

Maugean skate

A LIVING DINOSAUR!



Maugean Skate Distribution

Maugean Skate Facts

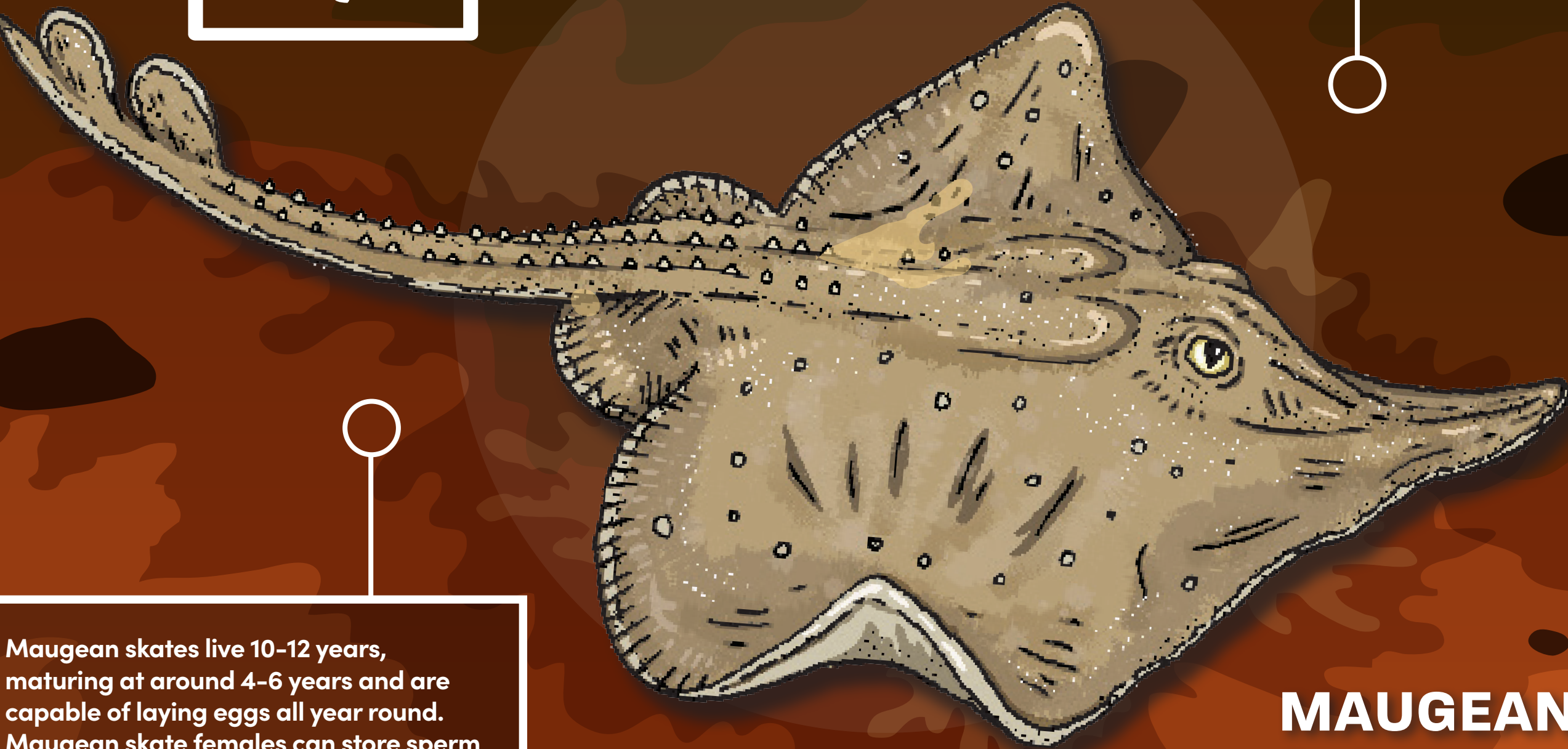
It is thought that the Maugean skate has existed since the Cretaceous period, a time when T-Rex roamed the earth.

Max size of 85cm



A true Tasmanian that only exists in one small pocket of water on Earth, Macquarie Harbour. Tragically, extinction within 10 years is a real possibility!

Nearly half (47%) the population were estimated to have been killed in 2019 due an extreme weather event that resulted in oxygen-depleted bottom waters rising through the water column and literally choking the skates to death.



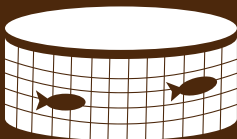
Maugean skates live 10-12 years, maturing at around 4-6 years and are capable of laying eggs all year round. Maugean skate females can store sperm from multiple males at any one time.

MAUGEAN SKATE

Zearaja maugeana
Endangered



Threats & Solutions



AQUACULTURE: Fish waste from intensive salmon farming in Macquarie Harbour is driving the skate to imminent extinction. Microbes chew up fish waste and feed, further reducing the already low levels of oxygen in the water, making it harder for the skate to breathe.

SOLUTION: Remove salmon from Macquarie Harbour.



HYDROELECTRICITY PRODUCTION: Damming of rivers and manipulation of river flows to prioritise electricity production means relatively constant freshwater flows across the harbour and out the narrow entrance to the sea, preventing oxygen-rich seawater entering to 'recharge' the Macquarie Harbour.

SOLUTION: Manage river flows so that seawater can enter and recharge the harbour with oxygen at critical times.

References:
1. Kyne, P.M., Heupel, M.R., White, W.T. and Simpfendorfer, C.A. (2021). The Action Plan for Australian Sharks and Rays 2021. National Environmental Science Program, Marine Biodiversity Hub, Hobart.
2. Moreno, D., Tracey, S., Woolley, B. & Semmens, J.M. (2025) 2014-2024 Macquarie Harbour Maugean skate population status and monitoring report Institute for Marine and Antarctic Studies, University of Tasmania.
3. Threatened Species Scientific Committee (2023) Conservation Advice for *Zearaja maugeana* (Maugean skate). Department of Climate Change, Energy, the Environment and Water. Canberra, Australia.