. Tartarugas Marinhas. Projeto TAMAR. Maio 2012.

The fifth document suggested, although it is not a specific guide for handling sea turtles on board of fishing boats, it complements the previous four documents. The document presents simple and practical guidelines and basic procedures for people who have to provide primary trauma and sea turtle stranding responses. Also includes seven appendices with valuable additional information and is available on line in the version in Spanish and English.

5. Marine Turtle Trauma Response Procedures: A husbandry manual. *Phelan, Shana M. y Karen L. Eckert*. 2006. WIDECAST Technical Report 10. Balwin Misouri, USA. 100 pp.

http://www.widecast.org/Resources/Docs/Bluvias and Eckert Sea Turtle Husban dry Manual 2010.pdf

Finally, the sixth document provides a clear and original strategy to facilitate the implementation of educational activities for fishermen and other stakeholders, in addition to the specific contents in handling sea turtles on board of long-line fishing boats. This document was designed to help the coordinators of education programs and observers on fishing boats and to sensitize the fishermen working with them. The objective of the Fisheries Working Group with this activity is not only to recommend bibliography, but also to recommend to IAC Parties the use of the bibliography and to conduct capacity building workshops with the fisherman to guarantee that the information is available to them. The document is available in English and Spanish and its complemented by two videos about sea turtle release techniques and an extensive list of references to enhance the learning process. The first 23 minutes, 276MB video "Learning how to release sea turtles" was produced by IATTC and it is available at http://www.iattc.org/Downloads/IATTC-OFCF-release-Sea-turtles.mp4, the second 3 minutes 36MB video, "Reviving sea turtles" was also produced by IATTC and it is available at http://www.iattc.org/Downloads/IATTC-OFCF-release-Sea-turtles.mp4.

6. Parga, M. 2012. Curriculum for training in handling and release sea turtle hooks designed for fishermen. Reduction Program Bycatch of sea turtles in longline fisheries in the Eastern Pacific. WWF. 32p.

The goal of these manuals is to provide guidelines and basic procedures for handling incidentally captured sea turtles on board of fishing boats, providing a tool for fishermen as primary responders. Most of the information selected for this document was produced by organizations and institutions from IAC Parties, so that the contents are considered to be of a regional context for the fisheries and the sea turtle and fisheries interactions.

Analyzed fisheries included:

- Long-line fisheries
- Trawling fishery
- Gill net fisheries

Techniques mentioned in the manuals included:

- Techniques about boat maneuver in case of sea turtle approaching.
- Techniques about bringing a sea turtle onboard.
- Techniques about proper sea turtle manipulation and restrain onboard.
- Techniques about practical and quick clinical assessment (active, inactive or dead).
- Techniques about assessment and extraction of hooks.
- Techniques about sea turtle drowning assessment and resuscitation guidelines.
- Techniques about proper sea turtle release.

Attached protocols are:

- A morphologic key for sea turtles species identification.
- Data sheet for collecting basic information (morphometrics, etc).
- Techniques for tagging sea turtles.
- Expert directory.

Final Recommendations

The Scientific Committee recommends the use of these six manuals to better manage sea turtles onboard of fishing boats, which also address the objectives stated in the "Manual of management techniques for sea turtle conservation at nesting beaches" (CIT-CC8-2011-Tec.2. 52 pp.); thus maintaining a common axis regarding the IAC general and specific objectives. The recommendation of this selection also aims to:

- Promote the standardization of techniques used in the IAC region.
- Provide national sea turtle programs, a training tool.
- Strengthen capacity building of local and national institutions in the preparation of conservation programs.
- The use of standardized methodology and terminology.
- The promotion of the IAC objectives.

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