

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

GRUTAS MARINHAS DO FUNCHAL ISRA

European Atlantic Region

SUMMARY

Grutas Marinhas do Funchal is located on the southern coast of Madeira Island, Portugal. The habitat is characterised by steep, south-facing volcanic cliffs interspersed with a series of sea caves with rocky substrates. Within this area there are: **threatened species** and **undefined aggregations** (Common Smoothhound *Mustelus mustelus*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C5 - Undefined Aggregations

— —
PORTUGAL

— —
0-18 metres

— —
0.26 km²





DESCRIPTION OF HABITAT

Grutas Marinhas do Funchal is located on the southern coast of Madeira Island, Portugal. It is situated between Paia Formosa and Lido beaches. The habitat is characterised by steep, south-facing volcanic cliffs interspersed with a series of sea caves. The substrate within these caves and along the connecting shore is heterogeneous and transitions from consolidated volcanic rock to unconsolidated boulders and sand with depth (McIvor et al. 2023).

The region is influenced by a surface current resulting from the interaction of the Azores and Portugal currents, forming the cold Canary Current, which is further reinforced by upwelling along the Moroccan coast. The predominant water mass in the area is the Central Water, characterised by temperatures of 9–19°C and salinity between 35.1–36.7 (Araújo et al. 2008).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 18 m based on the depth range of habitat in the area.

ISRA CRITERIA

CRITERION A – VULNERABILITY

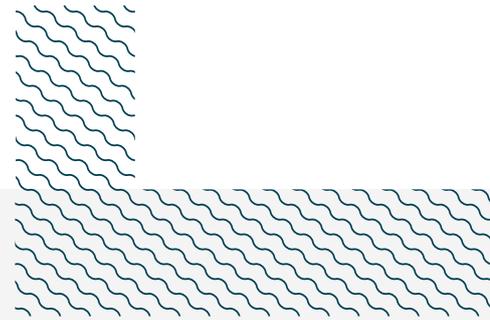
One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Endangered Common Smoothhound (Jabado et al. 2021).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Grutas Marinhas do Funchal is an important area for undefined aggregations of one shark species.

Data were gathered from opportunistic scientific observations and community sourced images from one cave in the area. This cave has an approximate area of 18 m² and is accessible through a tunnel (Tunel das Poças do Gomes) that connects natural pools (Doca do Cavacas) and an open beach (Praia Formosa). Between 2015–2020, aggregations of Common Smoothhounds were predictably observed between June and October in the area (McIvor et al. 2023). During this period, aggregations of 7–50+ Common Smoothhounds were opportunistically observed approximately once every 2–4 weeks (McIvor et al. 2023). Aggregations were formed by juvenile and subadult males and females (visually estimated between 50–70 cm total length [TL]). Individuals of 50–55 cm TL represented approximately 50–60% of the individuals within each aggregation (AJ McIvor pers. obs. 2022). Size-at-birth for Common Smoothhound is 34–42 cm TL and size-at-maturity ranges from 70–124 cm TL suggesting the majority of individuals were young-of-the-year (Ebert et al. 2021). Aggregations of juveniles and subadults were also reported nearshore in the Canary Islands between May–August supporting the importance of this type of habitat for the species during this life stage (Espino et al. 2022). This is the only area in Madeira Island where aggregations of more than 10 individual Common Smoothhounds are reported (AJ McIvor pers. obs. 2025). Further information is required to understand the nature and function of these aggregations.





Acknowledgments

Ashlie J McIvor (MARE-Madeira), Collin T Williams (NEOM Ocean Science and Solutions Applied Research Institute), João Canning-Clode (MARE-Madeira), Ana Dinis (MARE-Madeira), Mafalda Freitas (Estação de Biologia Marinha do Funchal), and Vanessa Bettcher Brito (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2025 ISRA Region 02 - European Atlantic 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. 2025. Grutas Marinhas do Funchal 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	B	C1	C2	C3	C4	C5	D1	D2
SHARKS												
<i>Mustelus mustelus</i>	Common Smoothhound	EN	0-800	X						X		

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



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