

WCPFC shark and ray handling guidelines for purse-seiner and longliner crew

The purpose of the shark and ray handling guidelines in this manual is to inform observers and crew of the WCPFC-recommended handling methods for the release of sharks and rays to minimise injury to sharks, rays and the crew.

The objective of the WCPFC-recommended shark and ray handling guidelines is to create routine processes to release sharks and rays safely and enhance their survival by mitigating the risk of injury and stress. The release of SSIs is compulsory. The guidelines should also be used for other key shark species to be released with minimal injury when they are not to be retained and fully utilised.

Vessel operators and crew are advised by WCPFC to adopt these guidelines as best handling practices for the release of sharks and rays. Maintaining crew safety is the top priority. Where large and dangerous animals are to be released, the guidelines recommend the use of tools such as stretchers to carry the sharks, or netting to lift them from the deck. Preferably they should be released directly from the net or line while still in the water. The crew should be prepared with the necessary equipment and instructed on how to use it to make the processes safe.

The role of the Pacific Islands Regional Fisheries Observers (PIRFOs) is to record the fate and condition of the released sharks and rays and note the method of release. PIRFOs also report what mitigation procedures are used to avoid SSI landings. It is not the role of an observer to release the sharks and rays.

These guidelines represent a compilation of WCPFC-recommended handling standards and illustrations. The source documents are listed in reverse chronological order on the next page of this section and should also be referred to for further detail.

Reference sources

Handling guidelines

- Anon., Australia. 2019. Information paper for a draft conservation and management measure on mobulid rays caught in association with fisheries in the WCPFC Convention area. WCPFC-TCC15-2019-DP05_rev
- Justel-Rubio A., Swimmer Y. and Hutchinson M. 2019. Graphics for best handling practices for the safe release of sharks. WCPFC-SC15-2019/EB-WP-14.
- Grande M. , Murua J., Ruiz J., Ferarios J.M., Murua H. , Krug I. , Arregui I., Zudaire I., Goñi N. and Santiago J. 2019. Bycatch mitigation actions on tropical tuna purse seiners: best practices program and bycatch releasing tools. In: IATTC - 9th Meeting of the Working Group on Bycatch. San Diego, California.
- WCPFC 15. 2018. Best handling practices for the safe release of sharks (other than whale sharks and mantas/mobulids). suppl_CMM 2010-07. WCPFC15 Summary Report.
- Common Oceans (ABNJ) Tuna Project. 2018. Safe release guidelines for sharks and rays 2018. WCPFC-SC14-2018/EB-IP-03.
- Clarke S., Staisch K. and Manarangi-Trott L. 2017. Clarification of WCPFC shark designations and observer data collection requirements in response to WCPFC13 decisions regarding manta and mobulid (devil) rays. WCPFC-SC13-2017/ST-WP-07.
- WCPFC. 2017. Best handling practices for the safe release of mantas and mobulids. suppl_CMM 2010-07. WCPFC14 ISG-5 Report. ,WCPFC SC13 Summary Report, Attachment P.
- WCPFC. 2015. Guidelines for the safe release of encircled whale sharks. suppl_CMM 2012-04, WCPFC 12 Summary Report,
- Gilman E. (Ed.). 2014. Methods for longline fishers to safely handle and release unwanted sharks and rays. Luen Thai Fishing Venture, Resources Legacy Fund, Secretariat of the Pacific Community, The Safina Center.
- Poisson F., Vernet A.L., Seret B. and Dagorn L. 2012. Good practices to reduce the mortality of sharks and rays caught incidentally by the tropical tuna purse seiners. WCPFC-SC8-2012/ EB-IP-12

WCPFC conservation and management measures pertaining to sharks and rays

- CMM 2014-05. (2014). Conservation and Management Measure For Sharks. WCPFC.
- CMM 2013-08. (2013). Conservation and Management Measure For Silky Sharks. WCPFC.
- CMM 2012-04 (2012). Conservation and Management Measure for Protection of Whale Sharks from Purse Seine Fishing Operations. WCPFC.
- CMM 2011-04 (2011). Conservation and Management Measure for Oceanic Whitetip Shark. WCPFC.
- CMM 2010-07, (2010). Conservation and Management Measure for Sharks II. WCPFC.



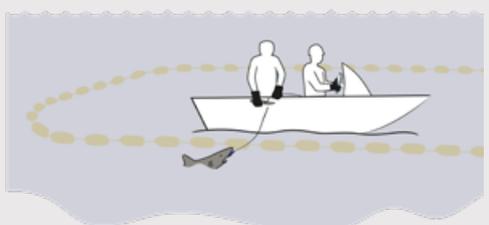
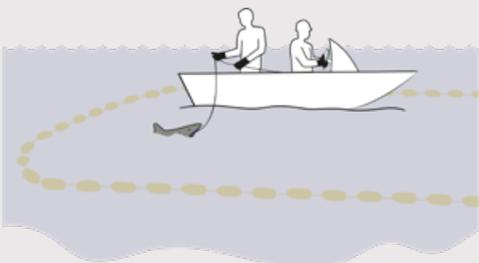
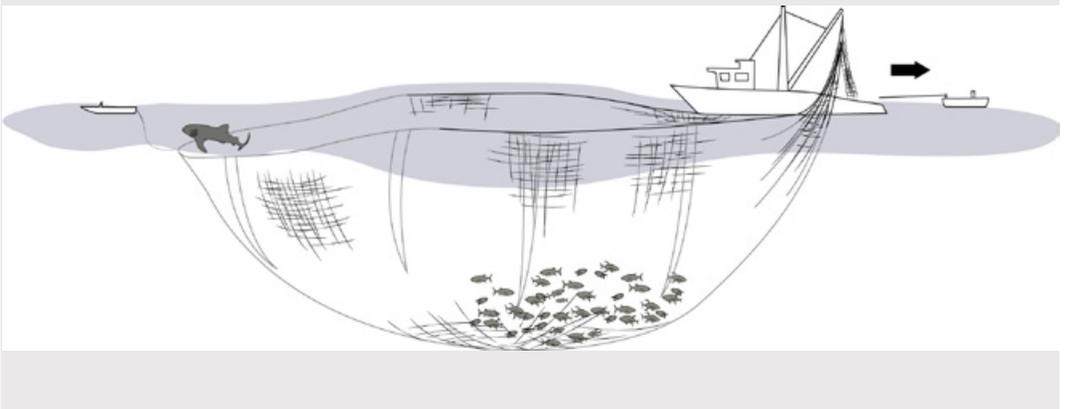
DOs and DON'Ts for purse-seiner crew



DOs and DON'Ts for longliner crew

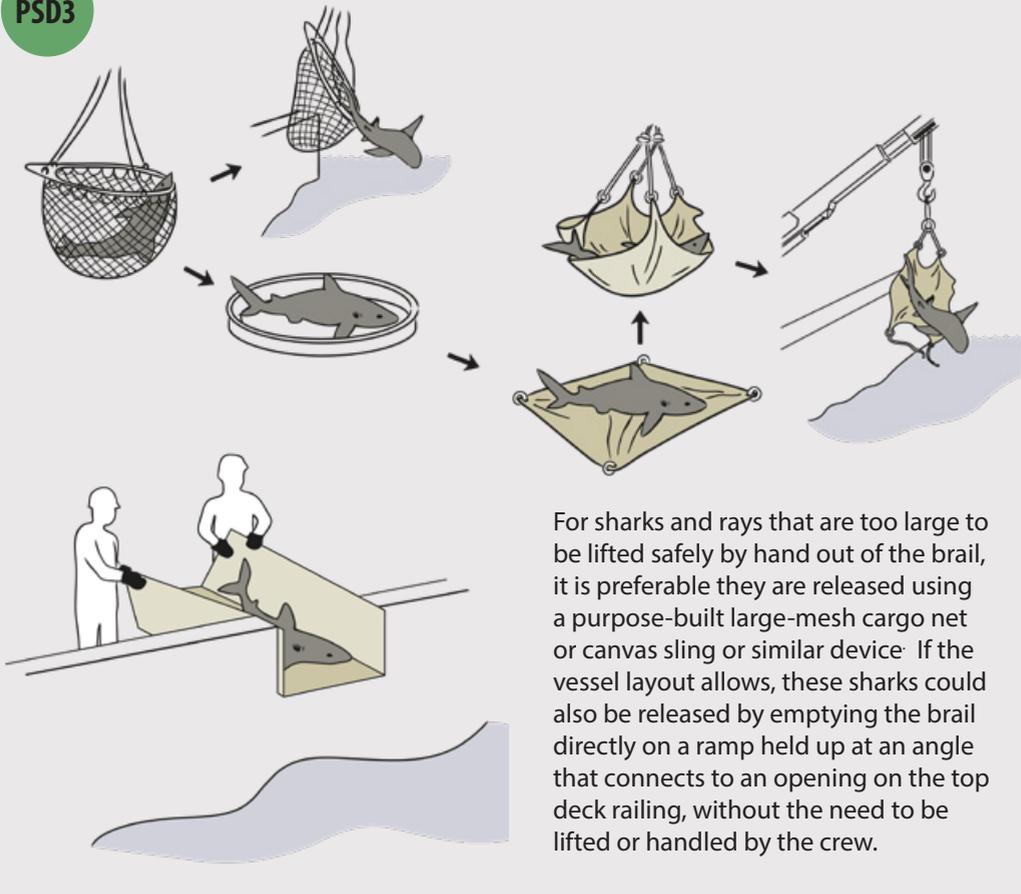
PURSE SEINERS

Release sharks and rays while they are still free-swimming whenever possible (e.g. back down procedure, submerging corks, cutting net)



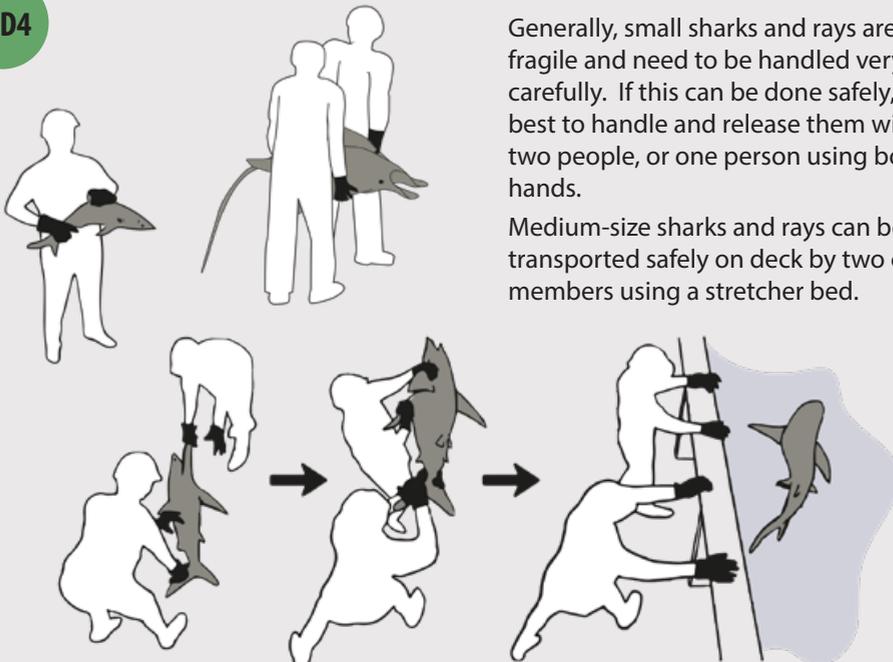
For sharks that cannot be released from the purse-seine net, consider removing them using a hook and line.

PSD3



For sharks and rays that are too large to be lifted safely by hand out of the brail, it is preferable they are released using a purpose-built large-mesh cargo net or canvas sling or similar device. If the vessel layout allows, these sharks could also be released by emptying the brail directly on a ramp held up at an angle that connects to an opening on the top deck railing, without the need to be lifted or handled by the crew.

PSD4

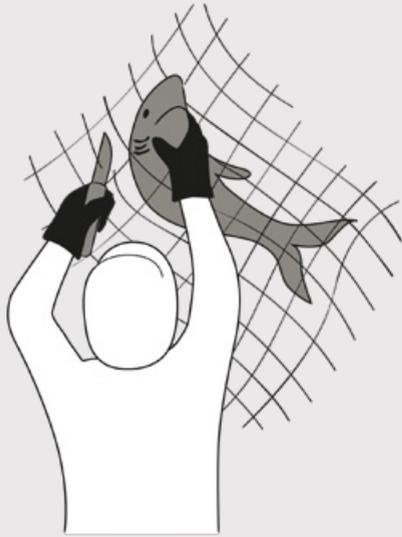


Generally, small sharks and rays are fragile and need to be handled very carefully. If this can be done safely, it is best to handle and release them with two people, or one person using both hands.

Medium-size sharks and rays can be transported safely on deck by two crew members using a stretcher bed.

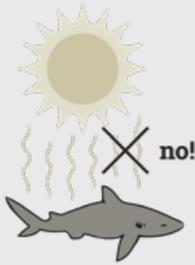
Illustrations based on Poisson et al, 2012

PSD5



When entangled in netting, if safe to do so, carefully cut the net away from the animal and release it to the sea as quickly as possible with no netting attached.

PSN1



Do not wait until hauling is finished to release sharks and rays. Return them to the sea as soon as possible.

PSN2

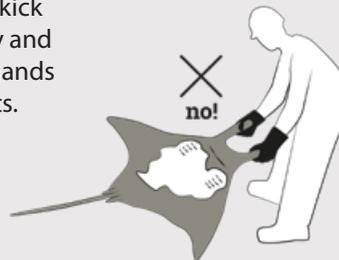


Do not cut or punch holes through the shark's or ray's body.

PSN3



Do not gaff or kick a shark or a ray and do not insert hands into the gill slits.

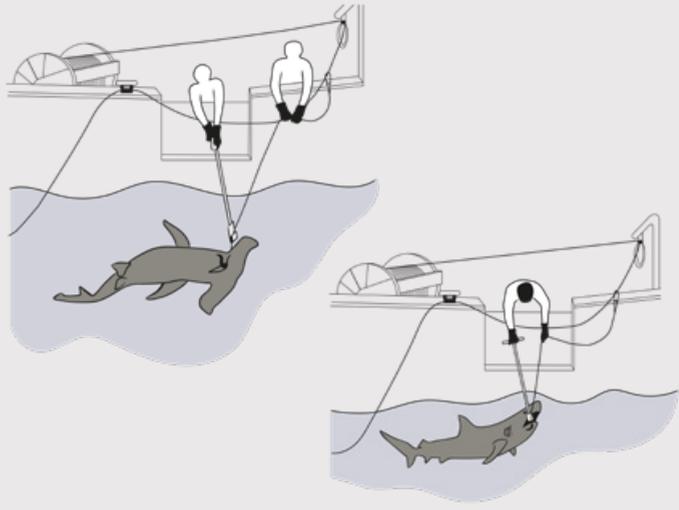


Do not pull a ray by the head lobes.

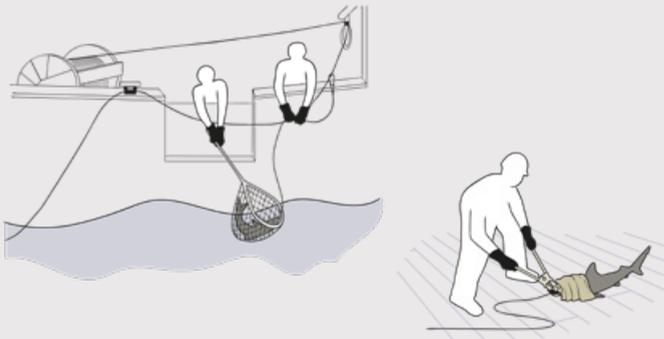
LONGLINERS

LLD1

The preference is to release all sharks and rays while they are still in the water, if possible. Use a dehooker to remove the hook or a long-handled line cutter to cut the gear as close to the hook as possible (ideally leaving less than 0.5 meters of line attached to the animal).



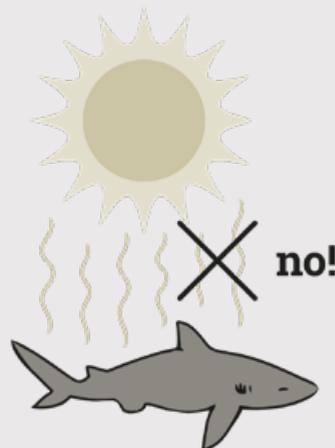
LLD2



If de-hooking in the water proves to be difficult, and the shark or ray is small enough to be accommodated in a dip net, bring it on board and remove as much gear as possible by using a dehooker. If hooks are embedded, either cut the hook with bolt cutters or cut the line at the hook and gently return the animal to the sea.

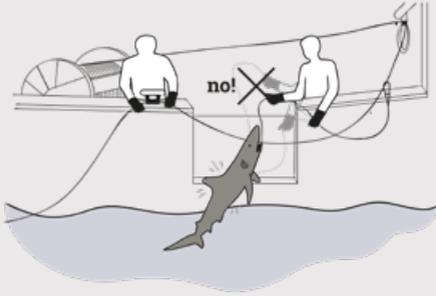
LLD3

Release all sharks and rays brought on deck as quickly as possible.



Do not strike a shark or a ray against any surface to remove the animal from the line.

LLN1



Do not try to remove a hook by pulling sharply on the branchline.

LLN3



Do not attempt to dislodge a hook that is deeply ingested and not visible.

LLN2

Do not cut the tail or any other body part.

LLN4



Do not gaff or kick a shark or a ray and do not insert hands into the gill slits.

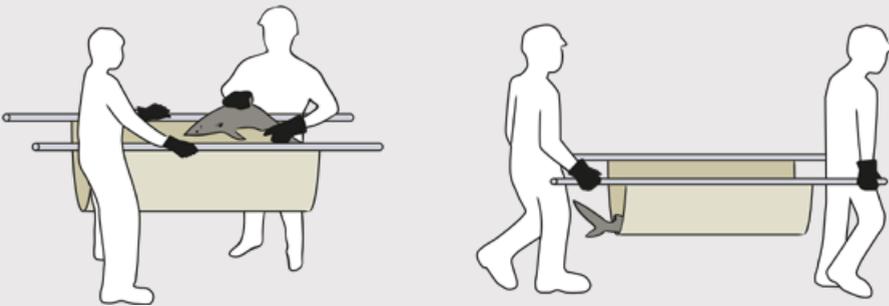
LLN5

ADDITIONAL RECOMMENDATIONS

Knowing that any fishing operation may catch sharks or rays, several tools can be prepared in advance (e.g. canvas, net slings or stretchers for carrying or lifting; large mesh net or grid to cover hatches/hoppers on purse seiners; long-handled cutters and dehookers on longliners).

Example of stretcher use

AR1



Install grid to cover hatches/hoppers

AR2