

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

EASTERN GULF OF LION ISRA

Mediterranean and Black Seas Region

SUMMARY

Eastern Gulf of Lion is in the northwestern Mediterranean Sea, bordering the coast of Provence in France. It is located in continental shelf edge, slope, and underwater canyon head zones. Surface waters are dominated by the oligotrophic Northern Mediterranean Current flowing westward. Within this area there are: **threatened species** and areas important for **movement** (Blue Shark *Prionace glauca*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C4 - Movement

— —
FRANCE — —
 — —
0-1,000 metres
 — —
11,529.7 km²
 — —





DESCRIPTION OF HABITAT

Eastern Gulf of Lion is located along, and offshore from, the coast of Provence in France. It overlaps the continental shelf edge, slope, and underwater canyon head zones of the Gulf of Lion. In this area, the oligotrophic Northern Mediterranean Current flows west and southward along the continental slope (Barrier et al. 2016). Occasionally, the current penetrates onto the shelf, influencing primary production in the area. These intrusions are mainly forced by easterly and north-westerly wind events (Barrier et al. 2016).

This Important Shark and Ray Area is pelagic and is delineated from surface waters (0 m) to 1,000 m based on the global depth range of the Qualifying Species and the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

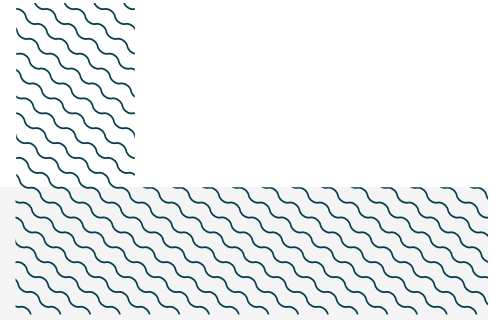
The one Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species™. The Blue Shark is assessed as Near Threatened globally (Rigby et al. 2019) and Critically Endangered in the Mediterranean Sea (Sims et al. 2016).

SUB-CRITERION C4 - MOVEMENT AREAS

Eastern Gulf of Lion is an important movement area for one shark species.

From July 2012 to May 2017, 39 Blue Sharks were tagged in three areas of the Western Mediterranean Basin with contrasting oceanographic features: (1) Gulf of Lion, (2) Ligurian Sea, and (3) Northern Alboran Sea near the Strait of Gibraltar (Poisson et al. submitted). Individuals were tagged with different satellite transmitters: three types of fin-mounted satellite tags (n = 32) and two types of pop-up satellite archival transmitting (PSAT) tags (n = 8). Animals tagged had a male : female sex ratio that greatly favoured females (1 : 2.9) and included 3 juvenile males (110-127 cm fork length [FL]), 6 juvenile females (119-130 cm FL), 3 large juvenile males (142-167 cm FL), 22 large juvenile females (131-178 cm FL), 4 adult males (185-295 cm FL), and 1 adult female (208 cm FL).

Kernel Utilisation Distribution (KUD) modelling was used to create 50%, 75%, and 95% KUDs for all track locations and by season. This model for all tracking locations identified the Eastern Gulf of Lion as a major hotspot (50% KUD based on all tracks) of Blue Shark movement. These densities were observed during summer (from June to August), with individuals overwintering in the Alboran and Tyrrhenian Sea (Poisson et al. submitted).



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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
SHARKS											
<i>Prionace glauca</i>	Blue Shark	CR*	0-1,000	X					X		

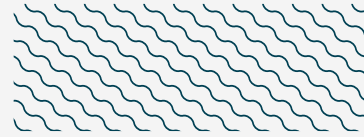
*Assessed as CR in a Mediterranean Sea regional assessment but considered NT globally.

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
<i>Pteroplatytrygon violacea</i>	Pelagic Stingray	LC

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

Barrier N, Petrenko AA, Ourmieres Y. 2016. Strong intrusions of the Northern Mediterranean Current on the eastern Gulf of Lion: insights from in-situ observations and high-resolution numerical modelling. *Ocean Dynamics* 66: 313–327. <https://doi.org/10.1007/s10236-016-0921-7>

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Rigby CL, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM, Marshall A, et al. 2019. *Prionace glauca*. *The IUCN Red List of Threatened Species* 2019: e.T39381A2915850. <https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T39381A2915850.en>

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