

## SCIENTIFIC COMMITTEE EIGHTH REGULAR SESSION

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Guidelines for the Safe Release of Encircled Animals, including Whale Sharks

WCPFC-SC8-2012/EB-WP-19

ISG3<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> SC8 Informal Small Group

## Guidelines for the safe release of encircled animals, including whale sharks

## Summary

Informal Small Group 3 (ISG3) meeting was held during the WCPFC SC8 in Busan, Korea on 8 August 2012. Fourteen (14) participants participated in the meeting and discussed the development of guideline for the safe release of encircled animals, including whale shark. ISG3 reached the conclusion that it is currently not possible to determine the "best" practical method for the safe release of encircled animals. Additionally, there have been no scientific investigations as to the survival of whale sharks that have been caught or entangled in purse seines. Therefore, ISC3 recommended further research primarily to investigate the survival of encircled animals associated with various release techniques.

General principles

- Safety of the crew is the paramount consideration
- When releasing encircled whale sharks, the stress the animal receives should be minimized to the extent possible taking.
- The following possible release methods should be used as general guidelines.
- The effectiveness of the following possible release methods has not been fully evaluated. Further scientific research is necessary in order to investigate survival after the release by various release methods. Therefore, CCMs are encouraged to conduct analysis on methods used by their purse seine vessels. In addition, the WCPFC could initiate a program of satellite tag deployments by experienced observers to assess survival of encircles animals associated with various release techniques.
- The appropriate release method should be chosen in a flexible manner depending on the condition of the particular purse seine set, e.g. the size and orientation of the encircled animal, size of fish in the purse seine set and operation style.

Possible release methods

- Cutting net
  - Experience indicates that cutting the vertically (about 3-5 meters) is quick and efficient.
  - Caveat: Possible loss of entire catches and time to repair the net.
- Passive removal or letting sharks go over corks (ref. JPN proposal in WCPFC8-2011-DP-17, see appendix1)
  - Would be easy particularly for vessels with skiff boat
  - The manipulation of cork line is only possible if the vessel concentrates and loads catch using a brailing boom.
  - o Very situation dependent and based on size and orientation of the animal
  - Caveat: If it takes a long time to roll a shark out of the net which may expose the sharks to excessive stress. Possible loss of partial catches during the operation.
- Horizontally pulling sharks by its tail or a Sling Method (not for use with marine mammals, see appendix2)
  - Encircling the caudal peduncle of the shark with a smooth sling (non-abrasive material) that is attached to a heavy line and towboat. A second line is run from the skiff through the sling and back to the skiff. The skiff slowly moves the

shark's tail/body next to the cork line and is gently led over the cork line. Lowering corks from brailing boom or releasing some corks from attachment to net skiff. Slowly towing shark horizontally by the tail until clear of corks when rope is released and sling falls away.

- Caveat: This procedure could be traumatic although likely less traumatic for small and medium sharks (5-6m maximum). Inappropriate more than 6m fish
- Brailing sharks (keep animals in water)
  - Could be very easy and quick. Appropriate length is probably less than 3m.
  - o Caveat: sharks must be small enough to be scooped by brailing without stress

Release methods not recommended

- Vertically lifting sharks by tail because internal organs may be damaged.
- Pulling sharks by a loop hooked around its gill or holes bored into a fin.

## [Appendix 1] proposed by Japan at the SC7 (Guideline for safe and live release of encircled non-target animals during purse seine fishing operation)

a). lead the head to approach nearest cork rope by rolling up the net under the ventral and tail side.	
<ul> <li>b). Release cork rope from their head side.</li> <li>c). Roll up the net of the tail side to run the head on the cork line</li> <li>d). Control the net carefully to keep whale shark calm down because if they wriggle, their body could be entangled in the net</li> </ul>	
e). Wait for escaping from the net themselves (whale shark swim away from the net)	

[Appendix 2] Design and deployment of a release mechanism for mid to small sized whale sharks

