A GUIDE TO SAFE HANDLING OF SHARKS, RAYS AND SKATES



Introduction

We are blessed with a high diversity and abundance of sharks, rays and skates in South Africa. Whether you actively target Elasmobranchs for catch-and-release angling or only encounter them occasionally on a fishing trip, it is important to know how to handle them. That way you can reduce the chance of post-release mortality significantly and help to keep our shark populations healthy.



FAMILIARISE WITH FISHING REGULATIONS

The fishing regulations can change every year so make sure that you are up-to-date. You can find some information on your fishing license, at local fishing clubs or you can visit the website of the <u>South African Department of Agriculture</u>, <u>Forestry and Fisheries</u> for the most recent version of the Recreational Fishing Brochure.

Elasmobranchs that are currently (2015/2016) on the prohibited species list include:

- Basking shark (Cetorhinus maximus)
- Great white shark (Carcharodon carcharias)
- Sawfishes (Family Pristidae)
- Whale shark (Rhincodon typus)

USE THE RIGHT GEAR

Make sure you are prepared for the right handling procedure and have all equipment on hand before you start angling.

- Use strong fishing tackle to reduce fight time never use a gaff
- Hooks:
 - Use hooks that will rust out if you are unable to remove them such as carbon or mild steel hooks – do not use stainless steel hooks
 - Use barbless circle hooks (flatten the barbs yourself if necessary)
 - Remove the hook when hooked in the throat (with a de-hooker)
 - Do not remove the hook if it was swallowed
 - If you cannot remove the hook, cut the line as close to the hook as possible
- Use a sling or stretcher
- Have recording material ready (forms, pencil, measuring stick or tape, camera)
- Keep Tags and applicator close
- Carry ID guides or a camera with your fishing gear

ACT QUICKLY

Elasmobranchs build up carbon dioxide and lactic acid in their tissues when fighting. And obviously they cannot breathe on land.

- Make sure that you finish the handling as quickly as possible but do not compromise on care
- Never leave a shark in a small rock pool release it back to where you caught it



• If the Shark is tired by the time of release, run water across its gills or move it slowly forward in the water, facing into the current, to resuscitate

TAKE CARE

The vital organs of Elasmobranchs are not protected by a skeleton as we know it – out of the water they are easily injured or crushed. Their skin is sensitive to UV radiation and can easily get sunburned.

- Do never lift a shark, skate or ray by its tail
- Do never lift an Elasmobranch by its gills (they are delicate and are easily injured)
- Try to work in the shallow water or use a stretcher or sling to support organs
- Try to avoid sun exposure and cover the shark with a wet cloth (soaked in seawater)
- Run water over the gill slits to oxygenate

BE SAFE

Make sure you are always careful in how you approach a shark, skate or ray. The animal will be stressed out. Your personal safety is just as important as the animal's.

- Take extra care when you move your hand close to the jaw e.g. when removing hook
- Cover the animal's eyes with a wet cloth to keep it calm
- Be especially careful with stingray tails: They can whip around and cause severe injuries

GIVE IT A PURPOSE

Getting hooked is generally not a pleasant experience for an Elasmobranch and always comprises a risk for the animal. So try to make it purposeful and contribute to research by tagging and recording. But don't forget to make it quick.



- Have recording forms and pencil ready
- Keep an identification guide in your toolbox
- Take pictures of unusual catches
- Take records: Use a measuring stick or tape to record the length of sharks or disc width of rays
- Do not weigh the animal if you want to release it: Length-weight conversion ratios can be used to estimate the weight of most common Elasmobranch species

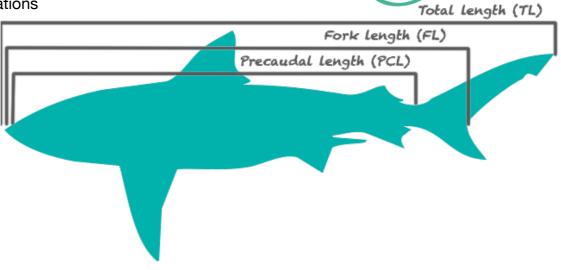


 Put a tag on it: <u>ORI (Oceanographic Research Institute)</u> is running a very successful tagging programme. Register with them as a responsible angler and you will get the reward: Whenever a shark, skate or ray that was tagged by you gets hooked again, you will be informed

Other details that should be recorded

- Time and date of capture
- Location and depth
- Water temperature and weather conditions
- Name, address, phone number
- Species and sex
- Length (pre-caudal length, fork length, total length, disc-width of rays)
- Weight (only if not released)
- Scars or other marks
- Capture gear and bait used
- Photograph (if applicable)
- Other observations

References



Fowler, S., Partridge, E. 2012. <u>Guidelines for shark and ray recreational fishing in the Mediterranean.UNEP-MAP-RAC/SPA.</u>

Department of Agriculture, Forestry and Fisheries. 2014. <u>Marine Recreational Activity Information Brochure 2014/2015</u>.



Disc Width