

Coastal Stingaree, *Urolophus orarius*

Report Card assessment	Depleted		
IUCN Red List Australian Assessment	Endangered (Endemic to Australia)	IUCN Red List Global Assessment	Endangered
Global Assessors	Kyne, P.M., Last, P.R. & Marshall, L.J.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Significant population reduction due to historic fishing pressure; pressure has declined but is ongoing, restricted range that overlaps with fisheries, and low post-release survival.		

Summary

The Coastal Stingaree is a small species endemic to temperate continental shelf waters in a restricted range in South Australia. It is caught incidentally in the Spencer Gulf Prawn Fishery (SPGF), and likely also in the Gulf St. Vincent and West Coast Prawn fisheries. A dramatic population decline was observed in Spencer Gulf trawl surveys between 2007 and 2013 with only one individual recorded in 2013. Fishing pressure was historically high in Spencer Gulf. In both surveys, the species only occurred in areas of low trawl effort which suggests a lack of resilience to trawl fishing pressure. The species is released when caught although post-release mortality for trawl caught stingarees is generally high and stingarees typically abort their embryos when captured. It would receive refuge in half of its range that is not fished and also possibly within the inshore marine parks network. Given its range overlap with fisheries that were historically intense, likely significant declines, ongoing fishing pressure, and low post-release survival, it is suspected that the population has undergone a significant reduction, and thus, it is assessed as Endangered (IUCN) (Kyne et al. 2021) and Depleted (SAFS).



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Distribution

The Coastal Stingaree is endemic to temperate waters in South Australia (Last et al. 2016). It occurs in a restricted range in the eastern Great Australian Bight from Beachport to Ceduna (Last and Stevens 2009).

Stock structure and status

The Coastal Stingaree has a low abundance (Kyne et al. 2021). A dramatic population decline was observed between 2007 and 2013 trawl surveys with only one individual recorded in 2013 (Burnell et al. 2015).

Fisheries

The Coastal Stingaree is an incidental catch of trawl fisheries. It is caught in the South Australian Spencer Gulf Prawn Fishery (SPGF), and likely also in the Gulf St. Vincent Prawn Fishery and West Coast Prawn Fishery (Kyne et al. 2019). The species was assessed as at low risk in the SPGF with the caveat to include it in further assessments given its status and limited information on its range within Spencer Gulf (PIRSA 2014). Subsequent to the SPGF risk assessment, comparative trawl surveys in the Spencer Gulf in 2007 and 2013 revealed a dramatic decline in the abundance of this species from 14 individuals in 2007 to one individual in 2013 (Burnell et al. 2015). In both surveys, this species was only noted in areas of low trawl effort which suggests it is not resilient to trawl fishing pressure (Kyne et al. 2019). Prawn trawl effort was historically high in parts of the fisheries, particularly within the Spencer Gulf, and although pressure has declined it is still ongoing (Kyne et al. 2019). All catch of the species is released; however, post-release mortality for trawl caught stingarees is generally high and urolophids typically abort their embryos when caught which can reduce population viability (Rigby et al. 2016, Adams et al. 2018, Campbell et al. 2018). Most vessels in these three fisheries use hoppers that can improve the survival of released species (PIRSA 2014). The species would have refuge in half of its range which is outside the area of the trawl fisheries and within the South Australian inshore marine parks network; 8% of its range is within marine parks (Heupel et al. 2019, Kyne et al. 2019, National Parks South Australia 2022). The species vulnerability to fishing and climate change was assessed as low and medium, respectively (Walker et al. 2021).

Habitat and biology

The Coastal Stingaree is demersal on the continental shelf at depths of 5–50 m (Last et al. 2016). Maximum size is approximately 31 cm total length (TL) and males mature at approximately 23 cm TL (Last et al. 2016). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: ~31 cm TL
Age and/or size at maturity (50%)	Males: ~23 cm TL Females: unknown

CAAB Code: 37 038022

Link to IUCN Page: <https://www.iucnredlist.org/species/60100/68649829>

Link to page at Shark References: <https://shark-references.com/species/view/Urolophus-orarius>

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