

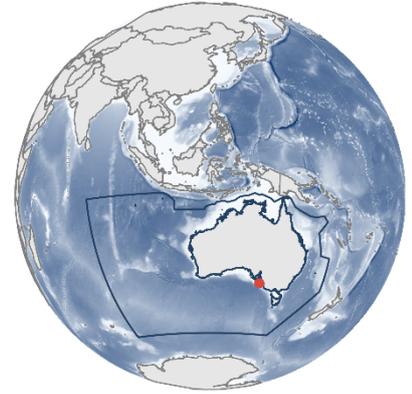


0 1.5 3 km

138.26°E

138.32°E

Great Australian Bight



35.74°S

35.79°S



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

THE PAGES ISRA

Australia and Southeast Indian Ocean Region

SUMMARY

The Pages is located in South Australia, Australia. It is situated on the eastern side of Backstairs Passage which separates Kangaroo Island from the Fleurieu Peninsula. The area encompasses the North and South Pages Islands, and two islets south of South Page Island. The habitat is characterised by seagrass patches, sandflats, shallow intertidal reef flats, and deep adjacent reefs. It is influenced by seasonal upwellings of cold nutrient-rich water that occur in the area during the austral summer. The area overlaps with two protected areas. Within this area there are: **threatened species** and **undefined aggregations** (White Shark *Carcharodon carcharias*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C5 - Undefined Aggregations

— AUSTRALIA —

— 0-30 metres —

— 15.01 km² —





DESCRIPTION OF HABITAT

The Pages is located in South Australia, Australia. It is situated on the eastern side of Backstairs Passage which separates Kangaroo Island from the Fleurieu Peninsula. The area encompasses the North and South Pages Islands, and two islets south of South Page Island. The two island groups are separated by ~2 km. The habitat in the area is characterised by seagrass patches, sandflats, shallow intertidal reef flats, and deep adjacent reefs.

The oceanography and ecology of the region are both influenced by the Leeuwin and Flinders currents, which flow through the Great Australian Bight. The warm Leeuwin Current flows from the west during the winter, while the Flinders Current brings cooler water from the southeast and enhances upwelling also during the winter (Richardson et al. 2019). Furthermore, seasonal upwellings of cold nutrient-rich water occur in the area during the summer (Richardson et al. 2020).

The area overlaps with Encounter Marine Park and The Pages Conservation Park (NPWS SA 2025).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 30 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Vulnerable White Shark (Rigby et al. 2022).

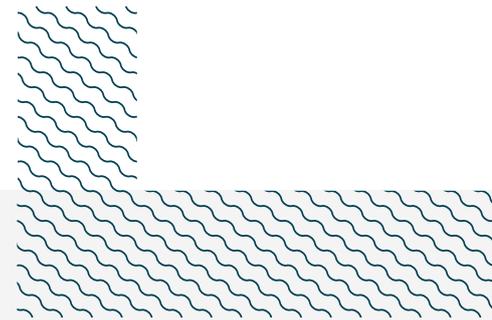
SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

The Pages is an important area for undefined aggregations of one shark species.

Annual monitoring with acoustic telemetry between 2019-2025 and records from baited remote underwater video station (BRUVS) surveys have revealed the regular presence of White Shark aggregations in the area (C Huveneers et al. unpubl. data 2025; Department for Environment and Water unpubl. data 2025). Twenty-eight White Sharks tagged with acoustic transmitters have been detected in the area and while some of them may be present year-round, most reside in the area over several weeks or months regularly moving between the North and South Pages (C Huveneers et al. unpubl. data 2025). Residency at The Pages is similar to that at the Neptune Islands, a known aggregation site for the species (Bruce & Bradford 2015; Nazimi et al. 2018; C Huveneers et al. unpubl. data 2025). Within this area, up to nine White Sharks were sighted in one day from the boat during cage-diving operations and up to eight individuals were detected on a single acoustic receiver (C Huveneers et al. unpubl. data 2025). More than three White Sharks were detected on the same receiver on 83 different days indicating the presence of aggregations. These aggregations were primarily recorded between August-February.

Seasonal aggregations of White Sharks in coastal and offshore islands have been reported globally (e.g., Seal Island in South Africa, Titi Islands and Ruapuke in New Zealand, Guadalupe Island in Mexico, central California in the United States of America; Jorgensen et al. 2010; Duffy et al. 2012; Fallows et al. 2012; Nasby-Lucas & Domeier 2012; Francis et al. 2015; Skubel et al. 2018). The Pages is one of few areas in South Australia where White Sharks aggregate (e.g., Neptune Islands) (Bruce & Bradford 2015; Robbins et al. 2015). The Pages hosts one of the major breeding colonies of Australian

Sea Lion *Neophoca cinerea* in South Australia (Shaughnessy et al. 2007, 2013), a known prey of White Sharks in this region (Shaughnessy et al. 2007). In addition, abundances of other known prey of this species (e.g., Silver Trevally *Pseudocaranx georgianus*, Yellowtail Kingfish *Seriola lalandi*, Gummy Shark *Mustelus antarcticus*, Southern Eagle Ray *Myliobatis tenuicaudatus*) are also high in the area (Grainger et al. 2020; Whitmarsh et al. 2025) suggesting that feeding may be a driver of the presence of White Shark aggregations. Additional information is required to understand the nature and function of these aggregations.



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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.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

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QUALIFYING SPECIES

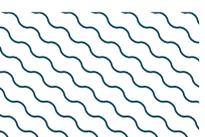
Scientific Name	Common Name	IUCN Red List Category/ EPBC Act	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met							
				A	B	C1	C2	C3	C4	C5	D1
SHARKS											
<i>Carcharodon carcharias</i>	White Shark	VU/VU	0-1,277	X						X	

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Mustelus antarcticus</i>	Gummy Shark	LC
RAYS		
<i>Bathytoshia brevicaudata</i>	Smooth Stingray	LC
<i>Myliobatis tenuicaudatus</i>	Southern Eagle 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.

Australian Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) categories are available at: <https://www.dcceew.gov.au/environment/epbc/our-role/approved-lists>. Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; CD, Conservation Dependent.





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