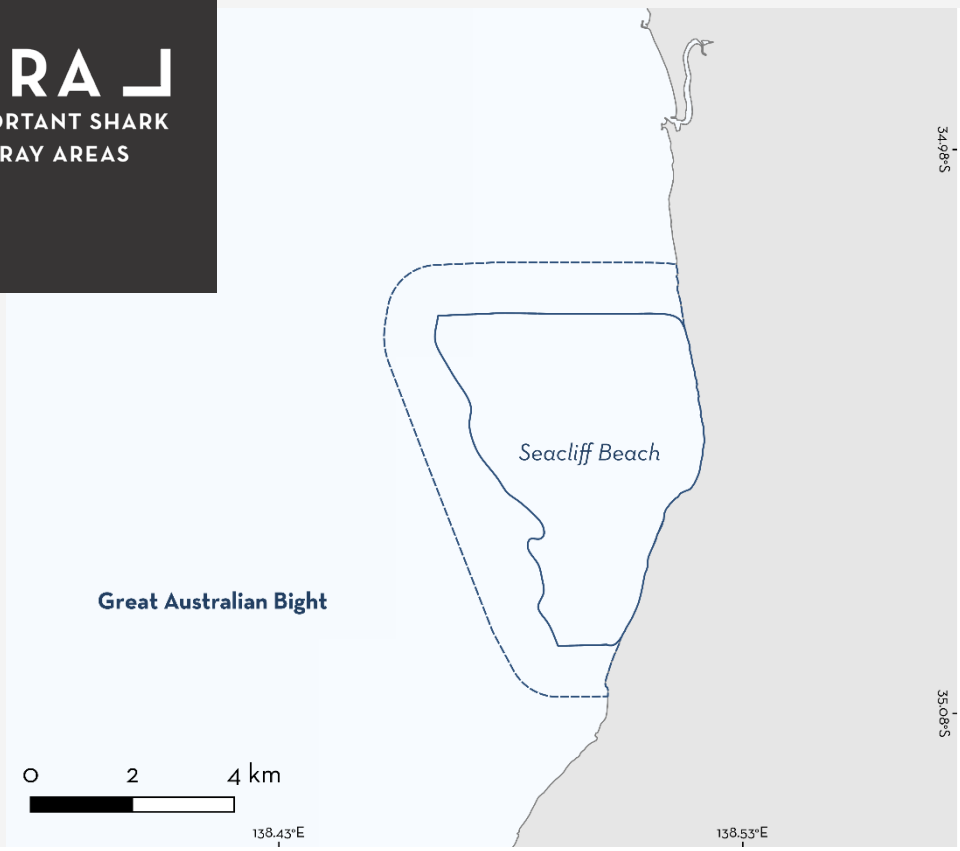
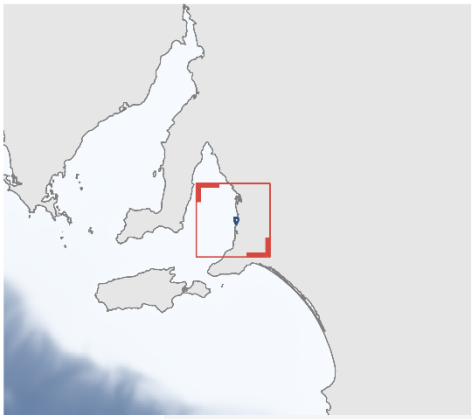
ISRA
IMPORTANT SHARK AND RAY AREAS





Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

SEACLIFF BEACH ISRA

Australia and Southeast Indian Ocean Region

AUSTRALIA

0–15 metres

22.43 km²

SUMMARY

Seacliff Beach is located in South Australia, Australia. It sits on the central-eastern coast of the Gulf St Vincent and is a shallow, flat environment comprised mostly of sand, seagrass, and macroalgae, with sandflats that become exposed at low tides. Within this area there are: **undefined aggregations** (Southern Eagle Ray *Myliobatis tenuicaudatus*).

CRITERIA

Sub-criterion C5 – Undefined Aggregations

DESCRIPTION OF HABITAT

Seacliff Beach is located on the central-eastern coastline of the Gulf St Vincent, South Australia, Australia. The area extends from Brighton Jetty in the north to Hallet Cove in the south and is situated ~15 km from Adelaide city. The area is a shallow, flat environment comprised mostly of sand, seagrass, and macroalgae, with sandflats that become exposed at low tides. The sand and seagrass habitats transition to rocky reef and unconsolidated substrates at the southern end of Seacliff Beach. Marine flora includes various species of seagrass (e.g., *Posidonia* spp., *Amphibolis* spp.), green algae, red algae, and brown algae (e.g., *Ecklonia radiata, Sargassum paradoxum*). Invertebrates such as limpets, chitons, snails, mussels, oysters, and abalone are also common.

The area is influenced by the dynamics of the Gulf St Vincent which is a relatively shallow (maximum depth ~40 m) inverse estuary system due to evaporative processes, which causes the northern areas of the gulf to have higher salinity despite being further from the open ocean (Bye 1976). The gulf is also blocked from the open ocean by Kangaroo Island, which leaves only two passages connecting the gulf and the Indian Ocean, limiting energy and water exchange (Tanner 2008).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 15 m based on the bathymetry of the area.

ISRA CRITERIA

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Seacliff Beach is an important area for an undefined aggregation of one ray species.

Southern Eagle Rays are regularly observed by beachgoers in the area according to citizen science reports (iNaturalist 2025; C Huveneers pers. obs. 2025). Fevers of Southern Eagle Rays mainly composed of 4–5 individuals, but up to 10 individuals, have been recorded by beachgoers along the Seacliff Beach shoreline in 2024 and 2025 (January, February, and April) (iNaturalist 2025; C Huveneers pers. obs. 2025). The frequency of their occurrence has not been quantified. From all Southern Eagle Ray observations reported on iNaturalist across the Gulf St Vincent (n = 171), there are only four records of aggregations in the gulf with three coming from Seacliff Beach (the other one being Christies Beach; iNaturalist 2025).

The presence of these aggregations is supported by evidence coming from acoustic telemetry (CN Roberts et al. unpubl. data 2025). Between March 2022 and February 2023, Southern Eagle Rays (n = 13) were acoustically monitored by over 50 receivers deployed along a 90 km stretch of the eastern Gulf St Vincent coastline. In this period, 13 individuals (12 females; 1 male) were caught and tagged at Seacliff Beach, two of which were captured twice. Individuals were >80 cm disc width (DW) indicating that all were mature as the reported size-at-maturity for the species is >80–100 cm DW for females and >65–69 cm DW for males (Last et al. 2016). Southern Eagle Rays were detected off Seacliff Beach more than at any other locations across the entire receiver array (CN Roberts et al. unpubl. data 2025). Most Southern Eagle Rays (n = 11; 84.6%) were detected for the entire monitoring period, with residency indices ranging between 0.06–0.99 (mean ± standard deviation = 0.70 ± 0.35), and six individuals spending over 95% of the monitoring period in Seacliff Beach (CN Roberts et al. unpubl. data 2025). Almost daily, groups of three or more Southern Eagle Rays (up to nine individuals) were detected regularly on the same receiver in a single hour (CN Roberts et al. unpubl. data 2025). Seacliff Beach is a shallow seagrass environment that supports a large diversity and abundance of prey, which could provide large, reproductively active females with enough nutrients and warm water

to support gestation and offspring survival (Speed et al. 2012). Additional information is required to understand the nature and function of these aggregations.

Acknowledgments

Charlie Huveneers (Flinders University), Lauren Meyer (Flinders University), Chloe N Roberts (Flinders University), and Emiliano García-Rodríguez (IUCN SSC Shark Specialist Group – ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2025 ISRA Region 08 – Australia and Southeast Indian Ocean workshop for their contributions to this process.

We acknowledge the Traditional Owners of Country throughout Australia and recognise the continuing connection to land, waters, and culture. We pay our respects to Elders past, present, and emerging.

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QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
RAYS												
Myliobatis tenuicaudatus	Southern Eagle Ray	LC	0–422							X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Heterodontus portusjacksoni	Port Jackson Shark	LC
RAYS		
Trygonorrhina dumerilii	Southern Fiddler Ray	LC

IUCN Red List of Threatened Species Categories are available by searching species names at www.iucnredlist.org Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.

SUPPORTING INFORMATION

There are additional indications that this is an important area for undefined aggregations of one ray species.

An ongoing study (started in October 2024) assessing Southern Fiddler Ray movements and residency along the Adelaide metropolitan coast revealed the presence of aggregations of this species in the area. Up to nine Southern Fiddler Rays were caught in a ~500 m, 50-hook demersal longline with a 2-hr soak time in October 2024 and January 2025 suggesting the presence of aggregations of Southern Fiddler Rays (CN Roberts et al. unpubl. data 2025). Across the Adelaide coast, 58 Southern Fiddler Rays (16 at Seacliff, 20 at Christies Beach [~15 km south], and 22 in Port River [40 km north]) were tagged with acoustic transmitters. Acoustic monitoring showed that 36% of the 16 individuals tagged at Seacliff Beach spent over 70% of the monitoring period in the area and that the frequency of detections at Seacliff Beach was high (CN Roberts et al. unpubl. data 2025). Longer time-at-liberty is required to assess movement and residency of this species along the metropolitan coastline but preliminary results showed the detection of multiple individuals on the same receiver in a short period confirming the presence of aggregations. Additional information is required to confirm the importance of the area for this species.

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