

## Yellowback Stingaree, *Urolophus sufflavus*

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 Yellowback Stingaree is a small species endemic to subtropical and temperate continental shelf and slope waters of Australia's east 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 45% in mean catch rates of stingarees, including this species, occurred in the SESSF off Sydney over 20 years to 1997. From 2010–2019, there was an inferred rise-peak-decline catch trend of this species in the SESSF.

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).



### Distribution

The Yellowback Stingaree is endemic to subtropical to temperate waters in eastern Australia (Last et al. 2016). It occurs in a relatively restricted range from Stradbroke Island (Queensland) to Green Cape (New South Wales) (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, Daley and Gray 2020, Kyne et al. 2021).

### Fisheries

The Yellowback Stingaree is an incidental catch of trawl and seine fisheries. It is caught in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF) with an estimated annual catch of 4.8 tonnes between 2000–2006 (Walker and Gason 2007). There was a decline of 45% in mean catch rates of stingarees in the SESSF off Sydney over 20 years from 1977–1997 off Sydney where the Yellowback Stingaree occurred in some of the survey catches (Graham et al. 2001). A rise-peak-decline catch trend was estimated for the species in the SESSF in later years, that is, during 2010–2019, based on observer data, though these catch estimates were unstandardized; total estimated catches were 258 t from 2003–2019 (Daley and Gray 2020). Thus, the species has likely undergone a population decline due to the historically high levels of fishing pressure. Fishing pressure has since declined significantly in the SESSF but is still ongoing, and the Yellowback Stingaree is assessed as at low risk in both the Commonwealth Trawl and Danish Seine Sectors (Sporcic et al. 2021a, b). The species is a minor catch of the deepwater eastern king prawn sector of the Queensland East Coast Trawl Fishery (ECTF) and although bycatch reduction devices (BRDs) have been mandatory since 2002, their effectiveness is limited at excluding small rays such as this species (Courtney et al. 2007). The species was 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 was frequently caught in the Ocean Trawl Fishery (OTF) in the early 2000s, although recent observed catches did not note this in the species-specific catches and reported only 0.7 kg of Stingarees (Urolophidae) undifferentiated in observed shots over two years (2017/18–2018/19) (DPI 2004, Johnson and Barnes 2023). In addition, since the early 1990s, effort in the OTF has declined markedly by 80% (Johnson and Barnes 2023). Catch in all fisheries was 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). The state and Commonwealth Marine Parks networks may provide some refuge for the species (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 Yellowback Stingaree is demersal on the continental shelf and slope at depths of 45–320 m but mostly at 100–160 m (Last and Stevens 2009). Maximum size is approximately 42 cm total length (TL) and males mature at approximately 23 cm TL (Last et al. 2016). Litter size is 1–2 pups (Kyne et al. 2016). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: ~42 cm TL
Age and/or size at maturity (50%)	Males: ~23 cm TL Females: unknown

**CAAB Code:** 37 038005

**Link to IUCN Page:** <https://www.iucnredlist.org/species/60104/68650134>

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

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