

Greenback Stingaree, *Urolophus viridis*

Report Card assessment	Depleting		
IUCN Red List Australian Assessment	Vulnerable (Endemic to Australia)	IUCN Red List Global Assessment	Vulnerable
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	Population reduction due to historic fishing pressure; pressure has declined but is ongoing and considerable range overlap with fisheries, low productivity and low post-release survival.		

Summary

The Greenback Stingaree is a small species endemic to subtropical and temperate continental shelf and slope waters of Australia's southeast coast. It is an incidental catch of trawl and seine fisheries and is caught in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF). Declines of 66% in mean catch rates of stingarees, occurred in the SESSF over 20 years to 1997, including this species which was commonly caught. Fishing pressure has declined significantly and although pressure is ongoing, the species is now assessed as at low risk in the SESSF. It also caught in the Queensland East Coast Trawl Fishery (ECTF) and the New South Wales Ocean Trawl Fishery, and it is assessed as at low risk from the ECTF, though fishing mortality is uncertain. The species is released when caught although though post-release mortality for trawl caught stingarees is generally high and stingarees typically abort their embryos when captured. It may receive some refuge in state and Commonwealth marine parks. Given its extensive range overlap with fisheries and likely significant declines, ongoing fishing pressure, low productivity and post-release survival, it is suspected that the population has undergone a reduction, and thus, it is assessed as Vulnerable (IUCN) (Kyne et al. 2021) and Depleting (SAFS).



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Distribution

The Greenback Stingaree is endemic to subtropical to temperate waters in southeastern Australia (Last et al. 2016). It occurs in a wide range from Stradbroke Island (Queensland) to Portland (Victoria) (Last and Stevens 2009).

Stock structure and status

The population trend is suspected to have declined in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF) due to historic and ongoing fishing pressure (Graham et al. 2001, Kyne et al. 2021).

Fisheries

The Greenback Stingaree is an incidental catch of trawl and seine fisheries. It is caught in the SESSF with an estimated annual catch of 455 t between 2000–2006 which was the highest catch of any ray during that time (Walker and Gason 2007). From 2000–2006, the species standardised catch-per-unit effort in the SESSF indicated a significant decline of 33% though the decline was probably partly due to shifting effort (Walker and Gason 2007). Further, there was a decline of 66% in mean catch rates of stingarees in the SESSF over 20 years from 1977–1997, including this species which was commonly caught (Graham et al. 2001). From 2003–2019, unstandardized catches of this species in the SESSF were estimated to total 992 t with fluctuations but no trend (Daley and Gray 2020). The species has likely undergone a population decline due to the historically high levels of fishing pressure, and although pressure has since declined significantly in the SESSF since 2000, it is still ongoing. The species is assessed as at low risk in both the Commonwealth Trawl and Danish Seine Sectors (Sporcic et al. 2021a, b). It is caught in the Queensland East Coast Trawl Fishery (ECTF) and assessed as at low risk from the ECTF although when uncertainty around fishing mortality was included it moved to precautionary medium risk (Campbell et al. 2018). In New South Wales, it is caught in the Ocean Trawl Fishery (OTF) with the species noted in 6% of observed shots over two years (2017/18–2018/19) (DPI 2004, Johnson and Barnes 2023). Since the early 1990s, effort in the OTF has declined markedly by 80% (Johnson and Barnes 2023). Catch in all fisheries 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). Fishing pressure is limited in northern New South Wales and in Bass Strait and the state and Commonwealth Marine Parks networks may provide some refuge for the species; it is estimated 13% of its range is within marine parks and closed fishing areas (Daley and Gray 2020, Parks Australia 2023). The species vulnerability to fishing and climate change in southern waters was assessed as low (Walker et al. 2021).

Habitat and biology

The Greenback Stingaree is demersal on the continental shelf and slope at depths of 20–330 m though mainly at 80–180 m (Last and Stevens 2009, Last et al. 2016). Maximum size is 51 cm total length (TL), males mature at approximately 28 cm TL and females at 26–31 cm TL, and litter size is 1–3 pups (Trinnie et al. 2015, Last et al. 2016). It has the lowest biological productivity of the southeast Australian stingarees (Trinnie et al. 2015).

Longevity and maximum size	Longevity: unknown Max size: 51 cm TL
Age and/or size at maturity (50%)	Males: ~28 cm TL Females: 20 years, 82 cm TL

CAAB Code: 37 038007

Link to IUCN Page: <https://www.iucnredlist.org/species/60105/68650230>

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

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