

Eastern Fiddler Ray, *Trygonorrhina fasciata*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Endemic to Australia	IUCN Red List Global Assessment	Least Concern
Assessors	Huveneers, C.		
Report Card Remarks	Bycatch of trawling; mostly released alive with likely high post-release survival and refuge areas		

Summary

The Eastern Fiddler Ray is a relatively common shelf species of eastern Australia. It is taken as bycatch in commercial trawls and is usually discarded alive with a likely high post-release survival rate. Catch data from the Southern and Eastern Scalefish and Shark Fishery indicated a stable population from 1996-2006 and since then better species-specific reporting should provide improved catch data for future analyses. The Eastern Fiddler Ray has some refuge from fishing in shallow areas and was found to be common in those areas. Therefore, the species is assessed as Least Concern (IUCN) and Sustainable (SAFS).



Distribution

The Eastern Fiddler Ray occurs in eastern Australia from southern Queensland to at least Twofold Bay (New South Wales). Records further south and west may be misidentified Southern Fiddler Ray (*T. dumerilii*) and need to be verified (Last and Stevens 2009).

Stock structure and status

The Eastern Fiddler Ray is a relatively common species (Last and Stevens 2009). Trend analysis of the Southern and Eastern Scalefish and Shark Fishery (SESSF) CPUE data remained stable from 1996-2006 (Walker and Gason 2007) suggesting the population has been relatively healthy.

Fisheries

The Eastern Fiddler Ray is taken as bycatch of mainly trawl fishing and is usually discarded alive with likely high post-release survival (Thomas and Chick 2007). In Queensland, it only seems to have been caught between 1990-1997 (Bensley et al. 2009). In New South Wales (NSW), the Eastern Fiddler Ray was regularly caught in inshore trawls along the southern half of the state with commercial landings of 'shovelnose ray' and 'fiddler ray' groups throughout NSW relatively stable since the mid-1990s. Species-specific reporting was introduced in NSW in 2009 which indicated that the Eastern Fiddler Ray

represents about 20% of the shovelnose/fiddler ray catches (Rowling et al. 2010). In the SESSF, mean annual catch of Eastern Fiddler Ray (reported as T. sp A) during 2000–2006 was estimated as 130 kg from the South East Trawl Fishery Danish seine, with all specimens discarded (Walker and Gason 2007). Untrawled or lightly trawled shallow water areas likely provide refuge for the species.

Habitat and biology

The Eastern Fiddler Ray occurs from nearshore areas to depths of 100 m and inhabits shallow soft substrate habitats and seagrass meadows (Last and Stevens 2009, Rowling et al. 2010). Maximum size is reported as 120 cm total length (TL), although the largest observed size is 92 cm TL (Last and Stevens 2009). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: reported to 120 cm TL
Age and/or size at maturity (50%)	Unknown

Link to IUCN Page: <http://www.iucnredlist.org/details/41866/0>

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

References

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- Rowling, K., Hegarty, A. and Ives, M. 2010. Status of Fisheries Resources NSW 2008/09. Industry and Investment NSW, Cronulla.
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- Walker, T.I. and Gason, A.S. 2007. Shark and other chondrichthyan byproduct and bycatch estimation in the Southern and Eastern Scalefish and Shark Fishery. Final report to Fisheries and Research Development Corporation Project No. 2001/007. July 2007. vi + 182 pp. Primary Industries Research Victoria, Queenscliff, Victoria, Australia.