



Looking after protected species in Queensland

A guide for recreational anglers



With around 700 000 people going fishing at least once every year in Queensland, the chance of anglers encountering a protected species may be quite high. To protect these animals, anglers need to be well informed about their responsibilities and what they can do to help reduce the impact of humans on protected species.

Reporting

Why should I report interactions?

The reporting of sightings, interactions and strandings by recreational fishers can help researchers and managers gain a better understanding about protected species. This will help determine the status of the population and whether the species is healthy and recovering or not. Reporting of injured or stranded animals can help ensure that animals are treated appropriately by professionals and have a better chance of survival.

When should I report something?

You should report when:

- You accidentally catch a protected species
- You accidentally strike a protected species while boating
- You find an injured protected species
- You find any dead and/or stranded protected species.

What information should I provide?

The more information you provide, the better. Researchers and managers are interested in where the animal is found, what condition it is in, its size and its sex. This information will help researchers understand the habitat the species uses, when and where they breed and what the impacts on the species may be.

How do I report an interaction or sighting?

Call the DERM Hotline on: 1300 130 372

Marine debris

Entanglement in marine debris is a serious threat to marine wildlife. Animals can suffer restricted mobility, starvation, amputation, infection and drowning. Species such as whales, seabirds and turtles are particularly susceptible to impacts from marine debris. Turtles can confuse plastic bags with jellyfish, part of their preferred diet. Seabirds can ingest plastic or hooks that are discarded with fish or bait.

You can do your part by ensuring that whatever you take fishing with you, you bring back. Pick up any rubbish you come across while fishing and dispose of it properly on shore. Use more environmentally friendly products such as biodegradable bait bags.

Tagged animals

A number of monitoring programs are conducted throughout Queensland to give scientists a better understanding of species movement, growth and survival rates. If you come across a tagged animal, please report it by phoning Suntag on 1800 077 001.

Status of protected species

At the international level, the IUCN—The World Conservation Union—compiles the Red List, considered by many experts to provide the world's most comprehensive guide to the global conservation status of both animal and plant species. Species are listed as:

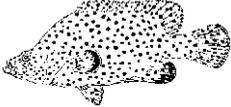
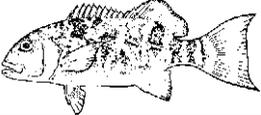
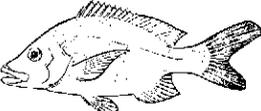
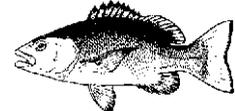
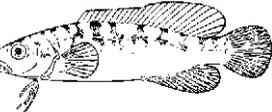
extinct	extinct in the wild
critically endangered	endangered
vulnerable	near threatened
least concern	data deficient
not evaluated	

In Australia, species are listed under the *Environment Protection and Biodiversity Conservation Act 1999* or the *Queensland Nature Conservation Act 1992* as:

critically endangered	endangered
vulnerable	rare
conservation dependent	near threatened
least concern	
a cetacean	listed marine species
listed migratory species	

Queensland no-take species

There is also a range of no-take species under Queensland fisheries regulations. The take and possession of these species shown below is prohibited. Should one of these species be accidentally taken, they must be immediately returned to the water.

Barramundi cod	
Chinaman fish	
Hump-headed Maori wrasse	
Paddletail	
Potato cod	
Queensland groper	
Red bass	
Bloomfield River cod (freshwater)	
River blackfish (freshwater)	
Spiny crayfish (freshwater)	

Minimising your impact on protected species

saltwater SPECIES

Turtles Status: **endangered and vulnerable**



Six species of marine turtle inhabit Queensland waters—the **loggerhead, green, hawksbill, olive ridley, leatherback and flatback turtles**. Australia has some of the largest marine turtle nesting areas in the Indo-Pacific region and has the only nesting populations of the flatback turtle.

General tips:

- Reduce your speed, avoid areas of aggregation and keep a good lookout in turtle waters. Turtles have to surface regularly to breathe and can be easily struck by boats.
- Take extra care during nesting season (usually summer for most species). Try to minimise loud noises and bright lights that can disturb nesting.

Tips for crab fishers:

- Use the appropriate amount of float line on crab pots for the tide and depth. This will reduce the chance of turtles becoming entangled and will also help ensure gear isn't lost.
- Weight pot lines in order to reduce the amount of line floating at the surface of the water column where turtles can become entangled.
- Consider using more turtle-friendly crab pots. Turtles can become trapped in wire collapsible traps that have wider entrances than the round mesh crab pots.

- Check pots regularly to ensure that turtles aren't entangled.
- Discarded pots can continue to trap turtles. Ensure your pots are well attached and rope is in good condition to avoid losing crab pots, dillies, etc.

Tips for line fishers:

- If you hook a turtle and can't release it safely, ring DERM on 1300 130 372 for further advice and assistance.
- Use different bait. Some turtles avoid mackerel baits but are attracted to squid baits.
- Consider using circle hooks. Barbless hooks are also easier to remove and cause less damage on the turtle. Some fishers even suggest that using barbless hooks increases their catch.



saltwater SPECIES

Sharks and Rays Status: **ranges from vulnerable to critically endangered**



Sharks and rays have long life spans, mature late in life and giving birth to only a few live young, which makes them particularly susceptible to population declines. A number of species have now been listed as protected due to concerns for their long-term survival in the wild*.

- **Whale shark (vulnerable)** The largest fish in the world, the whale shark is easily identified by its broad head and white spots, and can be found in the Coral Sea in November and December.
- **Great white shark (vulnerable)** Found from the southern Queensland border to as far north as Mackay, the great white plays an important role as a top level predator.
- **Grey nurse shark (critically endangered on the east coast/endangered in Queensland)** Often associated with inshore rocky reefs and sandy-bottomed gutters, grey nurse sharks look quite fierce with their overhanging teeth but are not known to be aggressive.
- **Freshwater sawfish (critically endangered in Queensland, vulnerable under Commonwealth listing)** Sawfish are identified by their unique 'saw', which easily becomes entangled in fishing gear. All sawfish species are relatively low in abundance and are now protected.
- **Speartooth shark (critically endangered)** Often confused with a bull shark, limited information is available on the speartooth shark, with only a few specimens ever recorded in the Gulf of Carpentaria.
- **Shortfin and longfin mako shark**
- **Porbeagle shark**

Practical tips

- Use barbless and/or circle hooks to reduce the likelihood of hooking a shark or ray and minimise impacts from deep hooking.
- A number of aggregation areas have been closed to fishing to protect grey nurse shark from incidental capture. Make sure you know where these areas are and comply with the rules that are in place to protect grey nurse shark. Be aware that grey nurse shark can also be found outside these aggregation areas during migration.
- A go slow zone (8 knots) should be adhered to within 250m of whale sharks.
- Be aware that you may encounter sawfish in both marine and freshwater areas where they are often found on the bottom of turbid rivers and inshore areas. Peak interactions with freshwater sawfish occur in the wet season (February – April), so pay particular attention at that time.
- Understand that the speartooth shark looks very similar to a bull shark and shares similar habitat in the Gulf of Carpentaria. You can tell the difference by the spear-like teeth on the bottom jaw (similar to grey nurse sharks) of the speartooth (bull sharks have triangular teeth).

* For more information please refer to the Fisheries Queensland Shark ID Guide available online

saltwater SPECIES

Dugongs Status: **vulnerable in Queensland**



Dugongs, often referred to as sea cows, are slow moving, air breathing marine mammals that feed predominantly on seagrass in sheltered inshore areas. Australia has one of the last significant populations of dugong in the world. Their preferred habitat regularly overlaps with those areas where Queenslanders like to go boating and fishing.

Practical tips

- Avoid areas where dugong are known to aggregate (e.g. seagrass beds in sheltered inshore areas).
- Avoid fishing areas at certain times (e.g. when dugong are migrating onto and off seagrass banks with the tide).
- Be aware of and adhere to rules designed to protect dugong, such as dugong go-slow areas.
- Always keep an eye out for dugong in the water. They are generally quite visible because of their need to surface regularly.
- As with turtles, dugong can become entangled with crab pot lines. To avoid entanglements, put weights on your float lines and make sure you use the appropriate length of rope for the tidal conditions.

saltwater SPECIES

Dolphins and Whales

Status: ranges from data deficient to vulnerable and endangered (all cetaceans are protected)



Since the ban on whale hunting in Australian waters in 1980, humpback whale numbers in particular have increased significantly in Queensland. With an increase in the number of humpback whales visiting Queensland waters, there is an increased potential for interactions. Queensland is also home to a large number of dolphins and other whale species all of which are protected.

Practical tips

- Use the appropriate amount of float line on crab pots for the tide and depth. This will reduce the possibility of entanglements, and will also help ensure gear isn't lost.
- Weight pot lines to reduce the amount of line floating at the surface of the water column where whales can become entangled.
- Check pots regularly to ensure that there are no entanglements.
- Keep a safe distance away from any whales you may see (100 metres).
- If whales approach within 100 metres of your vessel, either slowly steer a straight course away from them or stay put and place the engines in neutral and let the whale come to you. Do not engage the props while a whale is within 100 metres.
- Avoid making loud disturbing noises near whales. They have extremely sensitive hearing and are affected by sounds above and below the water.
- To avoid interactions with dolphins, try to minimise the amount of berley you use and the number of fish you discard over the side as this can attract dolphins to the area.

saltwater SPECIES

Seabirds Status: **ranges from listed marine species to vulnerable and endangered**



Seabird is a general term used to describe any species of bird which spends a substantial part of its life foraging and/or breeding in the marine environment. Examples include gulls, pelicans, terns, petrels, shearwaters, cormorants, gannets and boobies.

Practical tips

- Don't feed seabirds. Birds that become habituated to human activities can become a nuisance and make themselves more susceptible to harmful interactions.
- Keep your catch, bait and fishing gear out of sight when not in use. Birds are not as attracted if food is not visible.
- Try using thawed bait that doesn't float as much as frozen bait. This can help minimise the number of birds hooked accidentally.
- Use wildlife friendlier fishing practices and technology where possible. Barbless, uncoated hooks, non-braided wire and biodegradable bait bags can help minimise impacts on seabirds.
- Boat strike is a common cause of injury. Take care and keep an eye out for seabirds when operating vessels. Seabirds and other wildlife may be nesting or resting, or may already be disabled, or unable to get out of the way in time.

Information provided by Waterbird Rescue Queensland
www.waterbirdrescue.org.au

Saltwater and freshwater crocodile

Status: **Listed marine species (the saltwater crocodile is vulnerable in Queensland)**



Until the 1970s, crocodiles were hunted for their skin resulting in a significant decline in numbers. In Queensland, both the saltwater and freshwater crocodile are protected.

Practical tips

- Avoid fishing in areas close to crocodile slide marks. Crocodiles may still be in the vicinity and may approach people and boats.
- Be more aware at night and during breeding season (between September and April).
- Don't attract crocodiles by discarding bait, offal or unwanted fish in areas they're known to inhabit.
- For your own safety when fishing, stand a few metres back from the water's edge. Do not stand on logs or branches overhanging deep pools.

freshwater SPECIES

Freshwater fish **Status: endangered and vulnerable**



A number of fish species are protected because of concerns about their declining or naturally low numbers. Some species, such as the **Elizabeth Springs goby**, **red-finned blue eye**, **edgaston goby**, and the **Flinders Ranges gudgeon** are only known to inhabit one or two freshwater springs. Other species, such as the **oxleyan pygmy perch**, **honey blue eye**, **Murray cod**, **Lake Eacham rainbowfish**, the **Mary River cod** and the **lungfish** are only found in very specific habitats or in one or two catchments.

Practical tips

- Use fish friendly gear such as barbless hooks.
- Try to release the fish quickly and gently if they are caught.
- Where possible, avoid lifting fish out of the water to release them.

Air-breathing animals **Status: endangered and vulnerable**



Three species of freshwater turtle are protected in Queensland — the **Mary River tortoise**, the **Fitzroy tortoise** and the **Gulf snapping turtle**. As their names suggest they are restricted to the Mary River catchment, the Fitzroy River region and the Gulf of Carpentaria respectively. **Platypus** are also known to inhabit freshwater creeks and streams on the east coast of Queensland.

Practical tips

- Ensure you follow the regulations in place for freshwater fishing apparatus, which are designed to minimise the capture of non-target species.
- Check traps regularly to ensure any individuals that are caught can be released.
A platypus can only survive underwater for about 10 minutes.
- Try using wider gape hooks that minimise the chance of hooking turtles in particular, or barbless hooks which reduce the damage inflicted when releasing any hooked individuals.

Photos: turtle: DERM; dugong: DERM; dugong and calf: Great Barrier Reef Marine Park Authority; pelican: DERM; whales: DERM; angler: DEEDI; circle hooks: Infofish Services; grey nurse shark: DERM; dolphin: DERM; brown booby and darter: © Waterbird Rescue Queensland; saltwater and freshwater crocodile: DERM, courtesy of Hartley's Crocodile Adventures; Lake Eacham rainbowfish: DEEDI; platypus: DERM.

General handling practices for protected species

- Try to minimise the stress on individuals by releasing them as quickly and gently as possible. If you are unsure about handling seabirds, make them comfortable and warm, and take them to your nearest vet for treatment.
- Always consider your safety and the safety of the crew when handling protected species.
- Remove as much fishing gear as possible from any entangled animals before releasing.
- Hooks should be removed where possible. Where this isn't practical or safe, try to cut the line as close to the hook as possible. Be aware that wire traces can create abrasions and infections on the side of animals if left.
- Have tools such as pliers, de-hookers and line cutters on hand which will help you release any animals you may accidentally catch.

Further information

- For sawfish handling see *A guide to releasing sawfish—Gulf of Carpentaria inshore and offshore set net fishery*.
- For seabird handling see *Looking after protected species in Queensland – seabird care and handling* (DVD).
- For more detailed handling techniques for specific protected species, see the DEEDI publication *Looking after protected species in Queensland: a comprehensive guide for commercial fishers*, the Oceanwatch publication *Circle of dependence: protected species handling manual* or the Released fish survival website, www.info-fish.net/releasefish/
- For more information on identifying protected species see the *Protected Marine Species Identification Guide* developed by Oceanwatch, through the National Heritage Trust.

Useful contacts numbers

DERM Hotline	1300 130 372
Department of the Environment, Water, Heritage and the Arts	(02) 6274 1111
Fisheries Queensland logbook section	(07) 3227 6299
Fishwatch Hotline	1800 017 116
DEEDI Business Information Centre	13 25 23
Waterbird Rescue Queensland	0418 758 822
Denis Ballam (Seanet Extension officer)	(07) 4032 2234
Oceanwatch	(07) 5514 6021

For your nearest Queensland Boating and Fisheries Patrol, look under Q in the White Pages or contact the DEEDI Business Information Centre on 13 25 23.

To report foreign fishing vessels contact:

AFMA	0419 205 329 or 02 6272 5029
Australian Customs	1800 061 800 (24 hr hotline)

To report out-of-place shark control equipment

1800 806 891

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