

Southern Fiddler Ray, *Trygonorrhina dumerilii*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern (Endemic to Australia)	IUCN Red List Global Assessment	Least Concern
Global Assessors	Huveneers, C. & Reardon, M.B.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Common, stable catches, and mostly released but high post-release survival, and refuge in unfished and lightly fished areas.		

Summary

The Southern Fiddler Ray is a medium-sized common ray endemic to temperate continental shelf waters of southern Australia. It is caught incidentally in trawl, gillnet, and demersal longline fisheries and is mostly released with suspected high post-release survival. It is taken in the Great Australian Bight Trawl Sector of Southern and Eastern Scalefish and Shark Fishery with catches stable, and is at low risk from the fishery. It is also taken in South Australian prawn fisheries and is considered at medium risk from the Spencer Gulf Prawn Fishery, likely due to its relatively low productivity. It is a minor incidental catch of Western Australian fisheries. The species has refuge in unfished and lightly fished areas and its vulnerability was assessed as low for fishing and climate change. Therefore, the Southern Fiddler Ray is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



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Distribution

The Southern Fiddler Ray is endemic to temperate waters of southern Australia (Last et al. 2016). It occurs in a wide range from eastern Bass Strait to Lancelin (Western Australia) (Last and Stevens 2009).

Stock structure and status

There is currently no information on population size, structure, or trend for the species. However, it is common near the coast across most of its range (Last and Stevens 2009).

Fisheries

The Southern Fiddler Ray is incidentally caught in trawl, gillnet, and longline fisheries. It is caught in the Great Australian Bight Trawl (GABT) Sector of the Southern and Eastern Scalefish and Shark Fishery with an estimated average annual catch of 11.5 t between 2000–2006 of which approximately 26% of was retained for its meat and the remainder released with suspected high post-release survival

(Thomas and Chick 2007, Walker and Gason 2007). However, trawl capture can affect reproductive potential and neonate fitness (Guida et al. 2017). The catches were stable over this period and it is assessed as at low risk from the fishery (Walker and Gason 2007, Sporcic et al. 2021). In South Australia, the species is caught in the Spencer Gulf (SG) and Gulf St Vincent Prawn (GVP) Trawl fisheries and is assessed as at medium risk from the SG likely due to its relatively low productivity, and low risk from the GVP (PIRSA 2014, 2016; Huveneers and Reardon 2015). The species is a minor incidental catch of Western Australian trawl, demersal gillnet, and demersal longline fisheries and is most susceptible to trawling (Jones et al. 2010, Braccini et al. 2021, Braccini and Murua 2022). Unfished or lightly fished areas across its range provide refuge for the species (Kyne et al. 2021). The species vulnerability was assessed as low for both fishing and climate change (Walker et al. 2021).

Habitat and biology

The Southern Fiddler Ray is demersal on the continental shelf at depths of 5–205 m and mostly inhabits soft substrate habitats and seagrass beds (Last et al. 2016). Maximum size is 146 cm total length (TL) and maximum age estimated as 15 years (Izzo and Gillanders 2008, Last et al. 2016). Males mature at approximately 7 years and 68 cm TL and females at approximately 9 years and 89 cm TL (Izzo and Gillanders 2008). Litter size is 2-5 pups (Last and Stevens 2009).

Longevity and maximum size	Longevity: estimated 15 years Max size: 146 cm TL
Age and/or size at maturity (50%)	Males: ~7 years, 68 cm TL Females: ~9 years, 89 cm TL

CAAB Code: 37 027011

Link to IUCN Page: <https://www.iucnredlist.org/species/43270317/43270336>

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

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