

# Pilbara 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 periodic stock assessments on key indicator species.

This summary provides key outcomes of the 2024 assessment of the Pilbara Demersal Scalefish Resource (*Fisheries Research Report No. 338*).

## Status of indicator species

### Red emperor

**Severe risk**



### Goldband snapper

**High risk**



### Bluespotted emperor

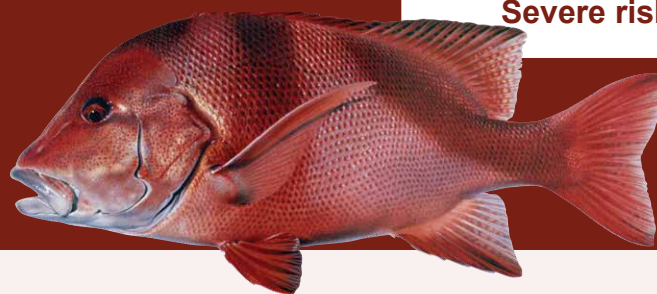
**Medium risk**



## Key points

- Overfishing has caused unacceptable declines in spawning biomass of red emperor and goldband snapper in the Pilbara region.
- Spawning biomass of red emperor is estimated to be 82% depleted and there's a lack of older fish in the population that are critical for sustaining stocks into the future.
- Goldband snapper spawning biomass has also been heavily exploited and is estimated to be 76% depleted.
- Spawning biomass of bluespotted emperor is predicted to remain at sustainable levels at the current levels of catch.
- A recovery plan has been implemented to reduce catches by 38% to allow recovery within 20 years (*Fisheries Management Paper No. 310*).
- DPIRD will monitor recovery progress through regular stock assessments and continue to adjust management as required.

# Snapshot Pilbara Red Emperor



Severe risk

## Catch

Red emperor is predominantly caught by the commercial trap and trawl fisheries (~88% in 2024).

Total catch across all sectors in 2024 (~113 t) decreased to below the Phase 1 recovery benchmark of 127 t.

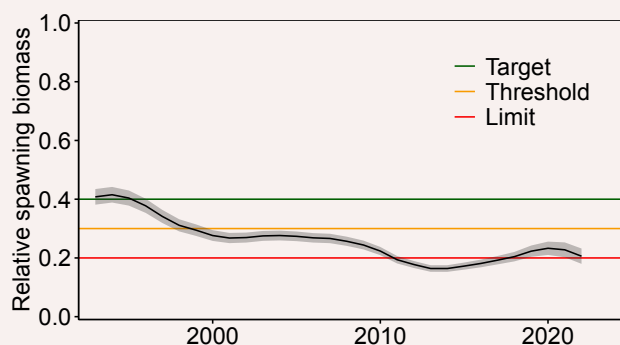


**Figure 1** Retained catches of red emperor by recreational, charter and commercial fishers in the Pilbara bioregion up to 2024

## Biomass

Fishing pressure has led to red emperor biomass being below sustainable levels for over 20 years.

Spawning biomass of red emperor was predicted to be 82% depleted in 2023.



**Figure 2** Spawning biomass of female red emperor in the Pilbara bioregion up to 2022, 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. In 2019, only 3% of the 2,259 fish studied were over 15 years old.



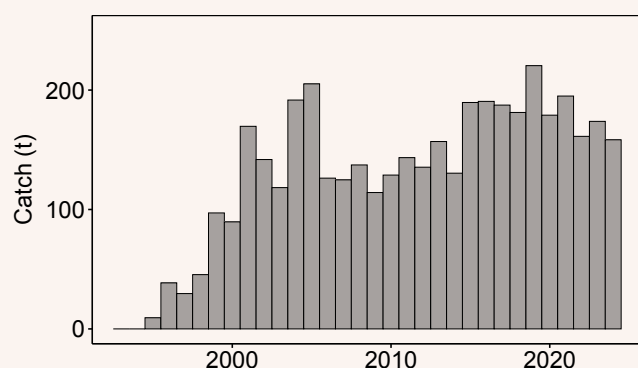


# Snapshot Pilbara Goldband Snapper



## Catch

Goldband snapper is mostly caught by the commercial line and trap fisheries and the charter sector.

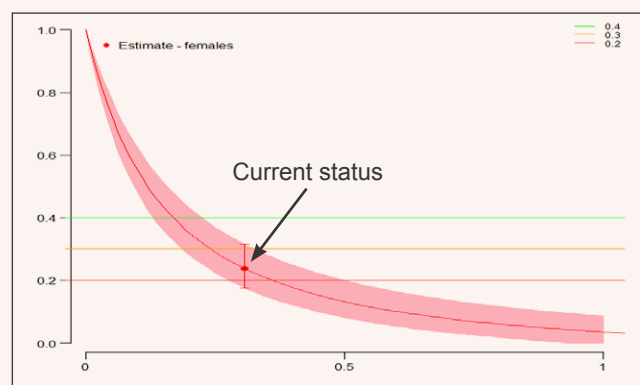


**Figure 3** Retained catches of goldband snapper by recreational, charter and commercial fishers in the Pilbara bioregion up to 2024

## Biomass

Fishing pressure has resulted in goldband snapper biomass being below sustainable levels.

Spawning biomass of goldband snapper is now 76% depleted.



**Figure 4** Fishing pressure has resulted in goldband snapper biomass being below sustainable levels (between threshold and limit)

Goldband snapper is managed across 3 separate regions in WA (Kimberley, Pilbara and Gascoyne).

Goldband snapper occur in much higher abundances in depths of 90 to 120 m.



# Snapshot Pilbara Bluespotted Emperor

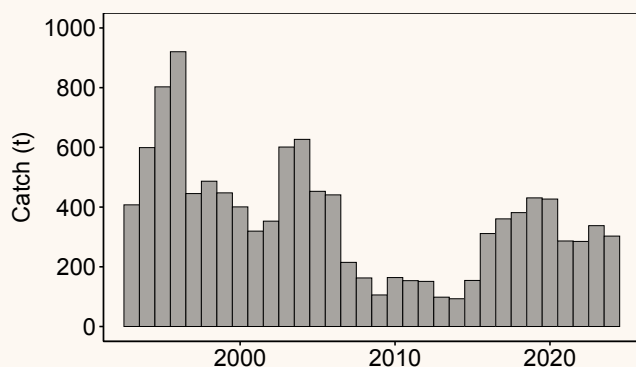


Medium risk

## Catch

Bluespotted emperor are predominantly caught by the commercial trawl and trap fisheries (69% and 31%, respectively in 2022).

Despite trawl fishery effort reductions in 2010, annual catch of this species increased from 2015 to 2019.

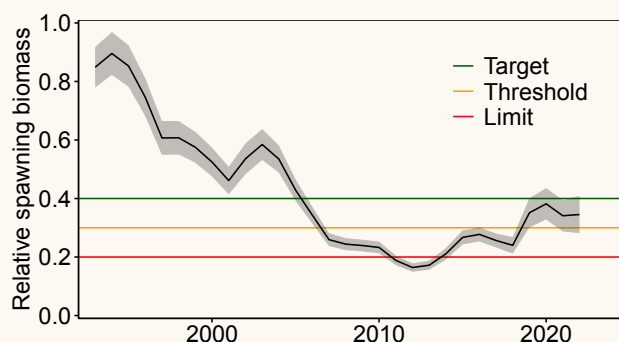


**Figure 5** Retained catches of bluespotted emperor by recreational, charter and commercial fishers in the Pilbara bioregion up to 2024

## Biomass

Bluespotted emperor are relatively resilient to fishing pressure, being shorter-lived and more productive than other demersal species like red emperor.

If future catches remain at current levels, biomass is predicted to remain at sustainable levels.



**Figure 6** Spawning biomass of female bluespotted emperor in the Pilbara bioregion up to 2022, compared to reference levels

Juvenile bluespotted emperor occur exclusively in shallow (<10 m) inshore macroalgae habitats. Each year, 2 cohorts recruit into these nursery habitats in the Dampier Archipelago.

Bluespotted emperor live up to 16 years old. The mean age of fish sampled in 2019 decreased to 3.5 years old, compared to the 4.2-4.8-year range (1993-2019).

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