

Atlantic Ocean



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

AMBRÓSIO SEAMOUNT ISRA

European Atlantic Region

SUMMARY

Ambrósio Seamount is located at the northwest edge of the insular shelf of Santa Maria Island in the southeast Azores Archipelago, Portugal. This area supports high biological productivity due to strong currents that produce upwellings. It overlaps with the Santa María Key Biodiversity Area. Within this area there are: **threatened species** and **reproductive areas** (Sicklefin Devil Ray *Mobula tarapacana*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas

—	—
PORTUGAL	—
—	—
0-200 metres	—
—	—
1.96 km²	—
—	—





DESCRIPTION OF HABITAT

Ambrósio Seamount is located at the northwest edge of the insular shelf of Santa Maria Island in the southeast Azores Archipelago. The Azores are a Portuguese archipelago that sits in the mid-north Atlantic Ocean. This reef seamount is a prominently isolated pillow-lava cone (1.3 km in diameter) situated ~5.5 km at the northwest edge of the northern shelf of Santa Maria Island (Ricchi et al. 2018, 2020). The area rises to ~45 m below the surface and the maximum depth between shore and the peak is ~200 m (Ricchi et al. 2018, 2020).

This isolated feature rising above the surrounding depths disrupts ocean currents, leading to upwellings that push cold, nutrient richer waters to the surface, enhancing productivity and attracting various pelagic species. The area is characterised by strong currents and rapidly changing conditions (Ricchi et al. 2018, 2020). The area has temperate conditions as a result of the confluence of the North Atlantic Current and the Azores Current. Sea surface temperatures are lower in the boreal winter and higher in summer with chlorophyll- α concentrations showing the opposite pattern (Amorim et al. 2017).

Ambrósio Seamount overlaps with the Santa María Key Biodiversity Area (KBA 2025).

This Important Shark and Ray Area is pelagic and is delineated from surface waters (0 m) to a depth of 200 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. This is the Endangered Sicklefin Devil Ray (Marshall et al. 2022).

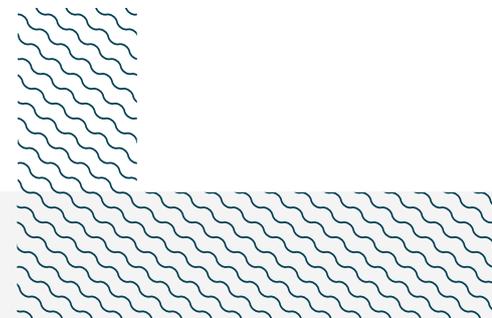
SUB-CRITERION C₁ – REPRODUCTIVE AREAS

Ambrósio Seamount is an important reproductive area for one ray species.

Pregnant female Sicklefin Devil Rays occur regularly and predictably in the area in larger numbers than in other places across the species' distribution (except for Princess Alice Bank, also in the Azores; Sobral 2013; A Sobral unpubl. data 2025). Between 1990-2024, photo-identification data collected from underwater visual census and citizen science (on a daily basis, weather permitting) revealed Sicklefin Devil Ray aggregations in the area. These were composed of 7-15 individuals on average with a maximum of 45 individuals recorded (Sobral 2013; A Sobral unpubl. data 2025). Since 2012, pregnancy has been consistently assessed and was assigned to an individual when a noticeable distended abdomen was observed in photographs. However, depending on the angle from which the photo was taken, pregnancy may be difficult to assess, indicating that the proportion of pregnant females is likely to be underestimated (A Sobral unpubl. data 2025).

Of 166 individuals identified by photo-identification in the area, 62 were females, 92 males, and 12 undetermined. Thirteen of these females (20.9%) were pregnant and occurred in the area between June-October (Sobral 2013; Sobral & Afonso 2014). The area is important for the gestation of this species as females in different stages of gestation are found in the area with extended abdomens growing noticeably bigger as the summer advances (A Sobral unpubl. data 2025). Additionally, nine individuals (two females and seven males) have been resighted across multiple years (1-8 years

between resighting) in this area with one of the females observed during two different pregnancies five years apart, indicating that this location can provide refuge and/or ideal conditions for gestating females (A Sobral unpubl. data 2025). One pregnant female recorded in this area in 2017 was first recorded pregnant in 2011 in Princess Alice Bank ~450 km northwest of Ambrósio Seamount (A Sobral unpubl. data 2025). Females are also regularly spotted with mating scars (healed) and males are all adults or sub-adults. Courtship behaviour has also been observed in the area (A Sobral unpubl. data 2025), although it does not seem to be a consistent behaviour (A Sobral unpubl. data 2025). There are no records of young-of-the-year or juveniles in the area.



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Ana F Sobral (Manta Catalog, Manta Trust) and Emiliano García-Rodríguez (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.

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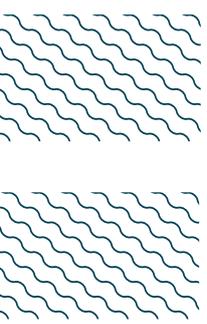
QUALIFYING SPECIES

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
RAYS												
<i>Mobula tarapacana</i>	Sicklefin Devil Ray	EN	0-1,896	X		X						

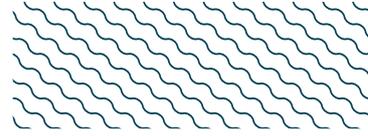
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Rhincodon typus</i>	Whale Shark	EN
RAYs		
<i>Mobula birostris</i>	Oceanic Manta Ray	EN

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 this area is important for feeding of one ray species.

Citizen science data from 2012–2024 have recorded aggregations of Sicklefin Devil Rays in the area (Sobral 2013; A Sobral unpubl. data 2025). Aggregations are regularly seen preying on bait balls of Longspine Snipefish (*Macrorhamphosus scolopax*) and Boarfish (*Capros aper*) (A Sobral pers. obs. 2013–2024). Sicklefin Devil Ray aggregations composed of 7–15 individuals on average occur in the summer, when the productivity is at its lowest (Visser et al. 2011; González García et al. 2023). This species is known to feed on small fishes and feeding on small pelagic fishes may represent an important opportunistic strategy in the area to meet energetic requirements. Additional information is needed to confirm the importance of the area for this species.



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