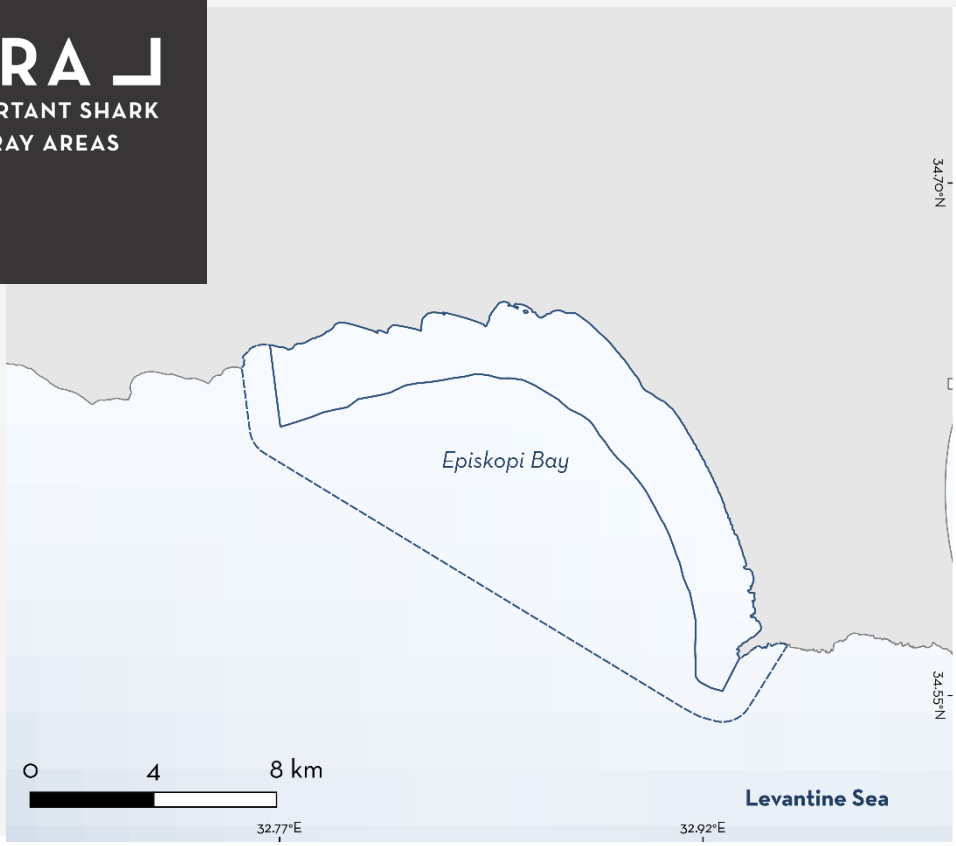
ISRA
IMPORTANT SHARK AND RAY AREAS



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

EPISKOPI BAY ISRA

Mediterranean and Black Seas Region

CYPRUS

0–20 metres

47.21 km²

SUMMARY

Episkopi Bay is located along the south coast of Cyprus within the Levantine Basin. The area is characterised by sea cliffs, sand dunes, seagrass beds, rocky reefs, and sand corridors. It is considered one of the most pristine marine areas of Cyprus. Within this area there are: **threatened species** and **reproductive areas** (Blackchin Guitarfish *Glaucostegus cemiculus*).

CRITERIA

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

DESCRIPTION OF HABITAT

Episkopi Bay is located along the south coast of Cyprus within the Levantine Basin. The area comprises a broad sandy embayment interspersed with seagrass meadows (Neptune Grass *Posidonia oceanica* and Slender Seagrass *Cymodocea nodosa*), sand corridors, and structurally complex reef formations (Dissanayake et al. 2021; Demetriou et al. 2022; DFMR 2024). The coastline comprises sea cliffs and sand dunes.

The bay is moderately exposed to prevailing wave energy; however, reef structures increase local hydrodynamic heterogeneity, creating microhabitats with reduced flow and enhanced structural refuge (Charilaou et al. 2012; Tziortzis et al. 2012; DFMR 2022).

This Important Shark and Ray Area is benthic and is delineated from inshore and surface waters (0 m) to 20 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 Critically Endangered Blackchin Guitarfish (Kyne & Jabado 2019).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Episkopi Bay is an important reproductive area for one ray species.

Between December 2012 and December 2025, a total of 828 Blackchin Guitarfish were recorded across Cyprus from multiple data sources (The MECO project unpubl. data 2012–2025). These included citizen science observations collected from small-scale and recreational fishers, SCUBA divers, free divers, and beach users through the Mediterranean Elasmobranch Citizen Observations (MECO) project, as well as targeted scientific surveys and records from recreational fishing competitions (The MECO project unpubl. data 2012–2025). Blackchin Guitarfish records increased markedly after 2022, reflecting intensified research effort and the implementation of structured citizen science and research initiatives. Prior to this coordinated effort, available information was limited, and the species was widely regarded as rare in Cyprus, likely a consequence of underreporting and the absence of systematic monitoring.

Size-at-birth of the species is 20–35 cm total length (TL; Otero et al. 2019; Azrieli et al. 2024) and young-of-the-year (YOY) are ≤60 cm TL (Başusta et al. 2020). Most recorded individuals corresponded to early life-stages, comprising 59 neonates and 591 YOY. Spatially, these early life-stages were strongly concentrated within three coastal bays: Larnaca Bay (southeast coast; 38% of all early life-stages recorded), Chrysochou Bay (northwest coast; 24%), and Episkopi Bay (south coast; 13%). Two other bays (Limassol Bay and Morphou Bay) were also surveyed but recorded only very small numbers of Blackchin Guitarfish (n = 18 and n = 1, respectively), highlighting the importance of the three bays where the species were more commonly encountered.

Early life-stages were observed in Episkopi Bay between 2012–2025, with a clear seasonal concentration during late boreal spring to autumn and a peak between August and November.

Records were derived primarily from recreational fishers (shore-based angling and surf casting), complemented by targeted research activities. Between December 2012 and November 2025, a total of 85 early life-stage individuals (6 neonates; 79 YOY; 96.6% of all Blackchin Guitarfish recorded in Episkopi Bay) were recorded in the area, comprising 32 individuals between 2012 and 2022, 21 in 2023, 31 in 2024, and one in 2025 (The MECO project unpubl. data 2012–2025). These were documented across 14 sampling days, with daily counts reaching up to 29 individuals in a single day (12 October 2024). Size ranged from 18–60 cm TL, corresponding to neonates and YOY. The consistent presence of early life-stages across multiple years, combined with observations of neonates with umbilical scars, indicates recent parturition and recurrent use of the area as a nursery habitat. In addition to neonates and YOY, two juveniles and subadults were recorded in the bay.

Acknowledgments

Christina Michail (Marine and Environmental Research Lab; University of Padova), Periklis Kleitou (Marine and Environmental Research Lab), Demetris Kletou (Marine and Environmental Research Lab), Ioannis Giovos (iSea, Environmental Organisation for the Preservation of the Aquatic Ecosystems), Giorgos Rallis (iSea, Environmental Organisation for the Preservation of the Aquatic Ecosystems), Ryan Charles (IUCN SSC Shark Specialist Group – ISRA Project), and Peter M Kyne (IUCN SSC Shark Specialist Group – ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2023 ISRA Region 3 – Mediterranean and Black Seas 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. 2026. Episkopi Bay 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
RAYS												
Glaucostegus cemiculus	Blackchin Guitarfish	CR	0–100	X		X						

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
Aetomylaeus bovinus	Duckbill Eagle Ray	CR
Dasyatis marmorata	Marbled Stingray	NT
Dasyatis pastinaca	Common Stingray	VU
Gymnura altavela	Spiny Butterfly Ray	EN
Myliobatis aquila	Common Eagle Ray	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.

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