Department of Primary Industries and Regional Development

GOVERNMENT OF WESTERN AUSTRALIA

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Kimberley Demersal Scalefish Resource

Fisheries Science Update – September 2025

The Department of Primary Industries and Regional Development (DPIRD) monitors the status of Western Australia's demersal scalefish resources by undertaking regular stock assessments on indicator species.

This summary provides key outcomes of the 2025 assessment of the Kimberley Demersal Scalefish Resource (*Resource Assessment Report No. 4)*.

Status of indicator species

Red emperor

High risk

Goldband Snapper

Medium risk

Key points

- Overfishing is causing declines in spawning biomass of red emperor and goldband snapper in the Kimberley region.
- Spawning biomass of red emperor is 76% depleted and will continue to decline under current management arrangements.
- Spawning biomass of goldband snapper will decline to below acceptable levels if current catch is maintained.
- Management changes will be required to ensure there are fish for the future.

Snapshot

Kimberley Red Emperor

High risk

Catch

Over 95% of red emperor catch is taken by the commercial trap fishery.

Since 2010, red emperor catch has been around 140–150 t per year except for peaks in 2019, 2021, 2023 and 2024.

As biomass declines, fishing pressure on red emperor increases (leading to overfishing).

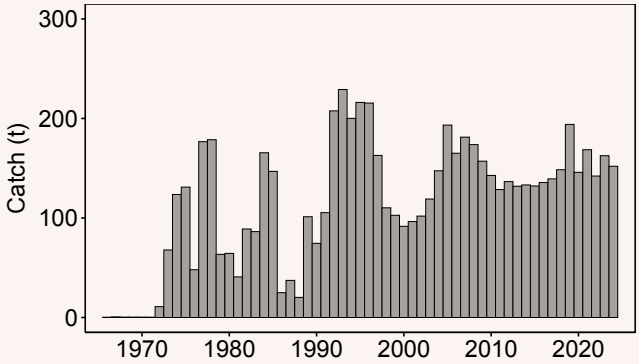

Figure 1 Retained catches (tonnes) of red emperor by commercial, charter and recreational fisheries in the Kimberley region up to 2024

Male red emperor grow larger than females however, their age structure is more truncated suggesting males are more susceptible to fishing pressure than females.

Biomass

Spawning biomass of red emperor has depleted by 76% of unfished levels.

Spawning biomass of red emperor is projected to decline below the limit if overfishing continues.

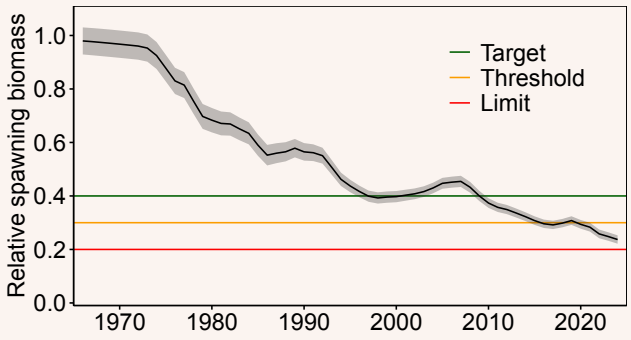

Figure 2 Spawning biomass of female red emperor in the Kimberley region compared to reference levels

It's assumed that almost all red emperor that are released will die because of depredation and/or barotrauma.

Red emperor live up to 41 years of age and mature around 7 years of age. Of the fish studied in the Kimberley, the average age since 2006 is around 8-9 years old, and ~90% are less than 15 years.

Snapshot

Kimberley Goldband Snapper

Medium risk

Catch

Over 95% of goldband snapper catch is taken by commercial fishers.

Fishing pressure has been increasing since the 2000s leading to declines in spawning biomass.

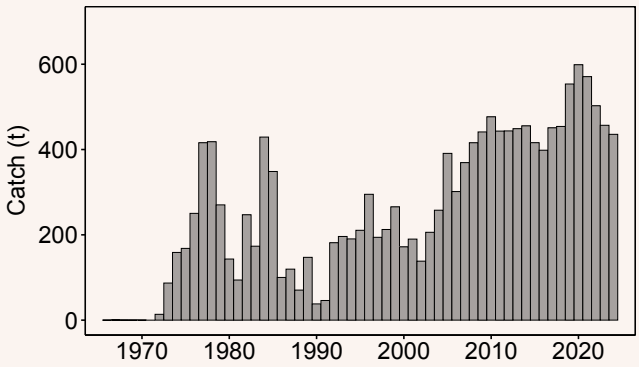

Figure 3 Retained catches (tonnes) of goldband snapper by commercial, charter and recreational fishers in the Kimberley region up to 2024

Goldband snapper live up to ~30 years however, the average age of goldband snapper caught in the Kimberley is 7-8 years old.

Biomass

Spawning biomass of goldband snapper has depleted by 62% of unfished levels and is projected to decline below acceptable levels if current catch levels continue.

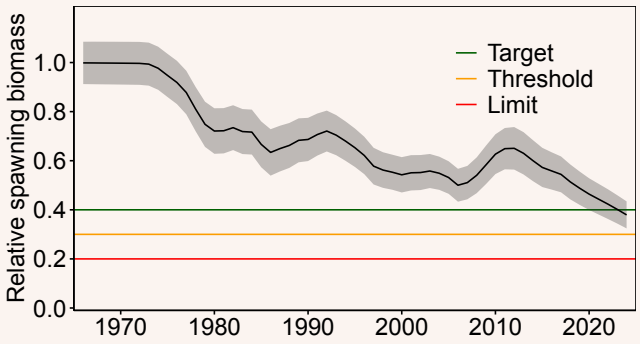

Figure 4 Spawning biomass of female goldband snapper in the Kimberley region compared to reference levels.

The average length of goldband snapper caught in the Kimberley has declined from 478-484 mm from 2006-2017 to 452 mm in 2021.

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