

## Eastern Shovelnose Ray, *Aptychotrema rostrata*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Endemic to Australia	IUCN Red List Global Assessment	Least Concern
Assessors	Kyne, P.M. & Stevens, J.D.		
Report Card Remarks	Abundant ray taken in fisheries but with some refuge in marine protected areas		

### Summary

The Eastern Shovelnose Ray is an abundant ray, endemic to the east coast of Australia. The species is a regular bycatch in a variety of commercial fisheries, particularly trawl fisheries, which operate across much of its range. It is either discarded or retained and marketed depending on location (in Queensland trawl fisheries it cannot be retained, whereas in New South Wales it can be marketed). It is also regularly taken by recreational fishers. The species breeds annually with litter sizes of 4-18. Despite high levels of bycatch and its occurrence within a geographic area which is subject to considerable fishing activities, it is abundant in a wide variety of habitats and refuges are available in some marine protected areas, in particular Moreton Bay Marine Park. Elsewhere, declines have been documented for other inshore shovelnose ray species and bycatch levels of the Eastern Shovelnose Ray should be monitored to gain data on the species' population status. Therefore, the species is assessed as Least Concern (IUCN) and Sustainable (SAFS).



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### Distribution

The Eastern Shovelnose Ray occurs on the east coast of Australia from offshore of Halifax Bay (north Queensland) to Merimbula (southern New South Wales) (Kyne and Bennett 2002, Last and Stevens 2009).

### Stock structure and status

The Eastern Shovelnose Ray's occurrence across its range is not uniform, and it is particularly scarce in the northern part of its distribution. The species is considered to be a fairly common to abundant across the centre of its distribution in southern Queensland and northern-central New South Wales (NSW) (P.M. Kyne, unpubl. data, Last and Stevens 2009). There is currently no information on population trend for the species.

## Fisheries

The Eastern Shovelnose Ray is a regular bycatch in both commercial and recreational fisheries. Within Queensland, the species is often the most abundant elasmobranch in the East Coast Trawl Fishery (ECTF). It is a minor bycatch in the deepwater component of the eastern king prawn sector and is also taken in the Moreton Bay sector (P.M. Kyne, unpubl. data). In these trawl fisheries, the Eastern Shovelnose Rays are discarded although post-release mortality is not known, and females often abort pups (Adams et al. 2018). The species is also a bycatch in the Queensland East Coast Inshore Fin Fish Fishery. Within NSW waters, the species is taken as bycatch in the Ocean Trawl Fishery. Given the species abundance in a variety of habitats in popular fishing areas (for example, Moreton Bay), it is regularly caught. Recreational fishing activities are intense in heavily populated parts of its range, particularly in and around Moreton Bay. Shovelnose rays are either discarded or retained for consumption, and are reportedly good eating (P.M. Kyne, pers. obs.). The specific effects of coastal development on this shovelnose ray are unknown, but areas of its distribution (particularly Moreton Bay, but also elsewhere) have been subject to considerable inshore marine habitat loss from urban, commercial, and industrial developments.

## Habitat and biology

The Eastern Shovelnose Ray occurs inshore on the continental shelf in a variety of habitats including the surf zone, estuaries, mudflats, seagrass beds and around rocky reefs. It ranges from <1 m to 220 m but is more common at <100 m (Kyne and Bennett 2002, P.M. Kyne, unpubl. data). Litter sizes are 4 to 18 (Kyne 2000).

Longevity and maximum size	Longevity: unknown Max size: 120 cm TL
Age and/or size at maturity (50%)	Males: 60-68 cm TL Females: 54-66 cm TL

**Link to IUCN Page:** <http://www.iucnredlist.org/details/161596/0>

**Link to page at Shark References:** <http://www.shark-references.com/species/view/Aptychotrema-rostrata>

### References

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