

## Pale Skate, *Notoraja ochroderma*

<b>Report Card assessment</b>	<b>Negligible</b>		
IUCN Red List Australian Assessment	Least Concern* (Endemic to Australia)	IUCN Red List Global Assessment	Data Deficient
Global Assessors	Huveneers, C. & Last, P.R.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	No recent commercial fishing pressure and low historic fishing effort across its known range.		

\*The Australian assessment status is more recent than the Global assessment and the shift from DD to LC aligns with a less evidentiary and more precautionary approach to Red List assessments rather than any significant new information.

### Summary

The Pale Skate is a small deepwater ray endemic to tropical northeast Australia. It is only known from a limited number of specimens and has a restricted range though it may occur more widely, as there have been few surveys and limited fishing effort across its range. The species is only known from research surveys and although its known range overlaps with the Coral Sea Fishery (CSF), it is unlikely to have been recently captured in the fishery. Trawl effort, which was historically low, is no longer permitted and the Line Sector, which has low effort, has not operated in recent years within the known range of the species. If the Pale Skate was previously caught it would have been

released as it has no commercial value and though post-release mortality was unknown, the CSF has chondrichthyan handling practices to maximise post-release survival. The species also receives refuge in the Coral Sea Marine Park. Although poorly-known, there has been no recent commercial fishing effort within its known range and historical fishing effort was low. Therefore, the Pale Skate is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Negligible (SAFS).



### Distribution

The Pale Skate is endemic to tropical northeast Australia (Last et al. 2016). It has a restricted range in Queensland where it is only known from off Cairns (McEachran and Last 1994, Last and Stevens 2009). The extent of occurrence is <math><20,000 \text{ km}^2</math>, though it may occur more widely (Kyne et al. 2021), given that there have been few surveys and limited fishing effort across its spatial and depth range.

### Stock structure and status

The Queensland Deepwater Skate is known only from a limited number of specimens and there is currently no information on population size, structure or trend for the species (McEachran and Last 1994, Last and Stevens 2009).

## Fisheries

The Pale Skate is only known from research surveys and although its range overlaps with that of the Commonwealth Coral Sea Fishery (CSF), it is unlikely to have been recently caught in the fishery. Trawl fishery effort has historically been low and since 2006–2007 there has been virtually no trawl activity and as of 2018–2019, trawling is no longer permitted (Patterson et al. 2022). The Line Sector has low effort with only 1–2 vessels active in recent years and all recent effort has occurred outside the known range of this species (Patterson et al. 2022). If the species was previously caught, it would likely have been released as it has no commercial value and though post-release mortality was unknown, the CSF has chondrichthyan handling practices to maximise post-release survival (AFMA 2010). The species has also received significant protection since 2014 with the implementation of the Coral Sea Marine Park, which includes zoning and gear restrictions (Patterson et al. 2022, Parks Australia 2023).

## Habitat and biology

The Pale Skate is demersal on the continental slope at depths of 348–465 m (Weigmann 2016). Maximum size is at least 37 cm total length (TL) and males mature at approximately 35 cm TL (Last et al. 2016). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 37 cm TL
Age and/or size at maturity (50%)	Males: ~35 cm TL Females: unknown

**CAAB Code:** 37 031019

**Link to IUCN Page:** <https://www.iucnredlist.org/species/161559/68637419>

**Link to page at Shark References:** <https://shark-references.com/species/view/Notoraja-ochroderma>

## References

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- Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology* 88(3): 837–1037.