



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

### LAMU ARCHIPELAGO ISRA

#### Western Indian Ocean Region

### SUMMARY

Lamu Archipelago is located in northern Kenya. The area contains >65 islands separated by numerous mangrove-covered channels and estuaries. It is characterised by extensive mangrove stands surrounded by lagoons, seagrass beds, rocky areas, shallow fringing reefs, and submerged barrier reefs. The area overlaps with the Kiunga Marine National Reserve Key Biodiversity Area and with the Lamu-Kiunga Area Ecologically or Biologically Significant Marine Area. Within the area there are: **reproductive areas** (Bluespotted Lagoon Ray *Taeniura lymma*).

-	-			
KENYA				
-	-			
0-50 metres				
-	-			
1,246.1 km²				
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#### CRITERIA

Sub-criterion C1 - Reproductive Areas



sharkrayareas.org



# DESCRIPTION OF HABITAT

Lamu Archipelago is located on the northern Kenyan coast, in Lamu county near the border with Somalia. The archipelago contains ~65 islands separated by numerous mangrove-covered channels and estuaries (Olendo et al. 2019). The area is characterised by extensive mangrove stands surrounded by lagoons, seagrass beds, rocky areas, shallow fringing reefs, and submerged barrier reefs (Church & Obura 2006).

The area is influenced by monsoon winds. The southeast monsoon (March-October) brings strong winds and currents, while the northeast monsoon (November-March) is characterised by dry conditions, mild currents, and higher temperatures (Painter 2020).

The area overlaps with the Kiunga Marine National Reserve Key Biodiversity Area (KBA 2023) and with the Lamu-Kiunga Area Ecologically or Biologically Significant Marine Area (EBSA) (CBD 2023). In addition, it overlaps with the Kiunga Marine National Reserve and with a Community Nature Reserve, the Pate Marine Community Conservancy.

This Important Shark and Ray Area is benthic and is delineated from inshore and surface waters (O m) to 50 m based on the depth range of the Qualifying Species.

# **ISRA CRITERIA**

### SUB-CRITERION C1 - REPRODUCTIVE AREAS

Lamu Archipelago is an important reproductive area for one ray species.

Between August and October 2022, 82 Bluespotted Lagoon Rays were reported in landings in Kiwayuu from artisanal fisheries operating in the area. Of these individuals, 45 measured 9.0-12.5 cm disc width (DW) which is close to the reported size-at-birth for the species (13-14 cm DW; Last et al. 2016) indicating the presence of neonates/young-of-the-year (YOY; N Wambiji unpubl. data 2023). In addition, neonates of this species were previously reported between January 2016-April 2017 as part of the Bycatch Assessment and Mitigation in the Western Indian Ocean Fisheries project (N Wambiji unpubl. data 2023) and between 2018-2019 (Wildlife Conservation Society unpubl. data 2020). This is the only area in Kenya where a large proportion of neonates have been recorded and between 2018-2019, this was the only place in Kenya where the species was observed during monitoring of artisanal landings.

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# QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				Α	В	Cı	C2	C3	C4	C5	Dı	D2
RAYS												
Taeniura lymma	Bluespotted Lagoon Ray	LC	0-50			Х						



## SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category				
SHARKS	1	I				
Carcharhinus dussumieri	Whitecheek Shark	EN				
Carcharhinus limbatus	Blacktip Shark	VU				
Carcharhinus melanopterus	Blacktip Reef Shark	VU				
Carcharhinus sorrah	Spottail Shark	NT				
Galeocerdo cuvier	Tiger Shark	NT				
Hemipistris elongata	Snaggletooth Shark	VU				
Loxodon macrorhinus	Sliteye Shark	NT				
RAYS						
Aetobatus ocellatus	Spotted Eagle Ray	EN				
Glaucostegus halavi	Halavi Guitarfish	CR				
Himantura leoparda	Leopard Whipray	EN				
Himantura uarnak	Coach Whipray	EN				
Maculabatis ambigua	Baraka's Whipray	NT				
Mobula kuhlii	Shorthorned Pygmy Devil Ray	EN				
Mobula thurstoni	Bentfin Devil Ray	EN				
Neotrygon caeruleopunctata	Bluespotted Maskray	LC				
Pastinachus ater	Broad Cowtail Ray	VU				

IUCN Red List of Threatened Species Categories are available by searching species names at <u>www.iucnredlist.org</u> 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 Lamu Archipelago may be an important reproductive area for one ray species.

Between January 2016 and April 2017, 27 Spotted Eagle Rays were observed at three landing sites from artisanal fisheries operating in the area as part of the Bycatch Assessment and Mitigation in the Western Indian Ocean Fisheries project (BYCAM unpubl. data 2023). From these, 17 were landed in Kiunga with sizes ranging from 22-119 cm DW and three in Kizingitini with sizes between 36-72 cm DW. Reported size-at-birth for the species is 18-50 cm DW (Last et al. 2016) confirming that six individuals were neonates or YOY (22% of overall records). More information is needed to confirm the reproductive importance of the area.

#### REFERENCES

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