

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

CALA VELLA MALLORCA ISRA

Mediterranean and Black Seas Region

SUMMARY

Cala Vella Mallorca is a small coastal area located in the east of Palma Bay in Mallorca Island, Spain. This shallow area is characterised by a combination of seagrass meadows and extensive submerged sandbanks, with rocky substrates restricted to a narrow and shallow belt. It is located within the Palma Bay Marine Reserve and the North-western Mediterranean Benthic Ecosystems Ecologically or Biologically Significant Marine Area. Within this area there are: **threatened species** (e.g., Rough Skate *Raja radula*); **rangerestricted species** (Rough Skate); and **reproductive areas** (Common Stingray *Dasyatis pastinaca*).

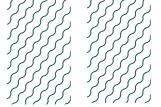
- – SPAIN - – 0-30 metres - – 10.6 km²

CRITERIA

Criterion A – Vulnerability; Criterion B – Range Restricted; Sub-criterion C1 – Reproductive Areas



sharkrayareas.org



DESCRIPTION OF HABITAT

Cala Vella Mallorca is a coastal area in the eastern part of Palma Bay, Mallorca Island, Spain. It is <30 m deep and extends from the coastline to ~2 km offshore. The area contains a variety of habitats, including seagrass meadows (mainly Neptune Grass *Posidonia* oceanica and *Cymodocea* nodosa), extensive submerged sandbanks, and rocky substrates that are restricted to a narrow and shallow belt.

Most of Cala Vella Mallorca falls within the no-take zone of the Palma Bay Marine Reserve. This area is within the North-western Mediterranean Benthic Ecosystems Ecologically or Biologically Significant Marine Area (CBD 2016) and the Aguas del Sur de Mallorca y Cabrera Key Biodiversity Area (BirdLife International 2023).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 30 m based on the observations of Qualifying Species and the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species[™] regularly occur in the area. These are the Endangered Rough Skate (Mancusi et al. 2016) and the Vulnerable Common Stingray (Jabado et al. 2021).

CRITERION B - RANGE RESTRICTED

The area holds the regular presence of the Rough Skate as a resident range-restricted species. Rough Skates occur year-round in the area and are regularly encountered by divers (G. Morey unpubl. data 2023). Four experimental hauls using trammel nets and benthic longlines were conducted in the area during 2014 and 2015, resulting in 17 Rough Skates being captured and released (G. Morey unpubl. data 2023). This species occurs only in the Mediterranean Sea Large Marine Ecosystem.

SUB-CRITERION C1 - REPRODUCTIVE AREAS

Cala Vella Mallorca is an important reproductive area for one ray species.

Common Stingrays seasonally aggregate to reproduce in the area. An underwater visual census with five-minute transects was conducted every two weeks in 2013, and citizen science divers have reported sightings continually since then. Common Stingrays have been observed in very shallow waters of the area resting on the bottom. Adults of both sexes aggregate in small groups (2-4 individuals) in this area, but the largest aggregations are found in a large sandy patch in 4-12 m depth. The highest abundances of mature specimens were recorded between late April and mid-May, with a mean abundance of 12 \pm 1.7 individuals per transect (range: 0-38), and up to 161 individuals were recorded in one hour (12 transects) at the main aggregation site (Morey et al. 2013). Females with mating scars have often been reported. The dedicated visual surveys in 2013 found 12 females with a visibly distended abdomen (Morey et al. 2013), and divers have also regularly reported similar observations since then, which suggests that potentially pregnant females visit the area to give birth.

Later in the season, between July and September, neonates have been reported (Morey et al. 2013). During the 2013 survey, 123 neonates were recorded, based on their size <25 cm disc width (DW) (size-at-birth = 12 cm DW; Saadaoui et al. 2015). Neonates have also been captured in experimental fishing surveys in 2015 and 2016 (G. Morey unpubl. data 2023).

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QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				Δ	В	Cı	C2	C3	C4	C5	Dı	D2
RAYS												
Dasyatis pastinaca	Common Stingray	VU	0-200	Х		Х						
Raja radula	Rough Skate	EN	0-350	Х	Х							



SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category						
SHARKS								
Mustelus mustelus	Common Smoothound	EN						
RAYS		- I						
Aetomylaeus bovinus	Duckbill Eagle Ray	CR						
Bathytoshia lata	Brown Stingray	VU						
Myliobatis aquila	Common Eagle Ray	CR						
Raja brachyura	Blonde Skate	NT						
Torpedo marmorata	Marbled Torpedo Ray	VU						

IUCN Red List of Threatened Species Categories are available by searching species names at <u>www.iucnredlist.org</u> 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 this area is an important site for undefined aggregations of Common Smoothhounds. Information from fishers operating next to this area suggests that Common Smoothounds may be more abundant in spring, when most individuals are captured, including large specimens. Inside the area, every evening over a week in May 2015, a group of ~10 Common Smoothhounds was reported from the same spot where the reproductive aggregation of Common Stingrays happens (G. Morey pers. obs.), and one of them (a female 141 cm TL) was captured and released with an experimental longline haul. Further observations are needed to examine if Common Smoothounds regularly occur in the area.

REFERENCES

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