

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 CORSICA ISRA

Mediterranean and Black Seas Region

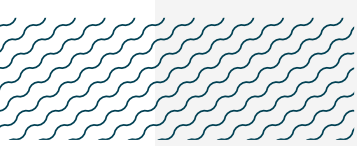
SUMMARY

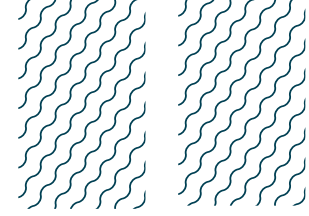
Eastern Corsica is located in the French northern Tyrrhenian Sea, Western Mediterranean Basin. This area is characterised by its wide expanses of sandy substrates and seagrass meadows. It includes benthic habitats of the continental shelf, slope, and underwater canyons. The area is recognised as a Site of Community Importance through the Natura 2000 network, overlaps with a Key Biodiversity Area, and sits within the Pelagos Marine Mammal Sanctuary. Within this area, there are: **threatened species** (Angelshark *Squatina squatina*); **reproductive areas** (e.g., Smallspotted Catshark *Scyliorhinus canicula*); and **undefined aggregations** (Angelshark).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas; Sub-criterion C5 - Undefined Aggregations

—	—
FRANCE	—
—	—
0-600 metres	—
—	—
1,800 km²	—
—	—





DESCRIPTION OF HABITAT

Eastern Corsica is situated within Corsican waters, a French island located between the Gulf of Genoa, the Tuscan archipelago, and the island of Sardinia. The northern part of the area is shallow, characterised by wide expanses of soft sandy substrates and scattered sites of infralittoral algae, and hosts one of the widest meadows of seagrass in the Mediterranean Sea. This makes the area of high conservation value (Pasqualini et al. 1998; Valette-Sansevin et al. 2019). Its large continental shelf (up to 150 m depth, 11 km offshore) is connected to the four largest lagoons of Corsica and seven estuaries, providing significant amounts of sediments and nutrients to the coastal area, therefore increasing the productivity of the ecosystem (Guinnos et al. 2001). The southern part of the area is deeper and comprises circalittoral soft substrates and several submarine canyons (Valette-Sansevin et al. 2018). Deep-sea habitats are also present in the southern part of the area and the area includes part of the Corsica Trough, a narrow and shallow basin that separates the continental shelves of Corsica and Tuscany-Elba and connects the Ligurian and Tyrrhenian Seas (Toucanne et al. 2012; Harris et al. 2014).

The area is recognised as a Site of Community Importance through the Natura 2000 network, sits within the Pelagos Marine Mammal Sanctuary, and overlaps with the Etang d'Urbino et zones humides périphériques Key Biodiversity Area (KBA 2023).

This Important Shark and Ray Area is delineated from the surface (0 m) to a depth of 600 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. The Angelshark is assessed as Critically Endangered (Morey et al. 2019).

SUB-CRITERION C1 - REPRODUCTIVE AREAS

Eastern Corsica is an important reproductive area for two shark species.

Benthic trawl surveys document the regular and predictable occurrence of egg-laying individuals of Blackmouth Catshark (n = 729 of 2,268 individuals) at depths between 190 m and 604 m and of Smallspotted Catshark (n = 426 out of 3,465 individuals) at depths between 96 m and 564 m each year from 2008 to 2011 (Mediterranean International Trawl Surveys [MEDITS] database). Gravid females are recorded when eggs are expelled by a slight pressure on the abdomen or when eggs naturally evacuate (Bertrand et al. 2002).

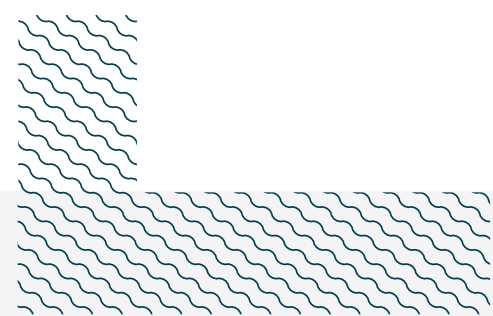
Blackmouth Catshark young-of-the-year (n = 94,357 out of 237,683 individuals; <23 cm total length [TL], Zicarelli et al. 2023) have been recorded each year from 2008 to 2019, and egg-laying individuals (n = 729 out of 43,845) each year from 2008 to 2011, at depths between 190 m and 604 m (MEDITS database).

Smallspotted Catshark young-of-the-year (n = 9,847 out of 84,337; <25 cm TL, Ivory et al. 2004, Abella et al. 2017) have been recorded each year from 2008 to 2019 and egg-laying individuals (n = 426 out of 15,546 individuals) each year from 2008 to 2011, at depths between 96 m and 564 m (MEDITS database).

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Eastern Corsica is an area of undefined aggregations for one shark species.

Aggregations of Angelsharks are known to occur both in the southern and northern part of the area according to fishers (C. Bousquet unpubl. data 2023). These aggregations are observed yearly in March and April by two small-scale-fishers. Up to 50 sharks can be caught in a single 300-600 m net, with soak time not exceeding 24 hours. The area may serve as a reproductive area for the species (Lapinski & Giovos 2019), however, further information is required on the function of the aggregations.



Acknowledgments

Anthony Acou (UAR Patrinat), Marion Bouet (Office de l'Environnement de la Corse, Service Aires protégées, de la mer, des îles et du littoral), Caroline M. Bousquet (UAR Stella Mare UCPP-CNRS; Angel Shark Project: Corsica), Jean-Michel Culioli (Office de l'Environnement de la Corse, Service Aires protégées, de la mer, des îles et du littoral), Jessica Dijoux (Comité Régional des Pêches Maritimes et des Elevages Marins de Corse; Angel Shark Project: Corsica), Eric D.H. Durieux (UMR Sciences pour l'Environnement UCPP-CNRS; UAR Stella Mare UCPP-CNRS; Angel Shark Project: Corsica), Michel Marengo (Station de Recherches Sous-marines et Océanographiques), Théophile L. Mouton (IUCN SSC Shark Specialist Group - ISRA Project), Eva K. Meyers (Leibniz Institute for the Analysis of Biodiversity Change; Angel Shark Project), Johann Mourier (MARBEC; Angel Shark Project: Corsica), Marie-Catherine Santoni (Office de l'Environnement de la Corse, Service Aires protégées, de la mer, des îles et du littoral), and Pauline Stephan (UAR Patrinat) 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. 2023. Eastern Corsica ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

QUALIFYING SPECIES

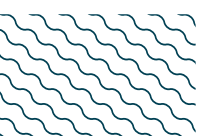
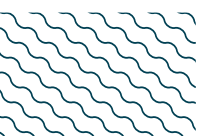
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met (mark with an 'X')							
				A	B	C1	C2	C3	C4	C5	D1
SHARKS											
<i>Galeus melastomus</i>	Blackmouth Catshark	LC	55-2,000			X					
<i>Scyliorhinus canicula</i>	Smallspotted Catshark	LC	0-800			X					
<i>Squatina squatina</i>	Angelshark	CR	0-150	X						X	

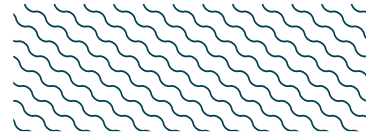
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Etmopterus spinax</i>	Velvet Belly Lanternshark	VU
<i>Mustelus mustelus</i>	Common Smoothhound	EN
<i>Prionace glauca</i>	Blue Shark	CR*
<i>Scyliorhinus stellaris</i>	Nursehound	VU
<i>Squalus blainville</i>	Longnose Spurdog	DD
RAYS		
<i>Dasyatis pastinaca</i>	Common Stingray	VU
<i>Dipturus oxyrinchus</i>	Longnosed Skate	NT
<i>Myliobatis aquila</i>	Common Eagle Ray	CR
<i>Pteroplatytrygon violacea</i>	Pelagic Stingray	LC
<i>Raja asterias</i>	Starry Skate	NT
<i>Raja clavata</i>	Thornback Skate	NT
<i>Raja miraletus</i>	Brown Skate	LC
<i>Raja polystigma</i>	Speckled Skate	LC
<i>Torpedo marmorata</i>	Marbled Torpedo Ray	VU

*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.

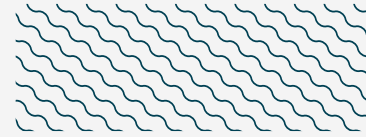




SUPPORTING INFORMATION

There are additional indications that Eastern Corsica is an important area for the reproductive purposes of Angelshark. This species regularly occurs within the area as small-scale fisheries bycatch (Lapinski & Giovos 2019; Bousquet et al. 2022). The regular presence of female Angelsharks aborting pups on boats has been reported each year since 2019 (n = ~10 per year according to Local Ecological Knowledge) in the winter and spring by commercial fishers in the southern part of the area (C. Bousquet unpubl. data 2023).





REFERENCES

- Abella A, Mancusi C, Serena F. 2017.** *Scyliorhinus canicula*. In: Sartor P, Mannini A, Carlucci R, Massaro E, Queirolo S, Sabatini A, Scarcella G, Simoni R, eds. Sintesi delle conoscenze di biologia, ecologia e pesca delle specie ittiche dei mari italiani/Synthesis of the knowledge on biology, ecology and fishery of the halieutic resources of the Italian seas. *Biologia Marina Mediterranea* 24 (Suppl. 1): 157–164.
- Bertrand JA, Gil De Sola L, Papaconstantinou C, Relini G, Souplet A. 2002.** The general specifications of the MEDITS surveys. *Scientia Marina* 66 (Suppl. 2): 9–17.
- Bousquet C, Bouet M, Patrissi M, Cesari F, Lanfranchi JB, Susini S, Massey JL, Aiello A, Culioli JM, Marengo M, et al. 2022.** Assessment of catch composition, production and fishing effort of small-scale fisheries: The case study of Corsica Island (Mediterranean Sea). *Ocean & Coastal Management* 218: 105998. <https://doi.org/10.1016/j.ocecoaman.2021.105998>
- Harris PT, Macmillan-Lawler M, Rupp J, Baker EK. 2014.** Geomorphology of the oceans. *Marine Geology* 352: 4–24. <https://doi.org/10.1016/j.margeo.2014.01.011>
- Ivory P, Jeal F, Nolan C. 2004.** Age determination, growth and reproduction in the lesser-spotted dogfish, *Scyliorhinus Canicula* (L.). *Journal of Northwest Atlantic Fishery Science* 35: 89–106. <https://doi.org/10.2960/J.V35.M504>
- Key Biodiversity Areas (KBA). 2023.** Key Biodiversity Areas factsheet: Etang d’Urbino et zones humides périphériques. Available at: <http://www.keybiodiversityareas.org> Accessed May 2023.
- Lapinski M, Giovos I. 2019.** New records of the critically endangered *Squatina squatina* (Linnaeus, 1759) from Corsica, France. *Acta Adriatica* 60(2): 195–200. <https://doi.org/10.32582/aa.60.2.10>
- Morey G, Barker J, Hood A, Gordon C, Bartolí A, Meyers EKM, Ellis J, Sharp R, Jimenez-Alvarado D, Pollom R. 2019.** *Squatina squatina*. *The IUCN Red List of Threatened Species* 2019: e.T39332A117498371. <https://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T39332A117498371.en>
- Pasqualini V, Pergent-Martini C, Clabaut P, Pergent G. 1998.** Mapping of *Posidonia oceanica* using aerial photographs and side scan sonar: Application off the Island of Corsica (France). *Estuarine, Coastal and Shelf Science* 47: 359–367. <https://doi.org/10.1006/ecss.1998.0361>
- Toucanne S, Jouet G, Ducassou E, Bassetti MA, Dennielou B, Angue Minto’o CM, Lahmi M, Touyet N, Charlier K, Lericolais G, et al. 2012.** A 130,000-year record of Levantine Intermediate Water flow variability in the Corsica Trough, western Mediterranean Sea. *Quaternary Science Reviews* 33: 55–73. <https://doi.org/10.1016/j.quascirev.2011.11.020>
- Valette-Sansevin A, Pergent G, Buron K, Pergent-Martini C, Damier E. 2019.** Continuous mapping of benthic habitats along the coast of Corsica: A tool for the inventory and monitoring of blue carbon ecosystems. *Mediterranean Marine Science* 20: 585–593. <https://doi.org/10.12681/mms.19772>
- Zicarelli G, Romano C, Gallo S, Valentino C, Pepe Bellomo V, Leonetti FL, Giglio G, Neri A, Marsili L, Milazzo C. 2023.** Diet and plastic ingestion in the Blackmouth Catshark *Galeus melastomus*, Rafinesque 1810, in Italian waters. *Animals* 13(6): 1039. <https://doi.org/10.3390/ani13061039>