

Oldest fish on record caught off Albany

17 December 2014, by Shannon Verhagen



The record-breaking fish was a bottom-dwelling Bight redfish, like this one. Credit: Jeffrey Norris

Commercial fisherman Tony Little caught WA's oldest fish on record in the deep waters of Two People's Canyon, off the coast of Albany.

The 84-year-old female Bight redfish (*Centroberyx gerrardi*), caught in November 2013, surpassed the state's previous record of 78 years, held jointly by the Western foxfish (*Bodianus frenchii*) and bass groper (*Polyprion americanus*).

The [fish](#) was caught as part of an \$850,000 stock assessment project for the South Coast's scalefish fisheries, run by the Department of Fisheries (DOF) and Murdoch University's Centre for Fish and Fisheries Research (CFFR), funded by the State Natural Resource Management Office.

"In 2013 we aged about 18,000 fish at our Finfish Ageing Laboratory," DOF researcher Jeffrey Norris says.

"It puts us in an excellent position to make judgements about the health of WA marine fish stocks."

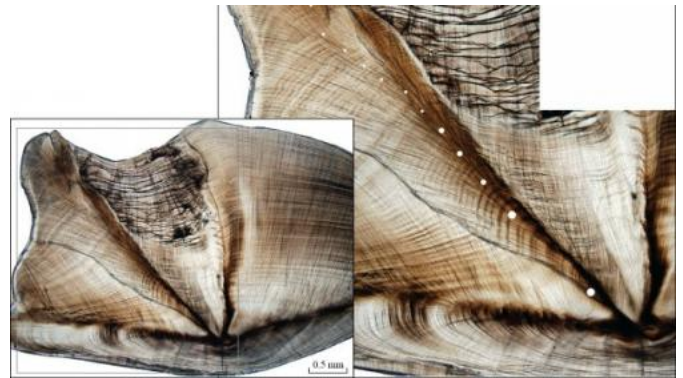
The laboratory receives filleted fish frames or skeletons from fish processors throughout the South Coast, using the otoliths—or ear bones—to

determine the age of individual fish and thus the age distribution across [fish populations](#).

The CFFR's Dr Peter Coulson is in charge of ageing the fish.

"The otolith... is removed and embedded in resin," he says.

"When the resin is set, we use a low-speed saw with a diamond-tip blade to cut a transverse section we can put under a microscope.



(L) The otolith of the 84-year-old fish, and (R) the otolith with dots to indicate every 5th growth ring. Credit: Jeffrey Norris

"Similar to the growth rings in a tree, the otolith has annual growth rings we can count to determine the fish's age."

Dr Coulson says they were aware they would find fish older than 50 years, but were still excited by the find.

Offspring carrying good genes

Mr Norris says finding older individuals indicates healthy stocks, where fish are able to complete their full lives.

"Bight redfish are long-lived, spawning year after year," he says.

"They aren't highly successful... they rely on one good year every few years, so the older they are, the higher the chance of [breeding] success."

Determining age structure is important in ensuring fishery regulations are strict enough to maintain healthy stocks and prevent overfishing, but there is also a sadness that comes with it.

"You think about the 84-year-old and all the things it's been through," Mr Norris says.

"I'm sure at points throughout her life she's been at the point of starvation, escaping predators, and dealing with parasites, and she's been spawning this whole time.

"She's gone now but all of her offspring, grandkids, great grandkids, will be carrying her good genes."

Provided by Science Network WA

APA citation: Oldest fish on record caught off Albany (2014, December 17) retrieved 21 June 2021 from <https://phys.org/news/2014-12-oldest-fish-caught-albany.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.