

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

#### **TUSCANY OFFSHORE THUMB ISRA**

## Mediterranean and Black Seas Region

# **SUMMARY**

Tuscany Offshore Thumb is located ~45 km off the Tuscany coast of Italy. The area is a platform bordering the continental shelf and lies around the Islands of Capraia and Gorgona in the Tyrrhenian Sea, northwest Mediterranean Sea. The area belongs to the Tuscany Magmatic Province, an association of intrusive and effusive rocks. In the core of the area, the seafloor is characterised by thanatocoenosis surrounded at relatively lower depths by fine detrital substrates with communities of the sea-lily crinoid *Leptometra phalangium*. The area overlaps with the Pelagos Sanctuary for Marine Mammals, an Ecologically and Biologically Significant Marine Area, and a Key Biodiversity Area. Within this area there are: **reproductive areas** (Smallspotted Catshark *Scyliorhinus canicula*).

## **CRITERIA**

Sub-criterion C1 - Reproductive Areas

**ITALY** 

100-450 metres

732.3 km<sup>2</sup>

/ 32.3 Kill

sharkrayareas.org

#### DESCRIPTION OF HABITAT

Tuscany Offshore Thumb is located ~45 km off the western Italian coastline, in the Tuscan Archipelago. The area extends on the bottom of the outer limit of the continental shelf and has its midpoint at ~25 km from the island of Gorgona and 20 km from the island of Capraia. At a large scale, the area is affected by the Eastern Corsica Current that merges the colder Western Corsica Current supporting a cyclonic circulation toward the Northern Tyrrhenian and Ligurian Seas (Cataudella & Spagnolo 2011). At a finer scale, the surface currents form a clockwise circulation that turns southwards on the northern part of the island of Gorgona, until they embrace the southern coast of the island of Capraia (Astraldi et al. 1993). The seafloor includes beds of thanatocoenosis, surrounded at relatively lower depths by shelf-edge detrital substrates with communities of the sea-lily crinoid Leptometra phalangium.

The area overlaps with the Pelagos Sanctuary for Marine Mammals, an Ecologically and Biologically Significant Marine Area (the North-western Mediterranean Benthic Ecosystems EBSA; CBD 2016), and a Key Biodiversity Area (Arcipelago Toscano; KBA 2023).

This Important Shark and Ray Area is benthic and is delineated from 100 m to 450 m based on the bathymetry of the area.

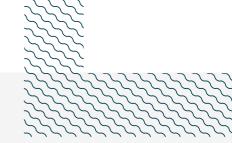
#### ISRA CRITERIA

## SUB-CRITERION C1 - REPRODUCTIVE AREAS

Tuscany Offshore Thumb is an important reproductive area for one shark species.

High densities of juveniles and egg cases of Smallspotted Catshark have been found in the area during >30 years of investigations (1985–2022; GRUND, Data Collection Framework-MEDITS [Mediterranean International Trawl Surveys]; Relini et al. 2000; Bertrand et al. 2002; Spedicato et al. 2019; MEDITS 2022). Egg cases are deposited in the area, attached to any material of biological and anthropological origin on the seafloor, and juveniles were recorded in MEDITS hauls (n = 6). Three trawl hauls were reported from south of the island of Gorgona at approximately 190, 220, and 400 m depth, and three hauls in the northern part at 200, 270, and 305 m depth. Further, in about 160 hauls conducted in the area from 1985 to 2022, an average of 2–4 egg cases were observed per haul, with an exceptional observation of tens of egg cases in one haul. Smallspotted Catshark pregnant females stay in the area only for the deposition of eggs and thereafter move to shallower waters, where they are more frequently caught (F. Serena unpubl. data 1985–2021).

In addition to the density of egg cases in the area, juvenile Smallspotted Catshark remain in the area for about a year, which is demonstrated by the capture of individuals up to 25 cm total length (TL) over several research campaigns (Baino & Serena 2000; Ivory et al 2004; Abella et al. 2017). This size corresponds to the size of young-of-the-year individuals (Ivory et al. 2004; Abella et al. 2017). These findings were recently confirmed by data from the MEDITS trawl survey, conducted from 2014 to 2018, with individuals considered to be <1 year old caught in the southernmost three MEDITS hauls, and a relatively high number also caught in the hauls to the north of the island of Gorgona.



#### **Acknowledgments**

Monica Barone (Independent Consultant), Cecilia Mancusi (ARPAT), Théophile L. Mouton (IUCN SSC Shark Specialist Group – ISRA Project), Caroline M. Bousquet (UAR Stella Mare UCPP-CNRS), and Fabrizio Serena (IRBIM-CNR) 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.** Tuscany Offshore Thumb 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	В	C <sub>1</sub>	C2	C3	C <sub>4</sub>	C <sub>5</sub>	Dı	D2
SHARKS				•	•	•	•	•	•			
Scyliorhinus canicula	Smallspotted Catshark	LC	0-800			Х						

# **SUPPORTING SPECIES**

Scientific Name	Common Name	IUCN Red List Category				
SHARKS						
Dalatias licha	Kitefin Shark	VU				
Etmopterus spinax	ppterus spinαx Velvet Belly Lanternshark					
Galeus melastomus	Blackmouth Catshark	LC				
Scyliorhinus stellaris	Nursehound	NT				
Squalus acanthias	Spiny Dogfish	EN				
RAYS						
Dipturus oxyrinchus	Longnosed Skate	NT				
Leucoraja circularis	oraja circularis Sandy Skate					
Raja clavata	Thornback Skate	NT				
Raja miraletus	Brown Skate	LC				
Raja polystigma	Speckled Skate	LC				
Torpedo marmorata	Marbled Torpedo Ray	LC				
CHIMAERAS						
Chimaera monstrosa	Rabbitfish	NT				

IUCN Red List of Threatened Species Categories are available by searching species names at <a href="https://www.iucnredlist.org">www.iucnredlist.org</a> Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.



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