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Octogenarian snapper found in WA becomes oldest tropical reef fish by two decades

An 81-year-old midnight snapper caught off the coast of Western Australia has taken the title of the oldest tropical reef fish recorded anywhere in the world.

The octogenarian fish was found at the Rowley Shoals—about 300km west of Broome—and was part of a study that has revised what we know about the longevity of tropical fish.

The research identified 11 individual fish that were more than 60 years old, including a 79-year-old red bass also caught at the Rowley Shoals.

Australian Institute of Marine Science (AIMS) Fish Biologist Dr Brett Taylor, who led the study, said the midnight snapper beat the previous record holder by two decades.

“Until now, the oldest fish that we’ve found in shallow, tropical waters have been around 60 years old,” he said.

“We've identified two different species here that are becoming octogenarians, and probably older.”

Dr Taylor said the research will help us understand how fish length and age will be affected by climate change.

“We’re observing fish at different latitudes—with varying water temperatures—to better understand how they might react when temperatures warm everywhere,” he said.

The study involved four locations along the WA coast, as well as the protected Chagos Archipelago in the central Indian Ocean.

It looked at three species that are not targeted by fishing in WA; the red bass (*Lutjanus bohar*), midnight snapper (*Macolor macularis*), and black and white snapper (*Macolor niger*).

Co-author Dr Stephen Newman, from the WA Department of Primary Industries and Regional Development, said long-lived fish were generally considered more vulnerable to fishing pressure.

“Snappers make up a large component of commercial fisheries in tropical Australia and they’re also a key target for recreational fishers,” he said.

“So, it’s important that we manage them well, and WA’s fisheries are among the best managed fisheries in the world.”

Marine scientists are able to accurately determine the age of a fish by studying their ear bones, or 'otoliths'.

Fish otoliths contain annual growth bands that can be counted in much the same way as tree rings.

Dr Taylor said the oldest red bass was born during World War I.

"It survived the Great Depression and World War II," he said.

"It saw the Beatles take over the world, and it was collected in a fisheries survey after Nirvana came and went."

"It's just incredible for a fish to live on a coral reef for 80 years."

The research is published in the journal *Coral Reefs*.

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The paper:

Unprecedented longevity of unharvested shallow-water snappers in the Indian Ocean

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About the Australian Institute of Marine Science

The Australian Institute of Marine Science (AIMS) is Australia's tropical marine research agency with facilities in Perth, Darwin, and Townsville.

In existence for almost half a century, it plays a pivotal role in providing large-scale, long-term and world-class research that helps governments, industry and the wider community to make informed decisions about the management of Australia's marine estate.

AIMS science leads to healthier marine ecosystems; economic, social and environmental benefits for all Australians; and protection of coral reefs from climate change. More here: <https://www.aims.gov.au/>