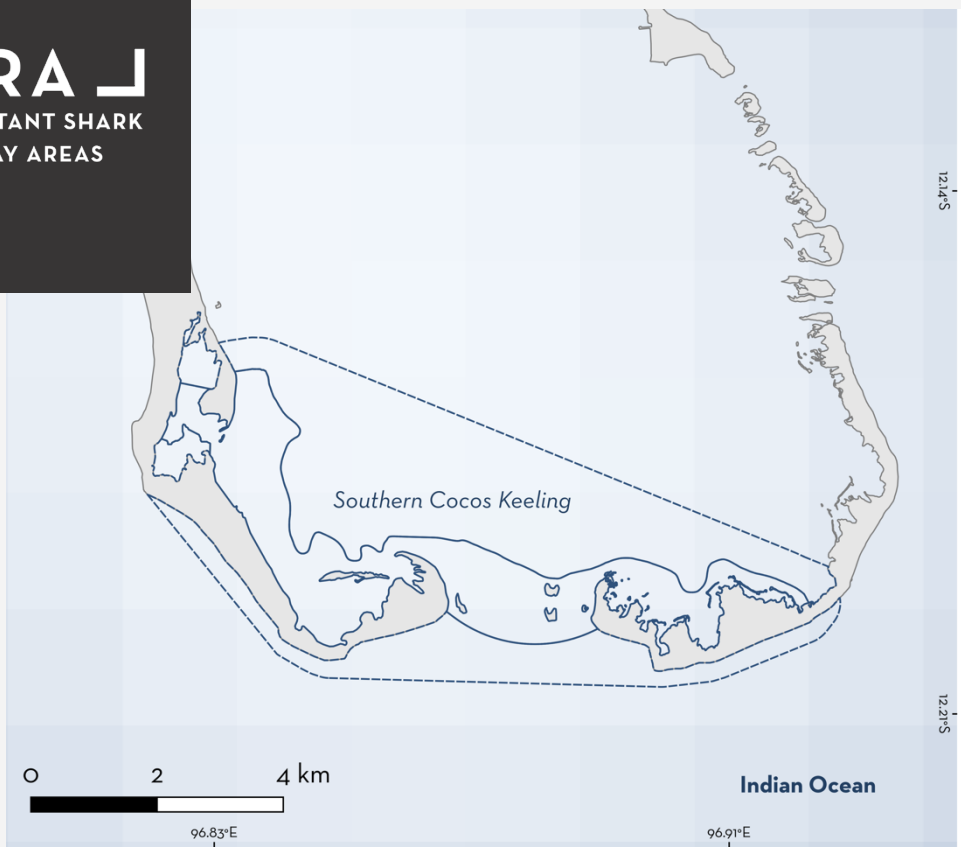
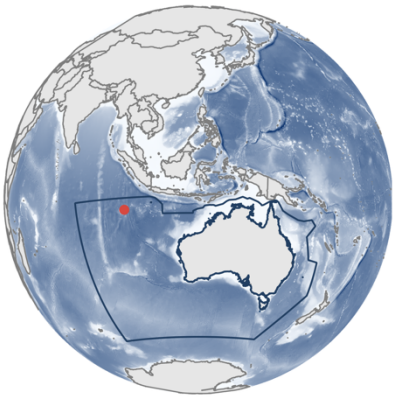
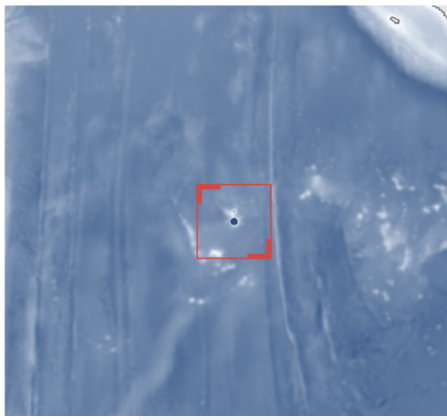
ISRA
IMPORTANT SHARK AND RAY AREAS







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

SOUTHERN COCOS KEELING ISRA

Australia and Southeast Indian Ocean Region

AUSTRALIA

0–4 metres

10.51 km²

SUMMARY

Southern Cocos Keeling is located in the Cocos (Keeling) Islands, a remote Australian territory in the Eastern Indian Ocean. The habitat is predominantly intertidal, consisting of a shallow lagoon with sandy substrates, seagrass beds on inshore reef flats, and mangrove areas in protected embayments within the lagoon. The surrounding waters of the atoll reach depths of 5,000–6,000 m, creating an isolation barrier. The area overlaps with Cocos (Keeling) Islands Marine Park. Within this area there are: **threatened species** and **reproductive areas** (Blacktip Reef Shark *Carcharhinus melanopterus*).

CRITERIA

Criterion A – Vulnerability; Sub-criterion C1 – Reproductive Areas

DESCRIPTION OF HABITAT

Southern Cocos Keeling is located in the Cocos (Keeling) Islands, a remote Australian territory in the Eastern Indian Ocean. This area is delineated around several small islands in the southern section of the southern atoll, including Pulu Kambing, Pulu Maraya, Pulu Belan, Pulu Belan Madar, Pulu Kelapa Satu, South Island, and West Island (the only inhabited island). It lies approximately 2,800 km northwest of Perth, Australia, and 1,200 km southwest of Jakarta, Indonesia. The habitat is predominantly intertidal, consisting of a shallow lagoon with sandy substrates, seagrass beds on inshore reef flats, and mangrove areas in protected embayments within the lagoon (Evans et al. 2016). The surrounding waters of the atoll reach depths of 5,000–6,000 m, creating an isolation barrier (Parks Australia 2025). The Cocos (Keeling) Islands represent the westernmost extension of the Western Pacific marine biogeographic region and have been reported to host marine species typically affiliated with both the Indian and Pacific oceans (Hobbs & Allen 2014).

Swell predominantly comes from the southeast, associated with the trade winds. There is usually a westward-flowing equatorial current; however, in November–December, when the Intertropical Convergence Zone moves south of the equator, an eastward-flowing equatorial counter current may develop. Tides are mixed, mainly semidiurnal, with large inequalities in range and timing between consecutive tides. The maximum tidal range is 1.2 m (Woodroffe & Falkland 2004).

The area overlaps with Cocos (Keeling) Islands Marine Park (Parks Australia 2025).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 4 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 Blacktip Reef Shark (Simpfendorfer et al. 2020).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Southern Cocos Keeling is an important reproductive area for one shark species.

Between 2000–2019, small Blacktip Reef Sharks (size estimated visually at <60 cm total length; TL) were regularly and predictably observed during high tide year-round within the area (K Wilshaw pers. obs. 2000–2019). Photographic records show aggregations of up to nine small Blacktip Reef Sharks (visually estimated ~30–50 cm TL). Blacktip Reef Shark size-at-birth is 30–52 cm TL (Ebert et al. 2021), and young-of-the-year (YOY) are up to 70 cm TL based on growth curves (Chin 2013; Chin et al. 2013) indicating that these are neonates or YOY. Additionally, reports from social media describe this area as the site in the southern atoll of Cocos (Keeling) Islands where neonate Blacktip Reef Sharks can be observed. The area has been used as a tourism spot, offering guaranteed excursions to observe neonates and YOY Blacktip Reef Sharks. The habitat in this area is consistent with the ecological preference of young Blacktip Reef Sharks which inhabit shallow nearshore environments encompassing mangroves, seagrass beds, and mud and sand flats (George et al. 2019).

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Karen Willshaw (Cocos Dive) and Vanessa Bettcher Brito (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
SHARKS												
Carcharhinus melanopterus	Blacktip Reef Shark	VU	0–100	X		X						

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.

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