

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 FLORES ISRA

Asia Region

SUMMARY

Southern Flores is located in eastern Indonesia. The area includes Mules Island and several small bays along the coast of Flores. It is characterised by a narrow shelf with terrestrial input from multiple rivers. The area overlaps with the KKPN Laut Sawu Marine National Park. Within the area there are: **threatened species** and **reproductive areas** (Silky Shark *Carcharhinus falciformis*).

CRITERIA

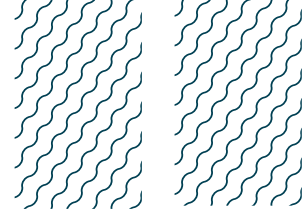
Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas

— —
INDONESIA

— —
0-300 metres

— —
506.9 km²





DESCRIPTION OF HABITAT

Southern Flores is located in eastern Indonesia. It is situated within the Lesser Sunda Islands in the Savu Sea of the Eastern Nusa Tenggara province. The area includes Mules Island and several small bays along the coast of Flores. It is characterised by a narrow shelf receiving freshwater input from multiple rivers flowing to the coast.

The area is influenced by the Indonesian Throughflow, which flows through the Ombai Strait producing seasonal upwellings during southeast monsoons, which, combined with river discharge, creates a high-productivity area year-round (Moore & Marra 2002; Putra & Mustika 2020; Wirasatriya et al. 2021).

The area overlaps with one marine protected area, the KKPN Laut Sawu Marine National Park.

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 300 m based on the depth range of the Qualifying Species in the area.

ISRA CRITERIA

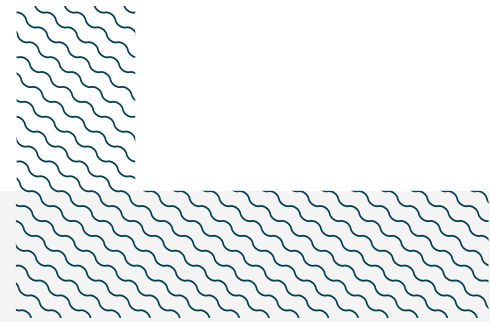
CRITERION A – VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. This is the Vulnerable Silky Shark (Rigby et al. 2021).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Southern Flores is an important reproductive area for one shark species.

Based on weekly monitoring of landings from fisheries operating in the area during the fishing season (August–February) between 2019–2022, Silky Shark (~1,800), including pregnant females, were regularly caught from September to April (BM Simeon unpubl. data 2024). Individuals were caught with benthic and surface longlines (BM Simeon unpubl. data 2024). While the fishery operates in other parts of the Savu Sea, pregnant females (n = 30) were caught only in areas around Mules Island and in the shelf break of Southern Flores. The majority of embryos were near-term (BM Simeon unpubl. data 2024), measuring 42–65 cm total length (TL), which is similar to the known size-at-birth for the species (56–87 cm TL; Ebert et al. 2021), confirming that this a pupping area for the species. Due to the fishing gear selectivity, neonates and young-of-the-year are largely absent from catches. In addition, the individuals sampled only represent a small portion of the total number of pregnant females caught in the area (BM Simeon unpubl. data 2024).



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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												
<i>Carcharhinus falciformis</i>	Silky Shark	VU	0-1,112	X		X						

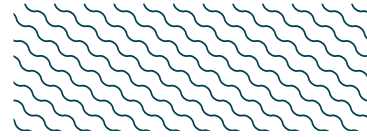
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Alopias pelagicus</i>	Pelagic Thresher	EN
<i>Alopias superciliosus</i>	Bigeye Thresher	VU
<i>Carcharhinus amblyrhynchos</i>	Grey Reef Shark	EN
<i>Carcharhinus brevipinna</i>	Spinner Shark	VU
<i>Carcharhinus obscurus</i>	Dusky Shark	EN
<i>Isurus oxyrinchus</i>	Shortfin Mako	EN
<i>Isurus paucus</i>	Longfin Mako	EN
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR
RAYS		
<i>Aetobatus ocellatus</i>	Spotted Eagle Ray	EN
<i>Bathytoshia lata</i>	Brown Stingray	VU
<i>Mobula kuhlii</i>	Shorthorned Pygmy Devil Ray	EN
<i>Mobula mobular</i>	Spinetail Devil Ray	EN
<i>Mobula tarapacana</i>	Sicklefin Devil Ray	EN
<i>Mobula thurstoni</i>	Bentfin Devil Ray	EN
<i>Rhina ancylostomus</i>	Bowmouth Guitarfish	CR

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 Southern Flores may be an important reproductive area for three shark and one ray species.

Pregnant female Spinner Shark, Dusky Shark, Scalloped Hammerhead, and Brown Stingray have been recorded in the area, according to landing monitoring (BM Simeon unpubl. data 2024). More information is needed to confirm the regular occurrence of these life stages and the reproductive importance of the area for these species.



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