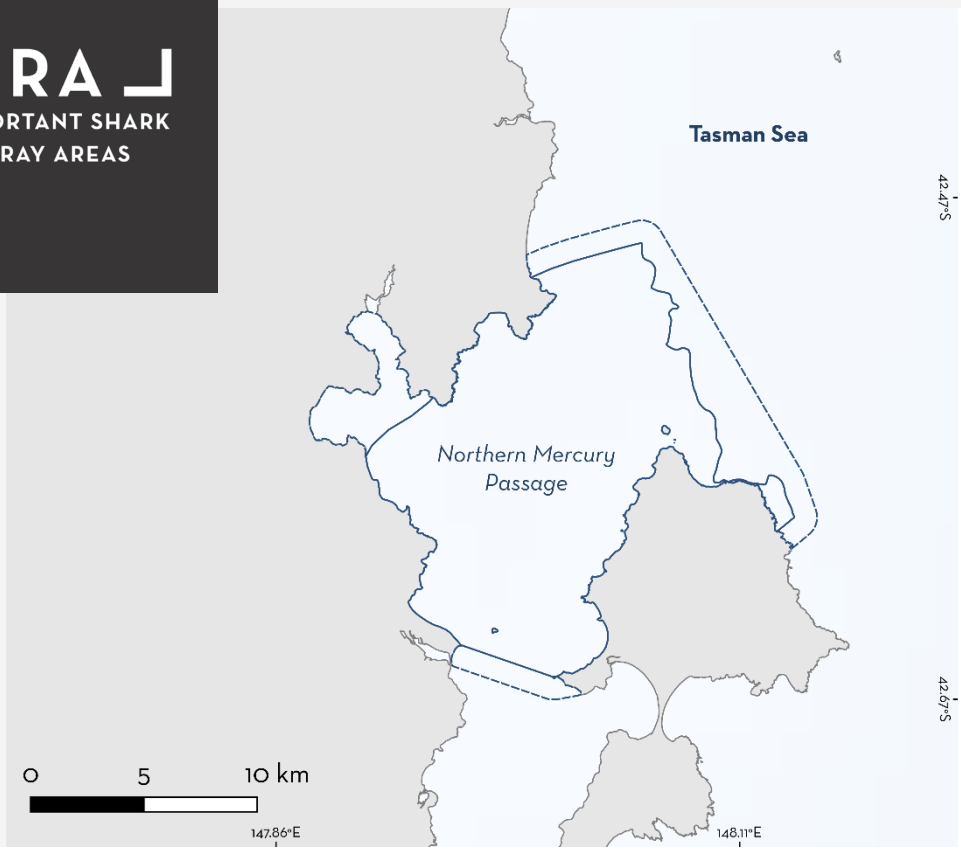
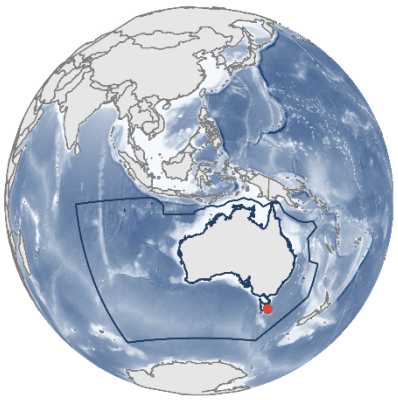
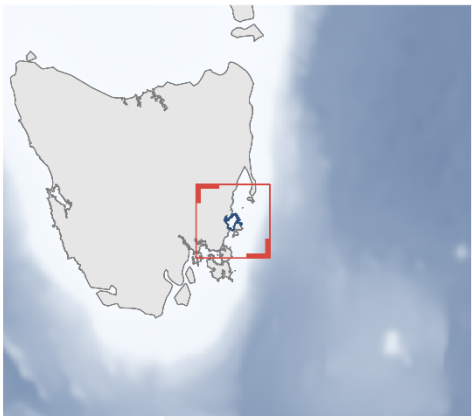
ISRA
IMPORTANT SHARK AND RAY AREAS







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

NORTHERN MERCURY PASSAGE ISRA

Australia and Southeast Indian Ocean Region

AUSTRALIA

0–40 metres

168.5 km²

SUMMARY

Northern Mercury Passage is located on the east coast of Tasmania, Australia. The area encompasses the channel which separates mainland Tasmania from Maria Island. It is characterised by sandy substrates and fringing reefs. It is influenced by the East Australian Current and freshwater runoff. The area overlaps with a Key Biodiversity Area, a marine reserve, a national park, and a Shark Refuge Area. Within this area there are: **range-restricted species** (e.g., Rusty Carpetshark *Parascyllium ferrugineum*).

CRITERIA

Criterion B – Range Restricted

DESCRIPTION OF HABITAT

Northern Mercury Passage is located on the east coast of Tasmania, Australia. The area encompasses the channel which separates mainland Tasmania from Maria Island. The northern part of the area includes Okehampton Bay and Cape Bougainville Peninsula on mainland Tasmania, east to Waterfall Bay on Maria Island. The southern part of the area extends south of Bloodstone Beach on Maria Island and Jack's Beach on mainland Tasmania. The area fully encompasses Lachlan Island. The habitat is characterised by sandy substrates and fringing reefs (DPIPWE 2010).

The area is influenced by the East Australian Current (EAC) which transports warm water during the austral summer months (EPA Tasmania 2021). The temperature varies between ~8–24°C (DPIPWE 2010). Locations within this area that are near Prosser River are influenced by catchment runoff following heavy rainfall, which results in reduced salinity levels (EPA Tasmania 2021).

The area overlaps with Maria Island Key Biodiversity Area (KBA 2025), Maria Island Marine Reserve, Maria Island National Park (TPWS 2025), and the Mercury Passage Shark Refuge Area (Tasmanian Government 2025).

This Important Shark and Ray Area is benthic and is delineated from inshore and surface waters (0 m) to 40 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION B – RANGE RESTRICTED

This area holds the regular presence of Rusty Carpetshark and Banded Stingaree as resident range-restricted species.

Rusty Carpetsharks are regularly reported in this area and the species has been through both Natural Values Atlas observations (n = 4 individuals; Natural Values Atlas 2025), which collates observations from various sources including citizen scientists, and Reef Life Survey (RLS) (n = 33 individuals; Edgar & Stuart-Smith 2014; Edgar et al. 2020; RLS et al. 2025; A Cooper pers. comm. 2025). Historical sightings (2000–2009; n = 13) were recorded in 2000 (n = 1), 2004 (n = 1), 2005 (n = 9), 2008 (n = 1), and 2009 (n = 1). Contemporary records (2010–2025; n = 24) were observed in 2010 (n = 2), 2011 (n = 1), 2012 (n = 1), 2013 (n = 4), 2014 (n = 1), 2016 (n = 1), 2018 (n = 1), 2021 (n = 2), 2023 (n = 1), 2024 (n = 9), and 2025 (n = 1). Estimated size data were available for more than half of the contemporary observations (62.5%, n = 15). These Rusty Carpetsharks measured between 30–75 cm total length (TL). The size-at-birth of this species is 17 cm TL and the size-at-maturity is 60–75 cm TL (Ebert et al. 2021). Although the citizen science monitoring effort is not standardised across the state, this area has the largest and one of the only known clusters of regular and predictable observations of Rusty Carpetshark.

Banded Stingarees have been recorded in Northern Mercury Passage through both Natural Values Atlas observations (n = 5 individuals; Natural Values Atlas 2025) and RLS which undertook underwater visual census along a 50 m transect line (n = 479 individuals; Edgar & Stuart-Smith 2014; Edgar et al. 2020; RLS et al. 2025; A Cooper pers. comm. 2025). Historical records (1992–2009; n = 263) were reported in 1992 (n = 9), 1993 (n = 49), 1994 (n = 9), 1995 (n = 8), 1996 (n = 6), 1997 (n = 9), 1998 (n = 9), 1999 (n = 10), 2000 (n = 12), 2001 (n = 36), 2002 (n = 4), 2004 (n = 9), 2005 (n = 23), 2006 (n = 29), 2007 (n = 22), 2008 (n = 10), and 2009 (n = 9). Contemporary sightings (2010–2024; n = 221) were recorded in 2010 (n = 44), 2011 (n = 20), 2012 (n = 6), 2013 (n = 10), 2014 (n = 19), 2015 (n = 29), 2016 (n = 20), 2017 (n = 3), 2018 (n = 5), 2019 (n = 3), 2020 (n = 2), 2021 (n = 4), 2022 (n = 10), 2023 (n = 25), and

2024 (n = 21). Estimated size data were available for most contemporary observations (94.6%, n = 209). Banded Stingarees measured between 10–50 cm TL and most were mature individuals (70.8%, n = 148) measuring ≥30 cm TL. Thirty Banded Stingarees were neonate/young-of-the-year (YOY), measuring ≤20 cm TL (Edgar & Stuart-Smith 2014; Edgar et al. 2020; RLS et al. 2025). The size-at-birth of the species is ~15 cm TL and the size-at-maturity is 20–22 cm TL (Last et al. 2016). Banded Stingarees are seasonally present in this area between December–June, with abundance peaking in April (Edgar & Stuart-Smith 2014; Edgar et al. 2020; Natural Values Atlas 2025; RLS et al. 2025). Although the citizen science monitoring effort is not standardised across the state, this area has the largest known number of contemporary observations of the species in Tasmania, highlighting the national importance of this area.

Rusty Catshark and Banded Stingaree are restricted to the Southeast Australian Shelf Large Marine Ecosystem (LME).

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Bailee Woolley (University of Tasmania) and Ryan Charles (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												
Parascyllium ferrugineum	Rusty Carpetshark	LC	5–150		X							
RAYS												
Urolophus cruciatus	Banded Stingaree	LC	0–210		X							

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Isurus oxyrinchus	Shortfin Mako	EN

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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