

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

FLIC-EN-FLAC ISRA

Western Indian Ocean Region

SUMMARY

Flic-en-Flac is located on the western coast of Mauritius. The area is characterised by a long white sandy beach with seven narrow passes and a coral reef barrier. It is under the influence of the northwest and southeast monsoon seasons. Within this area, there are: **threatened species** and **undefined aggregations** (Spotted Eagle Ray *Aetobatus ocellatus*).

MAURITIUS

0-60 metres

5.18 km²

CRITERIA

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





DESCRIPTION OF HABITAT

Flic-en-Flac is located on the western coast of Mauritius. It has one of the longest white sandy beaches of the island. The lagoon of Flic-en-Flac measures ~2 km² with seven narrow passes and is protected by a coral reef barrier (Doorga et al. 2021). This region experiences two major seasons, namely the southeast monsoon (April to November) characterised by strong persistent southeasterly winds, lower rainfall and lower temperatures, and the northwest monsoon (December to March) dominated by light northwesterly winds, higher rainfall, and warmer temperatures.

Flic-en-Flac is sheltered from the prevailing southeast trade winds (Doorga et al. 2018). The sediments that make up the lagoon and its beach are of carbonate origin and made up of coral fragments, crustaceans, and molluscan shells among others.

This Important Shark and Ray Area is benthopelagic and is delineated from surface waters (0 m) to 60 m based on the global depth range of the Qualifying Species.

ISRA CRITERIA

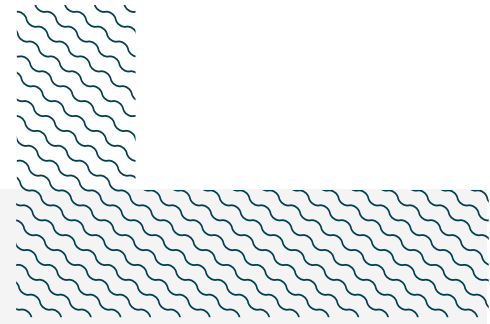
CRITERION A - VULNERABILITY

The one Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species™. The Spotted Eagle Ray is assessed as Endangered (Finucci et al. submitted).

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Flic-en-Flac is an important area for undefined aggregations of one ray species.

Spotted Eagle Ray aggregations of up to 43 individuals are observed predictably every year during the northwest monsoon (from October to February). Based on data collected on 45 dives from October 2021 to August 2023, these aggregations were observed every year, on seven occasions in total. The number of individuals in the first six aggregations were 5, 6, 10, 20, 30, and 40 (Mascarane Archipelago Elasmobranch Observatory unpubl. data 2023). In September 2023, an aggregation of 43 eagle rays was observed in the area (E Crochelet pers. obs. 2023). Most of these individuals were observed in mid-water, at a coral reef site named Big Rock. The individuals were relatively stationary, lying in the current. Further information is required to understand the nature and function of these aggregations.



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Suggested citation

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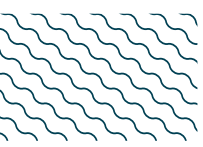
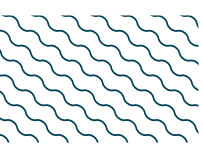
QUALIFYING SPECIES

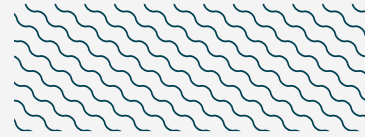
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met									
				A	B	C1	C2	C3	C4	C5	D1	D2	
RAYs													
<i>Aetobatus ocellatus</i>	Spotted Eagle Ray	EN	0-60	X							X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Carcharhinus amblyrhynchos</i>	Grey Reef Shark	EN
<i>Carcharhinus longimanus</i>	Oceanic Whitetip Shark	CR
<i>Sphyrna mokarran</i>	Great Hammerhead	CR
<i>Triaenodon obesus</i>	Whitetip Reef Shark	VU
RAYS		
<i>Myliobatis aquila</i>	Common Eagle Ray	CR
<i>Pateobatis fai</i>	Pink Whipray	VU
<i>Rhynchobatus australiae</i>	Bottlenose Wedgefish	CR
<i>Taeniurops meyeri</i>	Blotched Fantail Ray	VU

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

Doorga JR, Chinta D, Gooroochurn O, Rawat A, Ramchandur V, Motah BA, Sunassee S, Samyan C. 2018. Assessment of the wave potential at selected hydrology and coastal environments around a tropical island, case study: Mauritius. *International Journal of Energy and Environmental Engineering* 9: 135-153. <https://doi.org/10.1007/s40095-018-0259-7>

Doorga JR, Sadien M, Bheeroo NA, Pascin O, Gooroochurn O, Modoosoodun-Nicolas K, Ramchandur V, Ramharai D. 2021. Assessment and management of coastal erosion: Insights from two tropical sandy shores in Mauritius Island. *Ocean & Coastal Management* 212: 105823. <https://doi.org/10.1016/j.ocecoaman.2021.105823>

Finucci B, Rigby C, Armstrong A, Rezaie-Atagholipour M. Submitted. *Aetobatus ocellatus*. The IUCN Red List of Threatened Species 2023.