



Have you seen a sawfish?

From Sydney to Cairns to Darwin to Perth, we want to hear about your sightings – a live fish, a saw on the wall of your local pub, or a photo from your family album.

Media briefing: Cairns Aquarium, 11 am Tuesday 8 January 2019

With live sawfish, saws, crocheted sawfish and overlay

"Your sightings, no matter how long ago they happened, will help us work out how many sawfish there used to be, how many remain, and how we can help them recover," says Dr Barbara Wueringer, a zoologist and the director of Sharks and Rays Australia (SARA).

Forty years ago, sawfish were regularly seen off Sydney and the east coast, and Perth and up the west coast. Today they're rarely seen outside of the Gulf of Carpentaria, NT and the Kimberley.

Please report your sightings at <https://saw.fish>

Sawfish can grow to six metres with saws as long as two metres. The saw can detect the electrical impulses of fish. Then with one slash it can cut smaller fish in half. It's so streamlined that many prey fish may not detect it. But the saw gets caught in nets, and in the past it was a prized fishing trophy.

"Today it's rare to see large sawfish," says Barbara. "Most reports are three metres or smaller. But we could be wrong. There may still be some big ones out there."

"These are beautiful creatures," says Jessica Hudgins, a marine biologist researching sawfish at Heriot-Watt University in Scotland. "They're so unique and special. They're a big part of Australian history and culture. It would be tragic if we lost them forever."

"For four out of five species, the waters of Northern Australia may contain their last populations. As sawfish are slowly retreating to remote parts of the continent it's critical that we find out what's out there, and how we can help them," says Barbara.

Barbara is leading an investigation in Queensland to identify where sawfish still occur and in what numbers.

"We're working with local Indigenous Ranger groups, fishers, and landowners, and with scientists from around the world.

"But to make a real difference we're now calling for wider public participation. Through this citizen science initiative you can make the difference to sawfish survival."

SARA is based in Cairns. Their research is supported by the Save Our Seas Foundation (based in Geneva) and the US-based Shark Conservation Fund.

All sightings generated by the project will be shared with Team Sawfish at Murdoch University, WA and sawfish researchers from Charles Darwin University, NT.

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Social media: @SharksAndRaysAU on Twitter, Facebook and Instagram.

Background information and photos attached and/or at <https://saw.fish>.



Background information

Sawfish are rays that have a shark-like body and a unique toothed rostrum, which is also called the saw. Sawfish use the saw to detect their prey as well as kill it, as Dr Barbara Wueringer, the principal scientist at Sharks And Rays Australia (SARA), discovered. Sawfish deliver fast saw-swipes aimed at prey that can split a fish in half. Sawfish are stealth predators. A collaborative study between Dr Wueringer and scientists from Murdoch University and Newcastle University found that the shape of the saw is so streamlined that prey fish may not even detect when a sawfish swipes at them.

The saw is easily tangled in fishing nets, however. While analysing sawfish bycatch data from the Queensland Shark Control program, Dr Wueringer found that sawfish were mainly caught in gill nets. In most locations along Queensland's east coast, sawfish populations had dropped to zero in the 1990s, before the Queensland Government removed gill nets in most locations and replaced them with drumlines in a bid to reduce bycatch.

Old sawfish saws are often seen in pubs and bars around Australia. Before protections came into place, sawfish were often killed for these trophies. Ongoing work by SARA in remote areas of the Gulf of Carpentaria has found that some fishers still take trophies, and now amputate saws before releasing the animal. Not only is this practice illegal, but it also likely causes a slow death through starvation. The saw does not grow back.

"One of the biggest challenges we are facing with the conservation of sawfish in Queensland is that we do not know just how much their numbers have dropped," says Dr Wueringer. And this is where you can help.

"Quite often when I speak with older people about sawfish, they witnessed very large animals getting caught and being landed back in the 1980s or 90s. But sightings of these large animals are becoming increasingly rare, and so are sightings of smaller sawfish," Dr Wueringer adds.

Submissions of encounters with sawfish, especially with photographs, or information on sawfish saws, will allow Dr Wueringer



and her collaborator, Jess Hudgins from Heriot-Watt University in Scotland, to put together a more complete picture of both the historic and current distributions of sawfish. “We currently estimate that sawfish are extinct in much of their former range along the east coast of Australia, but this picture might be incomplete,” says Hudgins, who also administers SARA’s submissions database. The data collected will be used to recreate historic baselines for the different sawfish species including distribution ranges and their changes in size over time.

It is important to note that SARA is not asking anybody to target sawfish for the study. Sawfish are protected under the Environment Protection and Biodiversity Conservation Act as well as various state legislation. For example, in Queensland people are not allowed to target them without a permit and the legislation implies that possession of sawfish parts is also illegal without a permit.

Sawfish sightings or information regarding old rostra can be submitted directly to SARA’s homepage at <https://saw.fish>. You can also find us on facebook, instagram and twitter @SharksAndRaysAU

Photos (in order)

- A freshwater sawfish (*Pristis pristis*) caught at the mouth of the Mulgrave River (Far North Queensland, just south of Cairns) in 1938. The animal is estimated to be around 5 m long. Animals of this size are no longer caught in populated areas of Northern Australia. Photo source: Queensland State Library.
(StateLibQueensland1938_2.jpg and 1938_qld_state_lib.jpg...)
- A sawfish caught at Manly, Sydney in 1926,
- IMG_1733... A green sawfish (*Pristis zijsron*) is caught in a gill net. The animal will be tagged, measured and released. This species of sawfish can grow to 5.7 m in total length, including the saw. The saw measures up to 25% of the total length.
- IMG_7256 AD... A sawless freshwater sawfish (*Pristis pristis*) was caught by the Sharks And Rays Australia team in the Mitchell River, Far North Queensland. The animal’s saw had previously been amputated by fishers. Not only is this illegal, but it also causes the animal to slowly starve to death. Photo by Ashley Dew, Sharks And Rays Australia.
- IMG_7330 SL... A juvenile freshwater sawfish (*Pristis pristis*) is being measured, tagged and released by the team from Sharks And Rays Australia. Photo by Sam Lewis, Sharks And Rays Australia.
- IMG_7179 AD... This freshwater sawfish (*Pristis pristis*) that was caught by Sharks And Rays Australia during a research expedition has a very slim chance of survival, as a fisher previously amputated its saw. In this image, Dr Barbara Wueringer from Sharks And Rays Australia is holding the animal, ready for workup. Photo by Ashley Dew, Sharks And Rays Australia.

