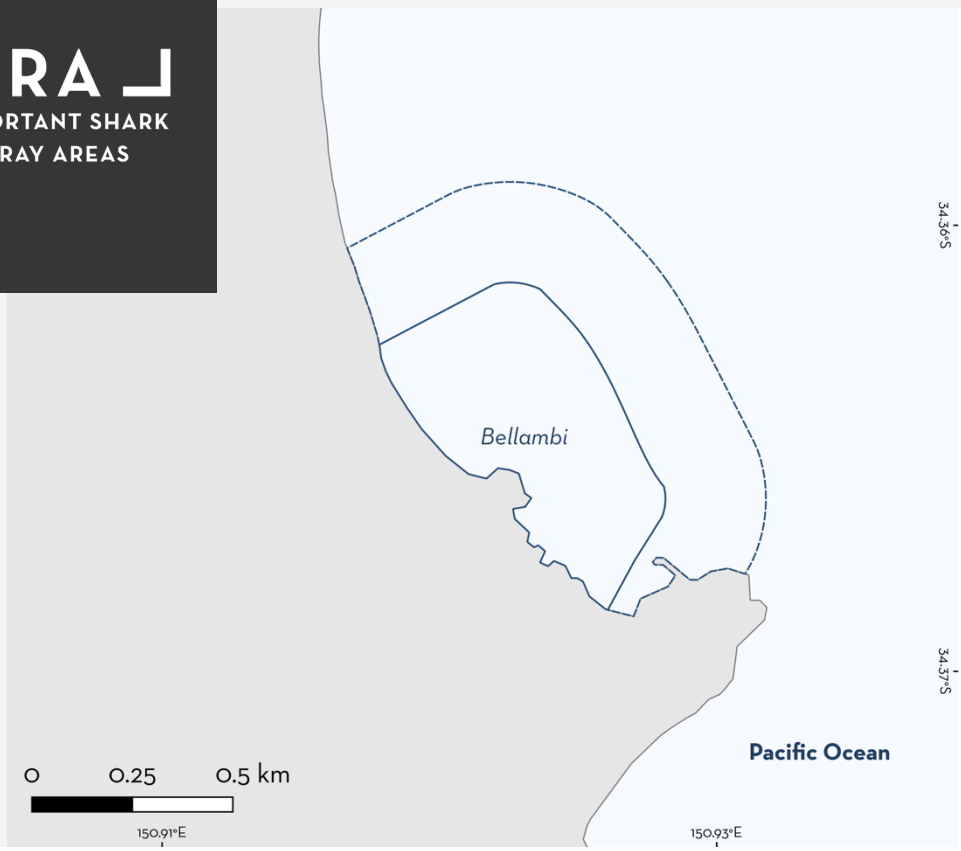
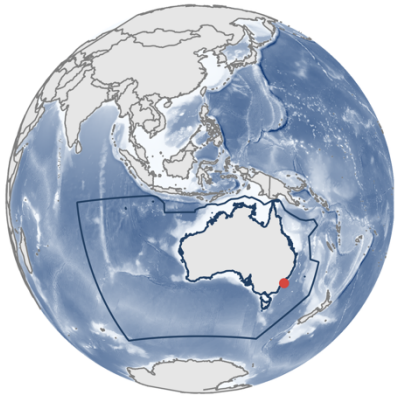
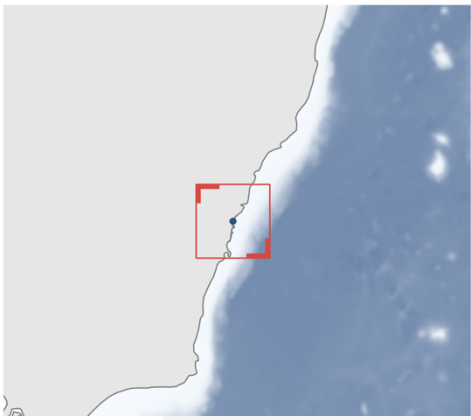
ISRA
IMPORTANT SHARK AND RAY AREAS







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

BELLAMBI ISRA

Australia and Southeast Indian Ocean Region

AUSTRALIA

0–10 metres

0.30 km²

SUMMARY

Bellambi is located on the Illawarra coast of New South Wales, Australia. This shallow area is characterised by rocky outcrops and sandy substrates and is subject to a temperate climate and semidiurnal tidal cycles. Within the area there are: **threatened species** and **undefined aggregations** (Dusky Shark *Carcharhinus obscurus*).

CRITERIA

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

DESCRIPTION OF HABITAT

Bellambi is located on the Illawarra coast of New South Wales, Australia. This shallow area is characterised by rocky outcrops and sandy substrates and is situated adjacent to a boat ramp and man-made rock pool.

The climate in the broader region is temperate and subject to semidiurnal tidal cycles, with sea surface temperatures in the region ranging between 16.4–24.8°C (Sea Temperature 2025). The area is influenced by the East Australian Current, with the flow strongest in the austral summer and resulting in seasonal fluctuations in eddy formation along the coastline (Ridgeway & Hill 2009).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 10 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 Endangered Dusky Shark (Rigby et al. 2019).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

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

Between 2021–2025, drone surveys were conducted regularly in the Bellambi Beach harbour area, including within this area. Surveys ranged between daily to weekly to monthly flights year-round (R Gorkin unpubl. data 2025). Standardised drone transects focused on a dedicated 1 km stretch of reef adjacent to the shoreline in the area (0–50 m from the swash zone). Drone transects typically lasted 15–20 minutes and followed a standardised track across a broader area.

Dusky Sharks were observed in the area annually between April and July, typically either individuals or in groups of <10 which persisted for only a few days. Sharks were identified by experts from the New South Wales Department of Primary Industries and Regional Development (P Butcher pers. comms. 2025). Extended drone surveys were conducted to investigate areas up to 1–2 km north and south of the standardised drone transect, but few sharks were recorded outside the area. During two non-sequential years (2021 and 2025), large aggregations of at times >50 Dusky Sharks were observed in the same area for multiple consecutive days, peaking between April and July. When present, these large aggregations would be observed most days for up to a few months, with 10–50+ Dusky Sharks observed each day, and numbers influenced by weather conditions and water visibility. Whereas outside aggregation times only 1–2 sharks would be observed and less frequently (monthly rather than daily). Drone surveys were conducted most days when aggregations of Dusky Sharks were observed in the area. These aggregations were concentrated within the area in a shallow section of the reef (<3 m depth) in a sheltered section of the coastline. Small and large schools of fish were frequently observed alongside the sharks, and occasional feeding behaviours were noted (e.g., chasing fish, consumption of fish). More information is needed to understand the nature and function of these aggregations.

Acknowledgments

Robert Gorkin (Western Sydney University; In2itiOn Pty Ltd), Joni Pini-Fitzsimmons (Charles Darwin University), and Asia O Armstrong (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.

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

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

Suggested citation

IUCN SSC Shark Specialist Group. 2025. Bellambi ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

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 obscurus	Dusky Shark	EN	0–500	X						X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
Bathytoshia brevicaudata	Smooth Stingray	LC
Myliobatis tenuicaudatus	Southern Eagle Ray	LC
Rhinoptera neglecta	Australian Cownose Ray	DD

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.

REFERENCES

Ridgway K, Hill K. 2009. The East Australian Current. In: Poloczanska, ES, Hobday AJ, Richardson AJ, eds. *A marine climate change impacts and adaptation report card for Australia 2009*. NCCARF Publication, 1–16.

Rigby CL, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM, Marshall A, et al. 2019. *Carcharhinus obscurus. The IUCN Red List of Threatened Species* 2019: e.T3852A2872747. https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T3852A2872747.en

Sea Temperature. 2025. Shellharbour Village Water Temperature. Available at https://www.seatemperature.org/australia-pacific/australia/shellharbour-village.htm Accessed September 2025.