

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

WESTERN APULIAN COAST ISRA

Mediterranean and Black Seas Region

SUMMARY

Western Apulian Coast is located in southeastern Italy. It constitutes the eastern part of the largest gulf in Italy, the Gulf of Taranto. The area includes pelagic waters over the continental shelf. Offshore of the area, there is a deep submarine canyon leading to the 'Taranto Valley', an area reaching 2,200 m depth. This characteristic causes a complex flow pattern of water masses and the occurrence of upwelling events with significant seasonal variability. The area includes Porto Cesareo marine protected area, and the southern part falls within the South Adriatic Ionian Straight Ecologically or Biologically Significant Marine Area. Within this area there are: **threatened species** and **areas important for feeding** (Basking Shark *Cetorhinus maximus*).

CRITERIA

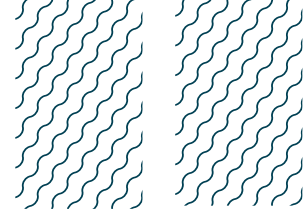
Criterion A - Vulnerability; Sub-criterion C2 - Feeding Areas

— —
ITALY

— —
0-200 metres

— —
1,983.8 km²





DESCRIPTION OF HABITAT

Western Apulian Coast is located in southeastern Italy, in the northern Ionian Sea. It extends from Santa Maria di Leuca to Taranto and borders the Salento (Apulia) peninsula.

The area encompasses pelagic waters over a wide continental shelf. Offshore of the area, the Gallipoli Canyon leads to a deep central trench >2,000 m deep, the Taranto Valley, that connects to the eastern Mediterranean Sea.

The basin-scale circulation is dominated by cyclonic and anticyclonic gyres, generating both mesoscale and sub-mesoscale eddies, upwelling (anticyclonic gyres), and downwelling (cyclonic gyres). This circulation is likely to be the main driver of ecosystem variability (Pinardi et al. 2016).

This Important Shark and Ray Area is pelagic and is delineated from surface waters (0 m) to 200 m based 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 Basking Shark is assessed as Endangered (Rigby et al. 2021).

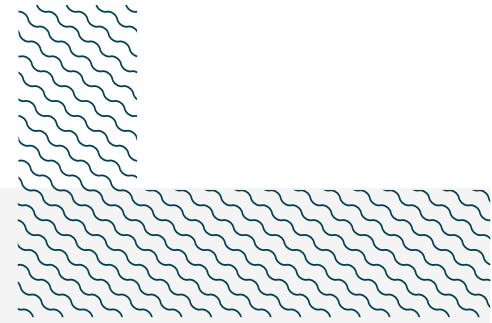
SUB-CRITERION C2 – FEEDING AREAS

Western Apulian Coast is an important feeding area for one shark species.

Regular seasonal sightings of Basking Sharks occur in late boreal winter/early spring. Aggregations of up to four individuals ranging in size between 300–900 cm total length (TL), make the Gulf of Taranto a known hotspot of Basking Shark occurrence in the Mediterranean Sea (Carlucci et al. 2014; de Sabata et al. 2014; Mancusi et al. 2020; de Sabata unpubl. data 2023).

Seven (February–March 2013) and 57 (mostly January–March 1977–2013) Basking Shark individuals have been reported in the area. These were reported in Taranto, off Torre Borraco and in the marine protected area of Porto Cesareo (Carlucci et al. 2014); and in Porto Cesareo/Gallipoli, a 30 km long stretch within the area, at the mouth of the canyon leading to the Taranto Valley (de Sabata et al. 2014).

Many individuals were directly observed cruising on the surface with their mouth open, which is a typical feeding behaviour for this species (Carlucci et al. 2014; de Sabata unpubl. data 2023). Such feeding behaviour in late winter/early spring has been shown to correlate to seasonal and interannual variations of phytoplankton biomass in northeastern Sardinia (de Sabata et al. 2013) and it is likely that similar correlations occur in Western Apulian Coast.



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Suggested citation

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QUALIFYING SPECIES

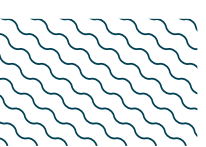
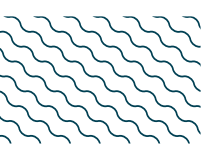
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met									
				A	B	C1	C2	C3	C4	C5	D1	D2	
SHARKS													
<i>Cetorhinus maximus</i>	Basking Shark	EN	0-1,264	X			X						

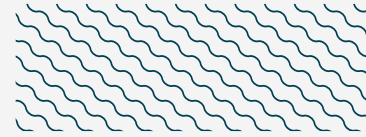
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Alopias vulpinus</i>	Common Thresher	VU
<i>Carcharodon carcharias</i>	White Shark	VU
<i>Hexanchus griseus</i>	Bluntnose Sixgill Shark	NT
<i>Isurus oxyrinchus</i>	Shortfin Mako	EN
<i>Lamna nasus</i>	Porbeagle	VU
<i>Prionace glauca</i>	Blue Shark	CR*
RAYS		
<i>Mobula mobular</i>	Spinetail Devil Ray	EN

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

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

- Carlucci R, Battista D, Capezzuto F, Serena F, Sion L. 2014.** Occurrence of the basking shark *Cetorhinus maximus* (Gunnerus, 1765) (Lamniformes: Cetorhinidae) in the central-eastern Mediterranean Sea. *Italian Journal of Zoology* 81(2): 280–286. <https://doi.org/10.1080/11250003.2014.910275>
- de Sabata E, Olita A, Clò S. 2013.** On the occurrence of basking sharks (*Cetorhinus maximus*) in Sardinia in relation to oceanographic variables. *Biologia Marina Mediterranea* 20(1): 180–181. <https://doi.org/10.13140/RG.2.2.17490.63682>
- de Sabata E, Bello G, Cataldini G, Mancusi C, Serena F, Clò S. 2014.** A seasonal hotspot for *Cetorhinus maximus* in Puglia, southern Italy. *Biologia Marina Mediterranea* 21 (1): 273–274. <https://doi.org/10.13140/RG.2.2.12955.54564>
- Mancusi C, Baino R, Fortuna C, de Sola LG, Morey G, Bradai MN, Kallianotis A, Soldo A, Hemida F, Saad AA, et al. 2020.** MEDLEM database, a data collection on large elasmobranchs in the Mediterranean and Black seas. *Mediterranean Marine Science* 21(2): 276–288. <https://doi.org/10.12681/mms.21148>
- Pinardi N, Lyubartsev V, Cardellicchio N, Caporale C, Ciliberti S, Coppini G, De Pascalis F, Diali L, Federico I, Filippone M et al. 2016.** Marine Rapid Environmental Assessment in the Gulf of Taranto: a multiscale approach. *Natural Hazards and Earth System Sciences* 16: 2623–2639. <https://doi.org/10.5194/nhess-16-2623-2016>
- Rigby CL, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM, Marshall A et al. 2021.** *Cetorhinus maximus* (amended version of 2019 assessment). *The IUCN Red List of Threatened Species* 2021: e.T4292A194720078. <https://dx.doi.org/10.2305/IUCN.UK.2021-1.RLTS.T4292A194720078.en>