

**Draft recommendation by ICCAT on the
by-catch of sea turtles caught in association with ICCAT fisheries
(combine, streamline, and amend Recommendations 10-09 and 13-11)**

(Proposal submitted by the European Union)

RECALLING that the *Recommendation by ICCAT Amending Recommendation 10-09 on the Bycatch of Sea Turtles in ICCAT Fisheries* (Rec. 13-11) stated that upon receipt of advice from the Standing Committee on Research and Statistics (SCRS), the Commission shall consider additional measures to mitigate sea turtle bycatch in ICCAT fisheries, if necessary;

RECOGNIZING that additional measures should be undertaken to reduce sea turtle bycatch and mortality in tuna fisheries;

CONSIDERING that the incidental catch of sea turtles' species in relation to fishing activities may seriously affect sea turtles' populations within the Convention area;

RECOGNIZING that the SCRS and its Subcommittee on Ecosystems and By-catch (SubComECO) have confirmed high annual rates of bycatch of sea turtles in ICCAT longline fisheries, particularly in shallow-sets, and have recommended that the Commission consider adopting mitigation measures for shallow-set longline fisheries;

GUIDED BY the significant work has been undertaken throughout the world that has led to advancements in best practices and technologies such as, excluder devices and type of baits to limit bycatch of sea turtles;

RECOGNIZING measures adopted by both the WCPFC and the Inter-American Tropical Tuna Commission to mitigate fisheries' impacts on sea turtles, in 2018 and 2019, respectively; and

ACKNOWLEDGING the urgent need to reduce the impacts of ICCAT fisheries on threatened and endangered sea turtle populations within the Convention area;

TAKING INTO ACCOUNT the obligations of Contracting Parties, Cooperating non-Contracting Parties, Entities or Fishing Entities (hereinafter referred to as CPCs) under the *Recommendation by ICCAT on Information Collection and Harmonization of Data on Bycatch and Discards in ICCAT Fisheries* [Rec. 11-10] and the *Recommendation by ICCAT to Establish Minimum Standards for Fishing Vessel Scientific Observer Programs* (Rec. 16-14) to report their fisheries' interactions with sea turtles using the SCRS statistical form;

ACKNOWLEDGING that relatively simple proactive and reactive efforts on the part of fishermen can serve to both avoid sea turtle interactions and minimize the adverse consequences of such interactions when they occur; and

CONSIDERING the urgent need to reduce the impacts of ICCAT fisheries on threatened and endangered sea turtle populations within the Convention area, while recognizing that the threats are many fold at sea and on land and that a holistic approach is needed;

THE INTERNATIONAL COMMISSION FOR THE CONSERVATION
OF ATLANTIC TUNAS (ICCAT) RECOMMENDS THAT:

1. In order to reduce bycatch rates and increase post-release survival of threatened and endangered sea turtle populations within the Convention area, in areas where encounters with sea turtles are likely as set out in paragraph 5, CPCs shall:
 - a) reduce and eliminate, to the extent possible, incidental catch of sea turtles during fishing operations, through the use of:
 - i. alternative gear types and gear modifications;
 - ii. time-area fishing restrictions and closures based on advice from the SCRS, in instances where there is a higher risk of interaction with sea turtles, based for instance on spatial recognition measures to identify sea turtles' presence;
 - iii. effective static net gears' marking allowing their detection by sea turtles (incl. acoustic reflectivity, use of net colours, light passive reflectors, thicker twine diameter, corks or other materials within the net, metal compounds that have acoustical detection features such as barium sulfate, illuminating nets with battery-operated light sticks);
 - iv. implementation of maximum potential bycatch thresholds, based on advice from the SCRS;
 - v. turtle excluder devices with sorting and shepherding devices; or
 - vi. modifications in fishing behaviour and strategy (e.g., reduced soaking time, etc.).
 - b) require that their purse seine vessels avoid encircling sea turtles to the extent practicable, release encircled or entangled sea turtles, including on fish aggregating devices (FADs), where feasible and ensure that FADs deployed in the ICCAT Convention Area are constructed according to Annex 5 of ICCAT Recommendation 21-01 to effectively eliminate entanglement risks of protected species such as sea turtles.
 - c) take all reasonable steps to ensure the safe release of sea turtles in a manner that maximizes the likelihood of their survival by requiring that:
 - i. their vessels that use gear that may entangle sea turtles, carry on board appropriate sea turtle handling equipment, consistent with the "Best practices for sea turtle handling and release" of the *FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations* (2009¹) ('the FAO guidelines') such as line-cutters, de-hookers and basket lifts or dip nets for longliners, basket lifts or dip nets for purse seiners etc.;
 - ii. the owners, operators, and crew of such vessels, as well as any on-board observers, use such equipment by following the safe handling and release practices in the Appendix, and consistent with the FAO guidelines.
 - d) require their fishermen on vessels targeting species covered by the Convention to bring aboard, if practicable, any captured hard-shell sea turtle that is comatose or inactive as soon as possible and foster its recovery, including giving it resuscitation in accordance with the Appendix, before returning it to the water.
 - e) ensure that fishermen are aware of and use proper mitigation and handling techniques, as described in the Appendix.

¹ <http://www.fao.org/docrep/012/i0725e/i0725e.pdf>

2. CPCs with longline vessels that fish in a shallow-set manner² shall:
 - a) Ensure that the operators of such vessels, while fishing for ICCAT species in the Convention Area in areas where encounters with turtles are likely, are required to employ or implement at least one of the following methods to mitigate the capture of sea turtles:
 - i. Use only finfish for bait;
 - ii. Use only large circle hooks, which are fishing hooks that are generally circular or oval in shape and originally designed and manufactured so that the point is turned perpendicularly back to the shank. These hooks shall have an offset not to exceed 10 degrees; and/or
 - iii. Use any other measure, mitigation plan or activity that has been reviewed by the SCRS and approved by the Commission to be capable of reducing the interaction rate of turtles in shallow-set longline fisheries.
 - b) The requirements of paragraph 2(a) need not be applied to those shallow-set longline fisheries determined by the SCRS, based on information provided by the relevant CPC, to have minimal³ observed interaction rates of sea turtles over a three-year period and a level of observer coverage of at least 10% during each of those three years.
3. In order to improve estimates of sea turtle bycatch in ICCAT fisheries, CPCs shall increase scientific observer coverage beyond the minimum level required in Rec. 16-14, to at least 10% of fishing effort in each of their fisheries recording interactions with sea turtles.
4. Consistent with the bycatch reporting obligations under Recs. 11-10 and 16-14, each CPC shall collect, and annually report to ICCAT:
 - a) the mitigation measures they are implementing in line with the requirement of paragraph 1(a);
 - b) information on their interactions with sea turtles in ICCAT fisheries. As a minimum, this information shall include:
 - i. date;
 - ii. location (latitude, longitude);
 - iii. fishing gear type;
 - iv. species identification;
 - v. size (curved or straight carapace length);
 - vi. capture and release condition (e.g., live/dead);
 - vii. FAD type if applicable;
 - viii. bait type if applicable;
 - ix. hook type and size if applicable;
 - x. fishing depth.
 - c) If available, the following information shall also be provided:
 - i. anatomical hooking location, if applicable (e.g., flipper, mouth/jaw, swallowed, entangled);
 - ii. amount of gear left on the animal, if applicable (e.g., estimated length of line);
 - iii. any associated photographs.
5. Paragraphs 1-3 shall not apply to vessels operating only north of 55 degrees N or south of 35 degrees S latitude (i.e., primarily outside the geographic range of Atlantic Sea turtles) or in the Mediterranean Sea.

² Shallow-set fisheries are generally to be considered those in which the majority of hooks fish at depth shallower than 100 meters.

³ As determined by the SCRS.

6. In their Annual Reports to ICCAT, CPCs shall report on the steps they have taken to implement this Recommendation. CPCs that qualify for the exemption specified in paragraphs 2(b) and 5 shall report the exemption in their Annual Report once for the duration that the exemption applies.
7. The SCRS shall continue to review any new relevant information on sea turtle bycatch mitigation measures and advise the Commission in 2025 on their effectiveness and their impacts on other species, notably sharks, and measures taken or recommended to protect such species as appropriate. As part of this work the SCRS shall analyze scientific information regarding different circle hook sizes and their effectiveness at mitigating sea turtle bycatch (decreasing catch and increasing post-release survival) in longline fisheries (both shallow- and deep set longline), including the impact on catch rates of other target and non-target species. The SCRS shall provide relevant recommendations to the Commission based on the results of this analysis.
8. The SCRS shall assess whether time-area fishing restrictions and closures, in areas where there is a higher risk of interaction with sea turtles, based for instance on spatial recognition measures to identify sea turtles' presence, are effective in reducing sea turtle bycatch. The SCRS shall also examine the possibility of defining maximum potential bycatch thresholds for sea turtle bycatch.
9. CPCs with longline fisheries (both shallow- and deep set longline) and gillnet fisheries are encouraged to undertake research trials aiming at mitigating bycatch, reducing bycatch mortality, and increasing post release survival of sea turtles, including on bait, hook sizes and shapes, depths, areas, seasons, as well as the resulting tradeoffs among catch rates of target and bycatch species, and to report the results of these trials to the SCRS. Based on the results of such research, the SCRS shall advise the Commission on potential additional sea turtle mitigation measures for these fisheries.
10. Considering the particular situation of coastal developing CPCs, the special funds established in Recs 14-14, 13-19, and 03-21 should be strengthened through the allocation of funds, from voluntary contributions of CPCs and inclusion of specific budget lines, to facilitate the implementation of this Recommendation, including for training fishermen on safe handling and release, providing related equipment, or supporting trials for new mitigation techniques.
11. This recommendation repeals and replaces both the *Recommendation by ICCAT on the By-catch of Sea Turtles in ICCAT Fisheries* (Rec. 10-09) and the *Recommendation by ICCAT Amending Recommendation 10- 09 on the By-catch of Sea Turtles in ICCAT Fisheries* (Rec. 13-11).
12. This recommendation shall become effective for all Contracting Parties six months after the date of the notification from the Commission transmitting the recommendation to the Contracting Parties.

Safe Handling and Release Practices for Sea Turtles

1. Purse seine safe handling and release

- a) Whenever a sea turtle is sighted in the net, all reasonable efforts should be made to rescue the turtle before it becomes entangled in the net.
- b) No turtle shall be hauled from the water by a fishing line attached to, or entangled upon, the body of a turtle.
- c) If a turtle is entangled during net roll, the net roll should be stopped as soon as the turtle comes out of the water; the turtle should be disentangled without injuring it before resuming the net roll.
- d) If, in spite of the measures taken under paragraphs a) and b) of this section, a sea turtle is accidentally brought on board the vessel and is alive and active, or dead, the sea turtle should be released as quickly as practicable.
- e) If a turtle is brought aboard the vessel and is comatose or inactive, resuscitation should be attempted (paragraph 3).

2. Longline safe handling and release

- a) When practicable, and when operator or crew on board are trained, comatose sea turtles should be brought on board immediately.
- b) Upon sighting a turtle, the vessel and line reel speed should be slowed, and the vessel direction adjusted to move toward the turtle, minimizing tension on the line.
- c) No turtle shall be hauled from the water by a fishing line attached to or entangled upon the body of a turtle.
- d) If a sea turtle is too large or hooked in such a manner as to preclude safe boarding without causing further damage/injury to the turtle, line clippers should be used to clip the line and remove as much line as possible prior to releasing the turtle.
- e) If a sea turtle is observed to be hooked or entangled by longline gear during hauling operations, the vessel operator should immediately cease hauling operations until the turtle has been removed from the longline gear or brought on board the vessel.
- f) If hooked externally or hook is fully visible, hooks shall be removed from sea turtles as quickly and carefully as possible. If a hook cannot be removed from a turtle (e.g., ingested or in roof of mouth), the line shall be cut as close to the hook as possible.
- g) Live turtles should be returned to the sea after handling:
 - i. By putting the vessel engine in neutral gear so that the propeller is disengaged, and the vessel is stopped, and releasing the turtle away from deployed gear; and
 - ii. Observing that the turtle is safely away from the vessel before engaging the propeller and continuing operations.
- h) If the sea turtle brought aboard the vessel is comatose or inactive, resuscitation should be attempted (paragraph 3).

3. Resuscitation for a turtle on board

- a) When handling a sea turtle, attempts should be made to hold the animal by the shell, avoiding the head and neck region, and flippers.
- b) Strive to remove and/or disentangle any foreign items from the sea turtle, such as any plastic items, netting, or embedded hooks, etc.
- c) Placing the turtle on its bottom shell (plastron) so that the turtle is right side up, safely isolated and immobilized on a cushioned surface, such as an automobile tire without a rim, a boat cushion, or coil of rope. The primary purpose of the cushioned surface is to elevate the turtle from the deck to assist in restraining it. Elevate its hindquarters at least 6 inches (15 cm) for a period of 4 up to 24 hours. The amount of the elevation depends on the size of the turtle; greater elevations are needed for larger turtles. Periodically, rock the turtle gently left to right and right to left by holding the outer edge of the shell (carapace) and lifting one side about 3 inches (8 cm) then alternate to the other side. Gently touch the eye and pinch the tail (reflex test) periodically to see if there is a response.
- d) Sea turtles being resuscitated should be shaded and kept damp or moist but under no circumstance be placed into a container holding water. A water-soaked towel placed over the head, carapace, and flippers is the most effective method in keeping a turtle moist.
- e) Sea turtles that revive and become active should be released over the stern of the boat only when fishing gear is not in use (i.e., not actively being set or hauled), when the engine gears are in neutral position, and in areas where they are unlikely to be recaptured or injured by vessels.
- f) Sea turtles that fail to respond to the reflex test or fail to move within 4 hours (up to 24, if possible) should be returned to the water in the same manner as that for actively moving turtles.