

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

ZALALA FARORA ISRA

Western Indian Ocean Region

SUMMARY

Zalala Farora is located in the northern part of the Sofala Bank, in the Zambezia province of central Mozambique. This area is shallow (<25 m deep) and is mostly characterised by sand and mud substrates. It is near the Zambezi River delta and is influenced by river discharge. It is a highly productive area, also due to the adjacent Angoche upwelling cell, which is responsible for high nutrient input resulting in an abundance of marine species in this area. This coastal site partly overlaps with the Quelimane to Zuni River Ecologically or Biologically Significant Marine Area (EBSA) and lies within the Mozambique Channel EBSA. Within this area there are: **threatened species** (e.g., Blacktip Shark *Carcharhinus limbatus*) and **reproductive areas** (e.g., Scalloped Hammerhead *Sphyrna lewini*).

CRITERIA

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

— —
MOZAMBIQUE

— —
0-25 metres

— —
647.58 km²





DESCRIPTION OF HABITAT

Zalala Farora is situated on the Sofala Bank in central Mozambique. The coastline is characterised by mangrove forests, swampy depressions, a series of low beach ridges, and adjacent islands with coral and rocky substrate. Sand and mud substrate are the most dominant habitat types resulting from the inflow of the Muniga, Molocué, Namacura, and Bons Sinais rivers, as well as other large, regional rivers including the Zambezi, Ligonha, and Licungo rivers. The extensive and well-established mangroves thrive because of the alluvial and freshwater discharge. Freshwater discharge and shelf break upwelling events are the most important source of nutrients which are spread by eddies in the Mozambique Channel (Malauene et al. 2014), leading to high productivity.

Zalala Farora partly overlaps with the Quelimane to Zuni River Ecologically or Biologically Significant Marine Area (EBSA; CBD 2023a) and lies within the Mozambique Channel EBSA (CBD 2023b).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 25 m based on the bathymetry of the area and where the Qualifying Species are caught by fishers.

ISRA CRITERIA

CRITERION A – VULNERABILITY

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species™ regularly occur in the area. These are the Critically Endangered Scalloped Hammerhead (Rigby et al. 2019) and the Vulnerable Blacktip Shark (Rigby et al. 2021).

SUB-CRITERION C₁ – REPRODUCTIVE AREAS

Zalala Farora is an important reproductive area for two shark species.

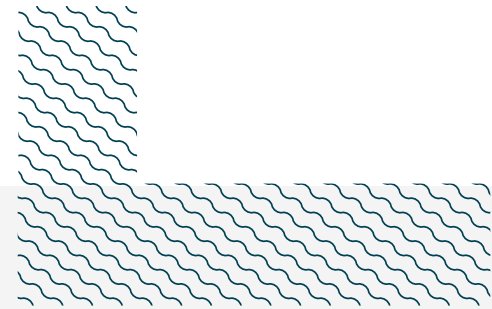
Catch records from artisanal fisheries in the area from 2008–2022 indicate that 81% (n = 671) of Scalloped Hammerheads landed and measured in the area were young-of-the-year (YOY; 366 individuals) or neonates (180 individuals), based on body size (Instituto Oceanográfico de Moçambique [InOM] & Wildlife Conservation Society [WCS] unpubl. data 2023; Fernando et al. in prep.). Individuals up to 57 cm total length (TL) were considered neonates and those ranging 57–80 cm TL were classed as YOY (Anislado-Tolentino et al. 2008).

Similar catch records from 2017–2022 indicated that 80% (n = 619) of Blacktip Sharks landed and measured were YOY (360 individuals) or neonates (133 individuals) based on body size (InOM & WCS unpubl. data 2023; Fernando et al. in prep.). Individuals <60 cm TL were considered neonates and those ranging 60–92 cm TL were classed as YOY (Branstetter 1987).

Pregnant females of both species have been recorded in this area. Studies of the reproductive biology of Blacktip Sharks (n = 484) and Scalloped Hammerheads (n = 235) show that mostly juveniles and pregnant females are landed in the area. There was a seasonal trend, with more pregnant females from April to December for Blacktip Sharks and from September to January for Scalloped Hammerheads, when ~50% of landed individuals from both species were pregnant females.

Artisanal fisheries catch surveys from other provinces in Mozambique suggest that Blacktip Sharks comprised a small proportion of the overall shark and ray landings in these other regions (0.1% in

Inhambane, 0.4% in Maputo, 0.3% in Nampula, and 0.6% in Sofala Province) compared to Zambezia province where 98% of Blacktip Sharks were landed. Similarly, few Scalloped Hammerhead Sharks were landed in other regions (0.1% in Cabo Delgado, 0.2% in Inhambane, 0.3% in Maputo, 1.4% in Nampula, 18% in Sofala Province) compared to Zambezia province (79%) (WCS 2020; InOM & WCS unpubl. data 2023), which highlights the importance of Zalala Farora for these two species in comparison to other regions in Mozambique.



Acknowledgments

Stela Fernando (Instituto Oceanográfico de Moçambique), Isabel Chaúca (Instituto Oceanográfico de Moçambique), Daniel Oliveira (Instituto Oceanográfico de Moçambique), Eurico Pereira Morais (Instituto Oceanográfico de Moçambique), Rui Mutombene (Instituto Oceanográfico de Moçambique), Badru Hagy (Instituto Oceanográfico de Moçambique), Rhett Bennett (Wildlife Conservation Society), Jorge J. Sítioe (Wildlife Conservation Society), David van Beuningen (Wildlife Conservation Society), and Christoph A. Rohner (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2023 ISRA Region 7 - Western Indian Ocean workshop for their contributions to this process.

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. 2023. Zalala Farora ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

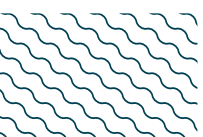
QUALIFYING SPECIES

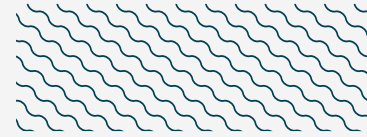
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met (mark with an 'X')									
				A	B	C1	C2	C3	C4	C5	D1	D2	
SHARKS													
<i>Carcharhinus limbatus</i>	Blacktip Shark	VU	0-140	X		X							
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR	0-1,043	X		X							

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Carcharhinus brevipinna</i>	Spinner Shark	VU
<i>Carcharhinus macloti</i>	Hardnose Shark	NT
<i>Carcharhinus sorrah</i>	Spot-tail Shark	VU
<i>Galeocerdo cuvier</i>	Tiger Shark	NT
<i>Loxodon macrorhinus</i>	Sliteye Shark	NT
<i>Mustelus mosis</i>	Arabian Smoothhound	NT
<i>Rhizoprionodon acutus</i>	Milk Shark	VU
RAYS		
<i>Himantura uarnak</i>	Coach Whipray	EN
<i>Maculabatis ambigua</i>	Baraka Whipray	NT
<i>Rhinoptera jayakari</i>	Oman Cownose Ray	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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