



Sharks & Rays

Guide to Safe and Responsible Fishing

Recreational Fishing



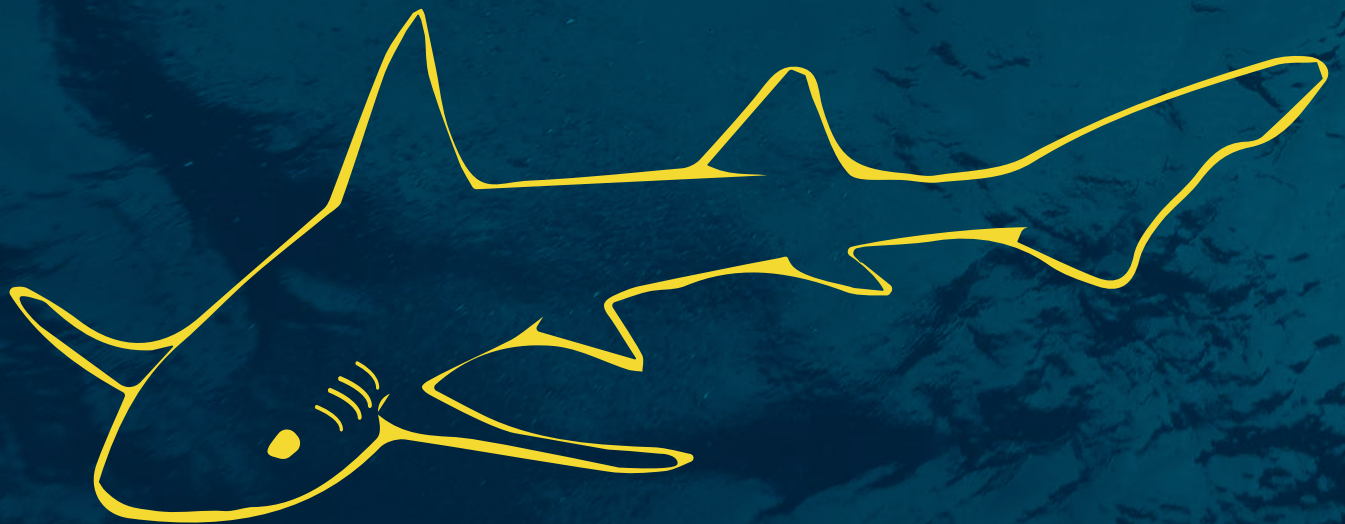
**SHARK
MATES**

Catch. Care. Conserve.





**Let's work together
to support our
sharks and respect
our rays**





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Discover best practice guidelines for catching, handling and releasing sharks and rays



Australians love spending their weekends catching fish from boats, shores and jetties. That enjoyment can be compromised if you're unsure what to do when you hook a shark or ray, or you feel that other members of the fishing community can improve their practices.

Knowing the best practices for catching, handling and releasing sharks and rays is important. This brochure outlines the detailed guidelines and some key points include:

- Use **circle hooks** instead of J-hooks to reduce the risk of injury and mortality injury and mortality following release.
- Use **non-stainless hooks** or corrodible hooks, that way if you are unable to remove the hook, it will likely fall off after a few weeks.
- **Reduce the fight time.**
- Keep the shark or ray **in the water.**
- **Practice responsible photography,** it is best practice to photograph the shark or ray while it's still in the water.

If you have to take the animal out of the water during the release remember:

- **Support the body,** always keep the animal horizontal while lifting.
- **Do not lift the animal by the tail.**
- **Reduce the amount of exposure,** as a rule of thumb do not keep animal out of water more than 2 minutes.

The Shark Mates guidelines are based on the latest science and targeted research into the most effective handling and release techniques. For more information about the guidelines **visit our [website](#) and check out our videos** and share them with your fishing community.

Let's take better care of our sharks and rays and enjoy a better fishing experience as a result.



Preparing yourself for catching sharks or rays



Catching sharks and rays can be dangerous to yourself and other fishers. Your actions can have serious consequences for the shark or ray and can cause injury to fishers and people around you. Being caught is likely a stressful experience for the shark or ray so it's important to release it with the best chance of survival.

If you want a sustainable and enjoyable fishing experience, preparing yourself and having a plan is key.



Prepare your gear and tackle:



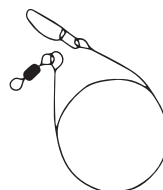
Use non-offset circle hooks instead of J-hooks to reduce the risk of injury and mortality once you release a shark or ray. They help prevent unwanted gut hook ups which increase the chance of a fish dying and reduce the chance of getting your tackle back when releasing the fish.



Use non-stainless hooks / corrodible hooks, so if you cut the line the hook remains in the shark or ray for less time.



It's important that all your terminal tackle (hooks, sinkers, swivels, etc) is in **tip top shape**.



If you are specifically targeting sharks and rays use heavy line to reduce fight time. **Wire tracers** should also be used to prevent the fish from cutting through the line.

Useful fishing tools:



Pliers useful for your own safety to easily remove hooks from shark or ray's mouth.



Crimper for joining trace to monofilament.



De-hooker easily removes hook from shark or ray without having to lean too far over the edge of boat or get too close to the mouth.



Gloves to protect your hands.



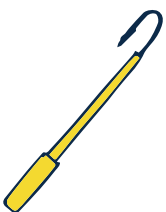
Towel or cloth to cover the eyes if you need to calm the animal to assist in removing the tackle.



Landing net. Make sure net is a soft knotless net. Knots can damage animals when trying to land them.



Dispatching tool if you are keeping the shark or ray for quickly and ethically killing. Humanely dispatch the animal by quickly cutting through the vertebral column immediately behind the head and then cut completely through the trunk to the underside to decapitate it using a sharp knife.

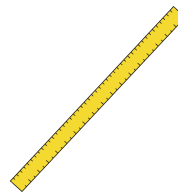


Gaff to aid in landing the shark or ray only if you are intending to keep it. Do not use a gaff if you are releasing it as they will damage the shark or ray.

Useful tools if you are targeting larger sharks and rays:



Bolt cutters to cut off hooks.



Measuring pole to easily and quickly measure the shark or ray whilst it is still in the water. Also, protect you from unnecessarily placing your hands near the head.



Rope to use as a noose around the tail to keep alignment with boat and avoid thrashing. Do not tail wrap or drag the animal backwards through the water.

To avoid catching sharks and rays as by-catch:



If you are fishing for scalefish from a jetty or in shallow water, using a **Paternoster rig** lowers the chances of hooking unwanted bycatch such as a ray or Port Jackson shark.



Have a plan



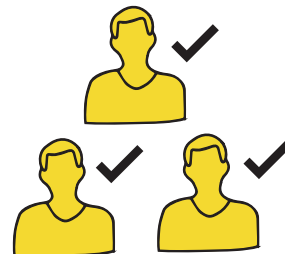
Catching a shark or ray can be exciting but excitement can soon turn to panic if you don't know what to do with your catch. Discuss what to do with your fishing mates at the beginning of the trip. Having a plan will ensure you, your crew and your catch stay as safe as possible:



Hook-up & reeling in:



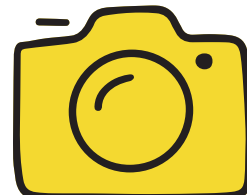
Try to reduce fight time, you don't want to exhaust the shark or ray as it will decrease survival following release.



Decide beforehand what peoples' roles will be on the boat or jetty if you catch a shark or ray.



Who will help landing the fish, driving the boat, clearing other lines and rods, move people out of the way, dehooking, take photos, and releasing the fish?

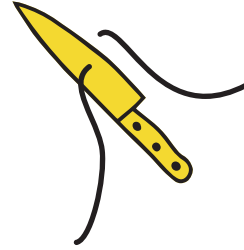


Are you going to take a photo? If so, who will take the photo? It's important not to remove the shark or ray from the water just to get a photo. It's best practice to photograph the shark or ray while it's still in the water. Make sure the camera and photographer are ready to go so you do not delay releasing the shark or ray.

Once reeled in:



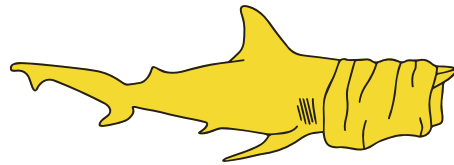
Make a quick decision while the shark or ray is still in the water whether you are going to keep it or release it.



If you are inexperienced, avoid handling large or dangerous rays or sharks. There's zero shame in **cutting the line as short as possible**.

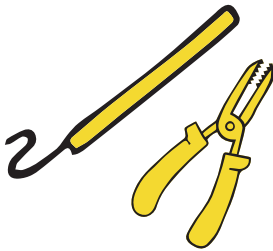


Unless you know otherwise, **assume the shark or ray is dangerous** and handle accordingly.

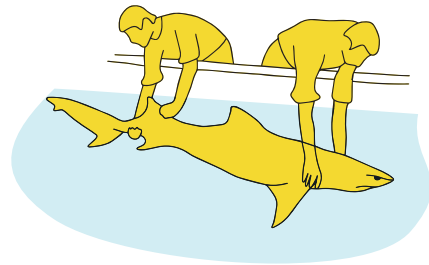


Cover the eyes with a damp cloth to calm the shark or ray.

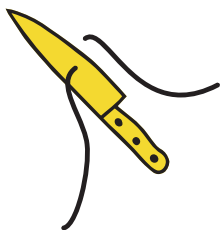
If releasing the shark or ray:



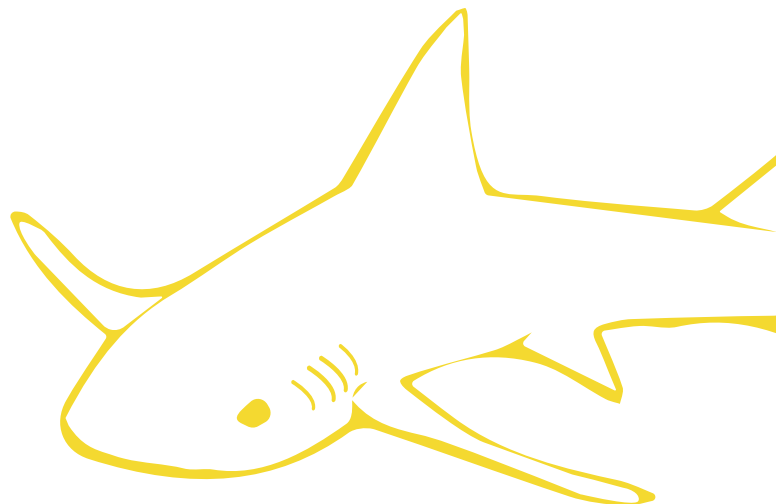
Try to safely dehook the shark or ray using **pliers or a de-hooking tool** whilst keeping it in the water.



Avoid taking a pregnant shark or ray out of the water as they may abort.

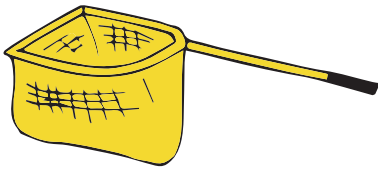


OK to cut the line if the animal is gut hooked or the hook is set in the mouth in a way that will cause a lot of damage in removing.

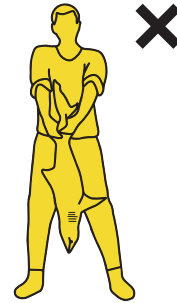


If releasing the shark or ray (continued):

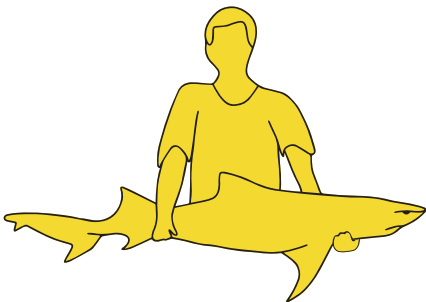
If releasing and unable to keep the shark or ray in the water to remove the hook:



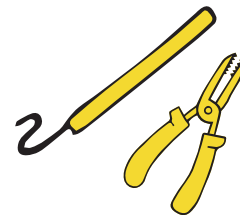
Use a **soft knotless net**.



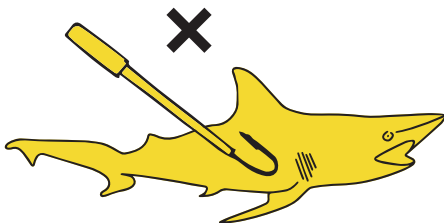
Do not lift **by the tail**.



Support the body and keep the shark or ray horizontal when lifting.



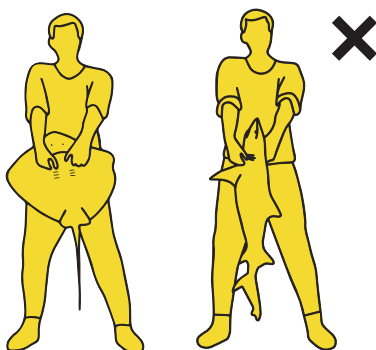
Remove hook using a set of **pliers** or **de-hooker**.



Do not use a gaff on the shark or ray if you **intend on releasing it**.



Return to the water as **gently and quickly as possible** (within 2 mins).



Do not grab a shark or ray **in the gills**.



Practice responsible photography, ideally photograph while animal is in the water, **prioritise release condition of the animal over a photo**.

If keeping the shark or ray:

- Quickly land the shark or ray (you can use a gaff here)
- Humanely dispatch the animal by quickly cutting through the vertebral column immediately behind the head and then cut completely through the trunk to the underside to decapitate it using a sharp knife. Decapitating it also helps drain blood from the carcass which helps to ensure the highest quality of meat for eating making sure you are making the most of your catch.

Know the fishing rules:

- Know your size limits, bag limits and protected species where you are fishing.
- Easy to find online, at bait and tackle shops, Victorian Fisheries Authority (VFA) fishing app and brochures.

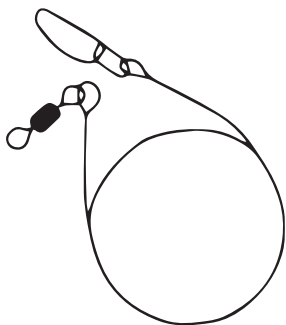


Handling and releasing sharks above 1 metre

Catching a large shark or ray can be exhilarating but it can also be very dangerous. If you have caught a large shark or ray (> 1m) it is recommended that you do not try and land the catch. Sharks and rays do not have a ribcage so it is very easy to damage their organs if you are taking them out of the water. It is especially important not to lift them out of the water if it is obvious the fish is pregnant; usually you can tell by fish being wider than normal.



Specific tips for larger sharks:

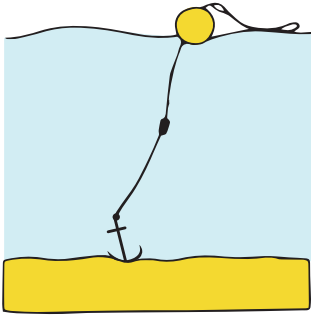


If you are targeting them, make use you use the appropriate gear, such as **heavy line and wire tracers**.

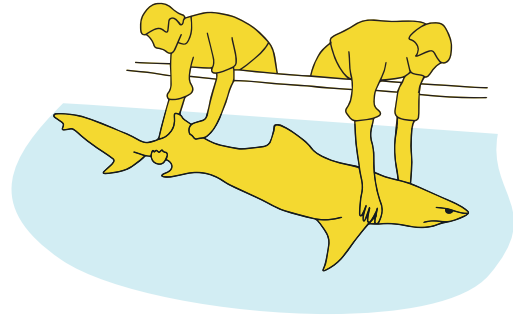


As always, minimise fight time, but it is safest to **avoid dehooking a large vigorous shark** that is still very energetic.

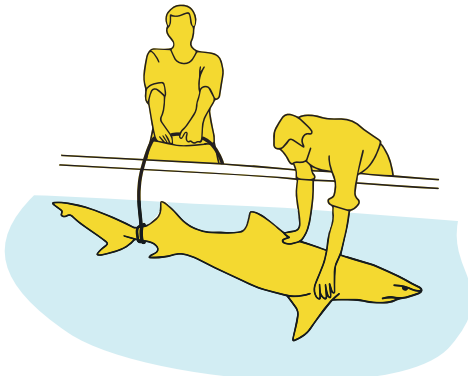
Large shark tips if fishing from a boat:



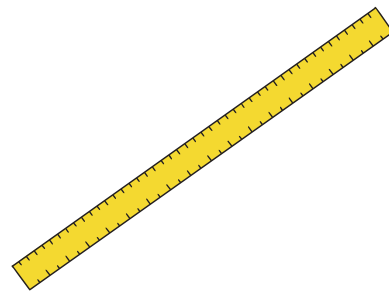
Have your **anchor on a buoy** so can drop it and follow the shark in your boat to reduce fight time.



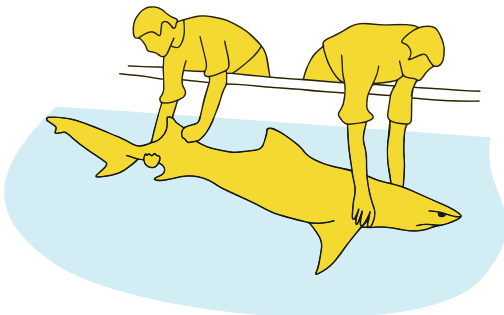
Move the boat into the current and keep water flowing into sharks' mouth.



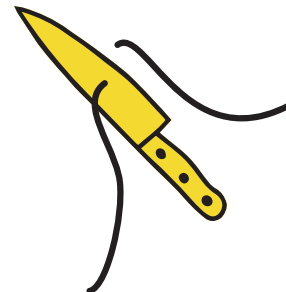
It can be helpful to use a **rope noose around the tail** to keep the shark aligned parallel with the side of the boat and to prevent thrashing while dehooking. But don't tail wrap or drag backwards through water by the tail as this can easily injure the shark.



Use measuring pole to measure the shark without removing it from the water and have it close at hand to reduce time taken to measure the shark.

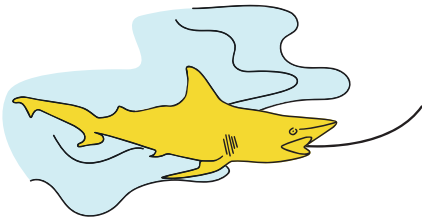


Motor the boat forward and keep the shark in the water to maintain flow through gills.

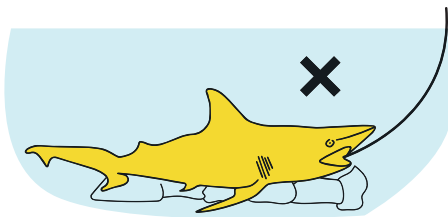


Cut the hook or line/leader as short as possible while shark is still in the water. Bolt cutters are good here if you are using heavy gear.

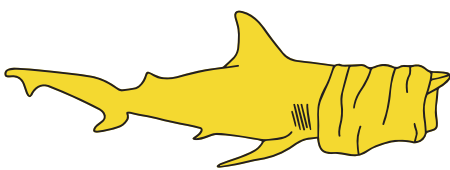
Large shark tips if fishing from a jetty or shore:



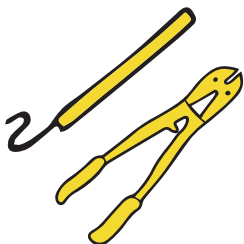
If you are on a jetty and it is safe and feasible, **walk the shark around to the shore** from the jetty or to a jetty landing, instead of pulling it up onto the jetty, otherwise cut the line as short as possible.



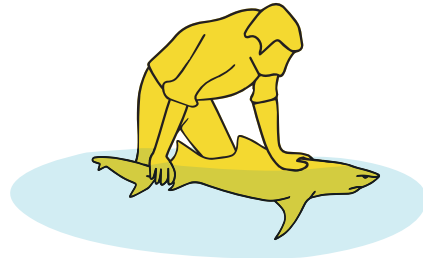
Do not reel in the shark over rocks or reef, sand is okay.



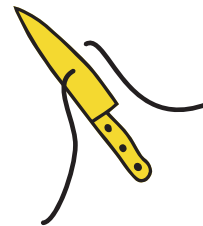
Use a damp cloth or towel to cover the eyes in order to calm the shark.



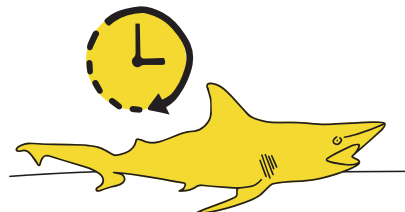
If safe to do so, dehook the shark using a long **dehooking device or long pair of bolt cutters**.



Once the shark is in shallow enough water and not able to thrash about hold the shark steady by **placing a hand on the body of the shark from above just forward of the dorsal fin**. Unless it is a dangerous shark (eg bronzie, mako, white) hold the trace instead to control head movement.



Remember **there is no shame in cutting the line** as short as possible. If you need to cut the line, do it.



Reduce the amount of air exposure i.e. leaving shark lying on jetty or beach while getting photo.



Practice responsible photography, prioritise release condition over photos.

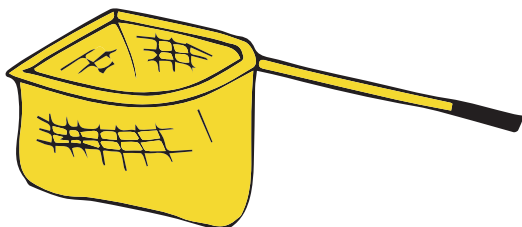
Handling small sharks and safe rays less than 1 metre



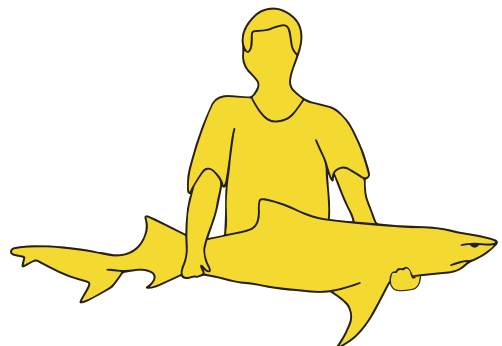
You might be targeting sharks and rays or catching them in the pursuit of other species. In this section we will look specifically at how fishers should be handling small sharks and safe rays (such as Port Jackson sharks) either from a boat or from the shore. Assume that the shark or ray is dangerous unless you are sure of the species. Even small sharks may still bite as it is their natural defence response.



If you are going to release the shark or ray then it's best that you do not try and get it out of the water. If you decide that you want to release it but still need to get the shark or ray out of the water to remove the hook or cut the line, then remember to follow these handling practices:

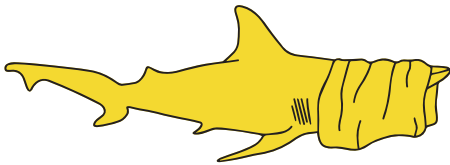


Use a soft knotless net to lift it out of the water.

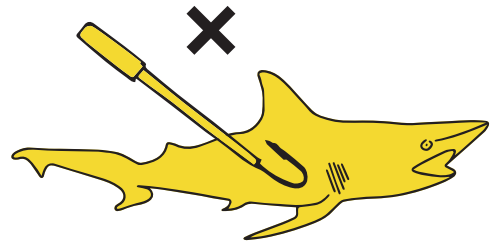


Supporting the body, always keep the animal horizontal while lifting.

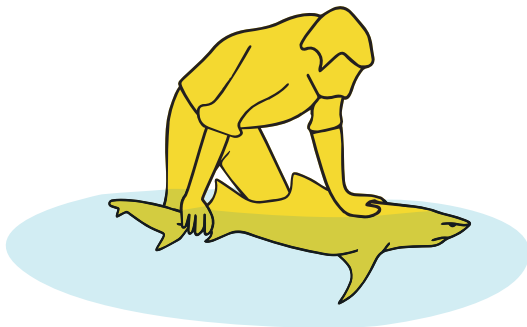
Handling small sharks and safe rays less than 1 metre (continued):



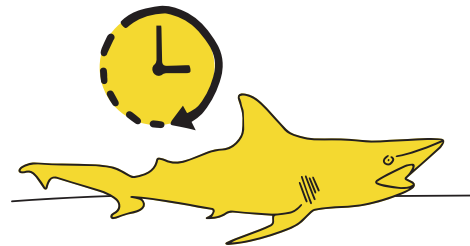
Cover the eyes **with a damp cloth**, this calms the shark/ray.



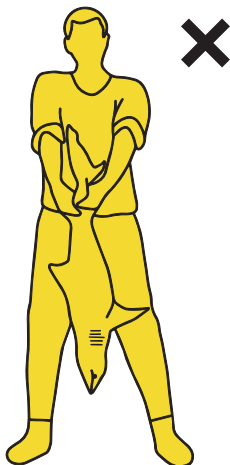
Remember **no grabbing or gaffing in the gills**.



Hold the body of the shark just **forward of the dorsal fin**, unless it is a dangerous shark (eg bronzie, mako, white) hold the trace instead to control head movement.



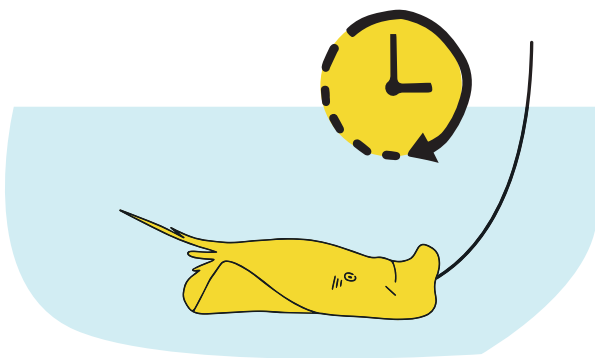
Reducing the amount of exposure, do not leave animal lying on jetty or beach for any more than 2 minutes.



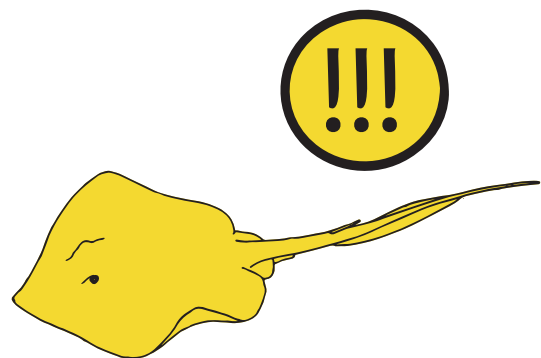
Do not lift the animal **by the tail**.



Dangerous rays



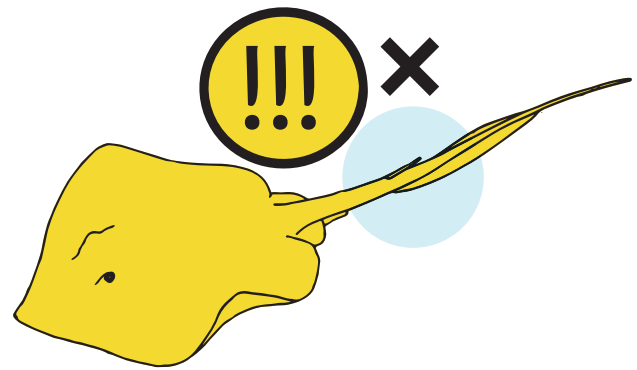
When hooked often large rays will sit on the bottom followed by runs. **When they start moving** is the chance to minimise the fight time.



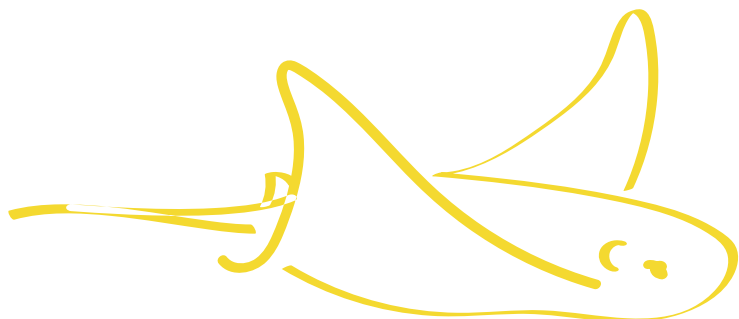
Assume ray is dangerous unless you are sure otherwise.

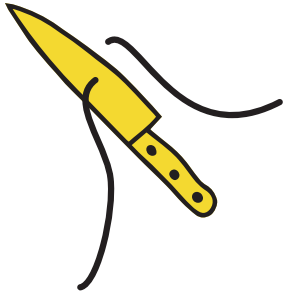


If you are going to release the ray then best to **not try and get it out of the water**.



Tail barbs can be dangerous because they are sharp and contain venom, so it is important to make sure you don't get within reach of the tail.



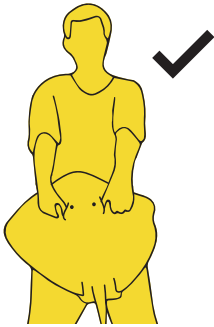


Rays are dangerous and unless you are confident about handling it then just cut the line as short as possible.

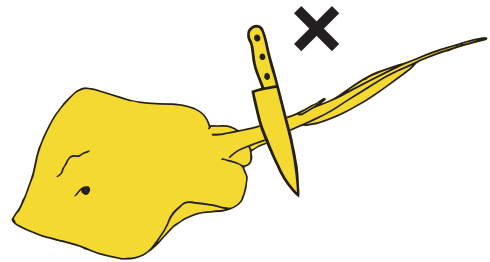


Pregnant rays will often **abort their young** if they are landed and handled.

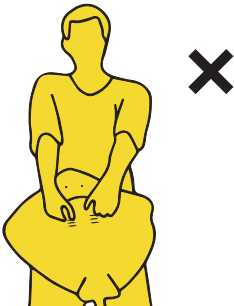
If you do choose to handle the ray then:



It is okay to lift it by the spiracles (opening either side of eyes) on the topside of their body.



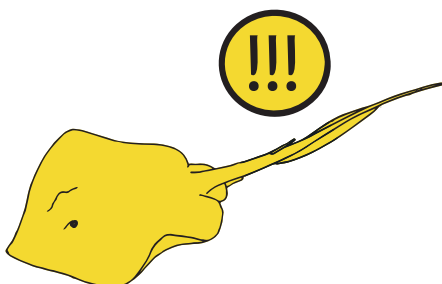
NEVER cut the tail or cut off the barb.



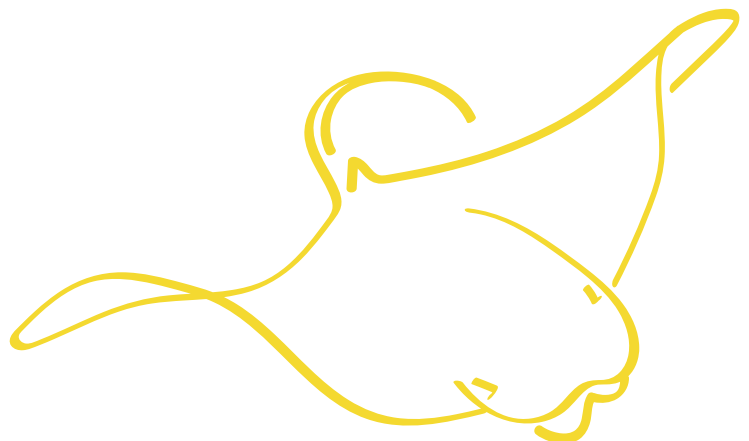
Do not lift by the gills on the underside of their body.



Remember to **reduce the amount of air exposure** (keep it under 2 mins).



Stay outside range of ray's tail.



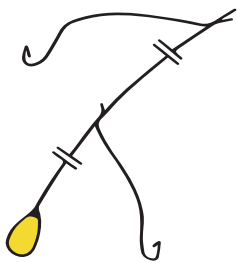
Specific tips for fishing from jetties and shores



Shores and jetties are very accessible fishing locations for fishers of varying skills and experience. Sharks and rays can be caught from these spots which can be unexpected and challenging, particularly if you're only an occasional fisher. In this section we outline how to avoid catching sharks and rays and some basic responsible practices in case you do catch one.



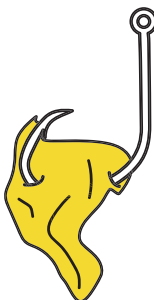
How to avoid catching a shark or ray:



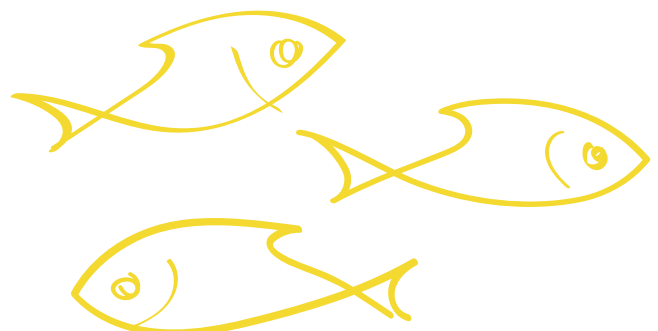
Use **paternoster rigs** because this helps keep the bait off the seafloor.



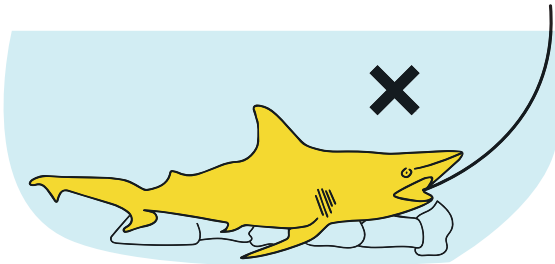
Avoid throwing **excess bait and berley** off as it can attract unwanted rays or sharks.



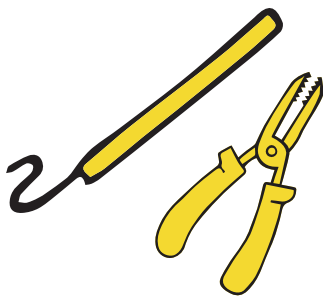
Avoid using large stationary baits.



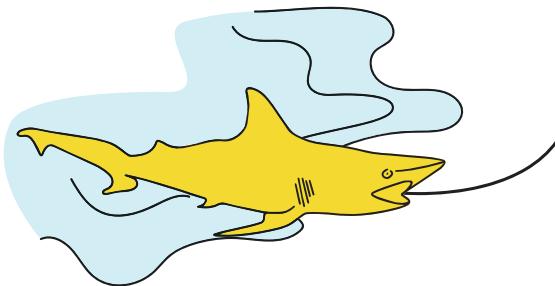
If you do catch one:



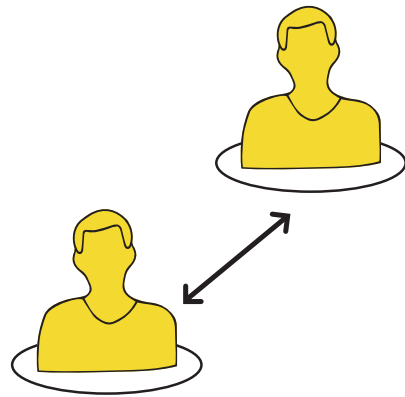
Do not bring the catch over rocks, bring it in over sand if possible.



Otherwise, pull the shark or ray up and cut the line or dehook with a set of **long pliers or dehooking tool.**



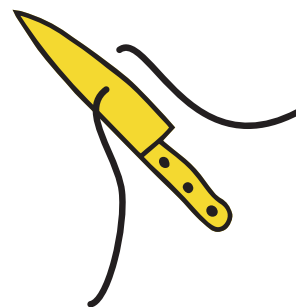
Walk the shark or ray around to the shore from the jetty or to a jetty landing, instead of pulling it up onto the jetty if possible. If you do this, don't leave your tackle box behind as you will have nothing to cut the line or de-hook.



Ask onlookers to keep their distance and other fishers to bring in their lines.



Follow the tips on how to handle and release outlined in the above sections depending on what it is you have caught.



Remember that **there is no shame in cutting the line** as short as possible. If you need to cut the line, do it.

Some common shark and ray species of Southern Australia:



Elephantfish

Scientific name: *Callorhinchus milii*

Identifying features: Fish with an elongated body and large pectoral fins. Elephant fish have a smooth shiny skin and almost completely lack scales. Easily identified by the trunk-like snout that hangs from the top jaw and the long spine in front of the first dorsal fin. They are particularly sensitive to handling and need to be released quickly to ensure survival. This species is generally easy to handle but the large dorsal spine can cause injury.

Note that the elephantfish is neither a shark nor ray, but rather belongs to a relatively small group of closely related animals referred to as chimaeras.



Elephantfish
habitat map

Gummy Shark

Scientific name: *Mustelus antarcticus*

Identifying features: Gummy sharks have flattened blunt teeth and lack sharp teeth. They are a slender-bodied shark with a white belly and grey back with small white spots. Sometimes the upper side can be almost black or a grey-brown colour. Second dorsal fin is nearly as big as the first.



School Shark

Scientific name: *Galeorhinus galeus*

Identifying features: A slender-bodied shark similar in appearance to gummy sharks except they lack the white dots that gummy sharks have on their upper side. They also have small sharp teeth and a pointy nose which can almost be translucent on its underside. Second dorsal fin is much smaller than the first.



White Shark

Scientific name: *Carcharodon carcharias*

Identifying features: Large shark with a grey back and white belly and large serrated teeth. Underside of pectoral fin tip are black

Protected species throughout Australia; no targeting or take, taking or possessing is prohibited. If accidentally caught, release unharmed as quickly as possible.



Bronze Whaler

Scientific name: *Carcharhinus brachyurus*

Identifying features: Large whaler shark which is copper to grey in colouration with a white underside and a pale strip down their sides. They lack a ridge between their dorsal fins unlike some other whaler sharks (e.g. dusky sharks).



Port Jackson Shark

Scientific name: *Heterodontus portusjacksoni*

Identifying features: Smaller shark easily distinguished by its dark stripe pattern and blunt head. They have spines on at the forward edge of their dorsal fins and should be carefully handled.



Broadnose Sevengill Shark

Scientific name: *Notorynchus cepedianus*

Identifying features: They have a short, blunt snout, and seven pairs of gill slits. Often grey to greyish-bronze with a darker speckled pattern.



Southern Fiddler Ray

Scientific name: *Trygonorrhina dumerilii*

Identifying features: Small to medium ray with three parallel stripes behind the eyes. A species of guitarfish with flattened pectoral fin discs and slender tail. They have a distinct pattern that has three parallel stripes behind the eyes. Their tail lacks a venomous barb in their tail and they are relatively safe to handle.



Smooth Stingray

Scientific name: *Bathytoshia brevicaudata*

Identifying features: Very large stingray (can reach 2.5 m from wing tip to tip) with a black or dark grey to brown back and a pale belly. They have a serrated barb on their tail which is venomous and makes them particularly dangerous to handle.



Southern Eagle Ray

Scientific name: *Myliobatis tenuicaudatus*

Identifying features: Ray that is brown to yellow on top with a blue to grey spot pattern and a white underside. They have a blunt snout, pointed wings and a long thin tail with one or two venomous barbs which are venomous and make these rays particularly dangerous to handle.



Important regulations in the states of Southern Australia:

New South Wales:

- It is not permitted to remove the fins of sharks while at sea.
- Only 5 sharks can be taken in total. Only 1 tiger, mako, smooth hammerhead, whaler, or blue shark.
- Protected species such as grey nurse shark, white shark, great and scalloped hammerheads must be carefully returned to the water if caught.
- Check the NSW Department of Primary Industries website for current regulations: www.dpi.nsw.gov.au

South Australia:

- It is illegal to take any fish using a wire trace with a gauge of 2mm or greater and a fishing hook greater than size 12/0.
- The following restrictions apply when shark fishing in the area between the southernmost breakwater at Outer Harbor and Yankalilla Bay between 5am and 9pm daily:
- The use of wire trace or a monofilament trace exceeding 1mm in diameter is prohibited. Hooks must not exceed a shank length greater than 56mm and a gape greater than 23mm between 5am and 9pm. A combination or gang of hooks that are joined by threading the point of one through the eye of another must not be used.
- Check the SA Department of Primary Industries and Regions website for current regulations: pir.sa.gov.au



Tasmania:

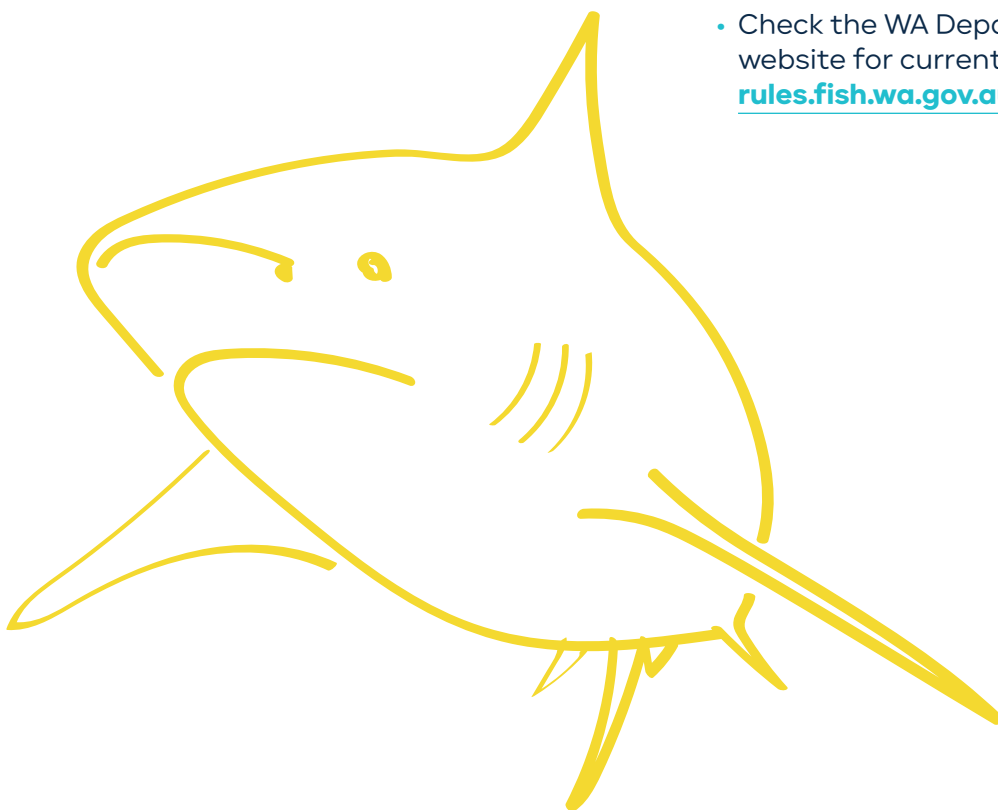
- Various locations have been designated **Shark Refugee Areas**. These areas are important habitat for the breeding of school, gummy sharks and rays. No shark or ray of any kind (other than elephantfish) may be taken. Do not target sharks at all in Shark Refuge Areas. Return accidentally caught shark to the water immediately. Using set lines and auxiliary fishing gear is prohibited in Shark Refuge Areas. Using mullet nets is prohibited in Shark Refuge Areas and other netting restrictions may apply. Where permitted, gillnets may only be set for up to 2 hours. You may carry sharks or rays through a Shark Refuge Area if they were taken outside that area.
- Check the Tasmanian Department of Primary Industries, Parks, Water and Environment website for current regulations: dpiwwe.tas.gov.au

Victoria:

- The species listed above cannot be filleted in or on Victorian waters. They must be kept whole or in carcass form until you are away from the water. It's okay to fillet your fish on the cleaning tables at the boat ramp.
- Rays cannot be taken within 400 m of any pier, jetty, wharf, rock wall or breakwater.
- Check the Victorian Fisheries Authority website for current regulations: vfa.vic.gov.au

Western Australia:

- Grey nurse, white, speartooth and whale sharks are protected and may not be taken. All ray and skate species are protected in Hamelin Bay. Black stingray and smooth stingray are protected from recreational fishing in the South Coast and West Coast bioregions, which extend from the South Australian border along the Western Australian Coast until north of Kalbarri (27° South).
- Check the WA Department of Fisheries website for current regulations: rules.fish.wa.gov.au



State based recreational fishing limits for each species listed above.

Body length of sharks is measured from the last gill slit to the base of the tail. Partial length is from the back of the gills to the front of the tail. Interdorsal fin length is from the front of the first dorsal fin to the back of the second dorsal fin.

Species	New South Wales	South Australia	Tasmania	Victoria	Western Australia
Elephantfish	N/A	N/A	Bag limit of 2	Bag limit of 1	N/A
Gummy Shark	Bag limit of 5 combined total with other sharks and rays	Bag limit of 2 combined total with School Shark Legal min. partial length of 45 cm	Bag limit of 2 combined total with School Shark Legal min. partial length of 45 cm	Bag limit of 2 combined total with School Shark Legal min. partial length of 45 cm	Bag limit of 3 total combined with other large pelagic finfish Max. size 70 cm interdorsal fin length
School Shark	Bag limit of 5m combined total with other sharks Min. size 91 cm total length	Bag limit of 2 combined total with Gummy Shark Legal min. partial length of 45 cm	Bag limit of 2 combined total with Gummy Shark Legal min. partial length of 45 cm	Bag limit of 2 combined total with Gummy Shark Legal min. partial length of 45 cm	Bag limit of 3 total combined with other large pelagic finfish Max. size 70 cm interdorsal fin length
White Shark	Protected species return to water unharmed	Protected species return to water unharmed	Protected species return to water unharmed	Protected species return to water unharmed	Protected species return to water unharmed
Bronze Whaler	Bag limit of 1	Bag limit of 1	Bag limit of 2 Boat limit of 5 combined total with other sharks and rays	Bag limit of 1	Bag limit of 3 total combined with other large pelagic finfish Max. size 70 cm interdorsal fin length
Port Jackson Shark	Bag limit of 5, combined total with other sharks and rays.	N/A	Bag limit of 2 Boat limit of 5 combined total with other sharks and rays	Bag limit of 1	Bag limit of 3 total combined with other large pelagic finfish Max. size 70 cm interdorsal fin length
Broadnose Sevengill Shark	Bag limit of 5, combined total with other sharks and rays.	N/A	Bag limit of 2 Boat limit of 5 combined total with other sharks and rays	Bag limit of 1	Bag limit of 3 total combined with other large pelagic finfish Max. size 70 cm interdorsal fin length
Southern Fiddler Ray	Bag limit of 5, combined total with other sharks and rays.	N/A	Bag limit of 2 Boat limit of 5 combined total with other sharks and rays	Bag limit of 1 combined with other rays Max. size 1.5 m width	Bag limit of 3 total combined with other large pelagic finfish
Smooth Stingray	Bag limit of 5, combined total with other sharks and rays.	N/A	Bag limit of 2 Boat limit of 5 combined total with other sharks and rays	Bag limit of 1 combined with other rays Max. size 1.5 m width	Bag limit of 3 total combined with other large pelagic finfish
Southern Eagle Ray	Bag limit of 5, combined total with other sharks and rays.	N/A	Bag limit of 2 Boat limit of 5 combined total with other sharks and rays	Bag limit of 1 combined with other rays Max. size 1.5 m width	Bag limit of 3 total combined with other large pelagic finfish

More about Shark Mates



Shark Mates was formed in 2020 to help Victoria's recreational fishers take better care of sharks and rays when out fishing. We're a team of biologists and industry representatives who are driven to create a safe and sustainable fishing experience for those in and out of the water.

The species of sharks and rays encountered are relatively similar across southern Australia – from southern Western Australia across to southern NSW and Tasmania. That means the principles we are promoting for Victorians should be broadly applicable across those areas too.

By sharing best practice capture and handling techniques, we hope to maintain healthy shark and ray populations and make your fishing more enjoyable both now and in the future.

Shark Mates is a collaboration between Monash University, VRFish, Victorian Fisheries Authority and Flinders University and has been funded by the Australian Government through the Fisheries Research and Development Corporation (FRDC).



Get in touch



Be a best practice ambassador

Want to find out more out our research, best practice guidelines and surveys?

Or perhaps you're keen to become a Shark Mates ambassador?

Whatever the case, we'd love to hear from you.

Drop us a line at:

www.sharkmates.com.au

or via our social media channels.



**SHARK
MATES**

Catch. Care. Conserve.

