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

SANTA MARÍA ISLAND ISRA

European Atlantic Region

SUMMARY

Santa María Island is located around the southernmost island of the Azores Archipelago, Portugal. The coastline is characterised by the presence of rocky areas. Sea surface temperatures are lower in the boreal winter and higher in summer, with chlorophyll-α concentrations being highest in winter and spring. It overlaps with the Santa Maria Key Biodiversity Area. Within this area there are: **threatened species** and **feeding areas** (Whale Shark *Rhincodon typus*).

CRITERIA

Criterion A – Vulnerability; Sub-criterion C2 – Feeding Areas

PORTUGAL

0–1,500 metres

336.2 km²

sharkrayareas.org

DESCRIPTION OF HABITAT

Santa María Island is located around the southernmost island of the Azores Archipelago, an autonomous region of Portugal. The coastline is characterised by the presence of rocky areas. The area has temperate conditions as a result of the confluence of the North Atlantic Current and the Azores Current and is highly influenced by strong currents (Afonso et al. 2020). Sea surface temperatures are lower in the boreal winter (~14–15°C) and higher in summer (~23–24°C), with chlorophyll-α concentrations being highest (~0.43 mg m^{-3}) in winter and spring (Amorim et al. 2017).

The area overlaps with the Santa María Key Biodiversity Area (KBA 2025).

This Important Shark and Ray Area is pelagic and is delineated from inshore and surface waters (0 m) to 1,500 m based on the bathymetry of the area.

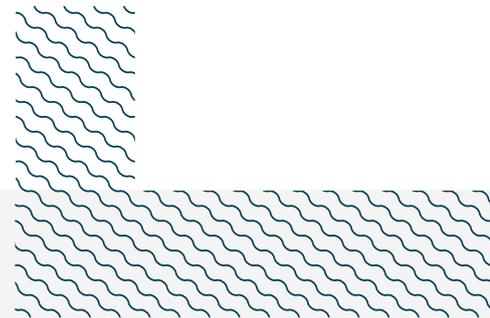## ISRA CRITERIA

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 Whale Shark (Pierce & Norman 2016).

SUB-CRITERION C2 – FEEDING AREAS

Santa María Island is an important feeding area for one shark species.

Observations from fishery observers, animal-borne camera tags, and underwater visual census (UVC) surveys have shown that Whale Sharks regularly and predictably aggregate in the area to feed on baitfish (Fontes et al. 2020, 2024; B Macena et al. unpubl. data 2025). Records of Whale Sharks associated with the pole-and-line tuna fishery in the Azores operating between May–November were collected by fishery observers between 2008–2013 (Fontes et al. 2020). Whale Sharks were recorded in association with tunas and were observed preying on bait balls of snipefishes (*Macroramphosus* spp.) corralled by large schools of Bluefin Tuna (*Thunnus thynnus*), Bigeye Tuna (*T. obesus*), Skipjack Tuna (*Katsuwonus pelamis*), and Yellowfin Tuna (*T. albacares*), with the largest number of aggregations across the archipelago recorded in this area (Fontes et al. 2020, 2024; B Macena et al. unpubl. data 2025). This behaviour was also observed daily during UVCs and tagging trips conducted in the area during summer between 2019–2024 and from videos recorded by animal-borne tags where 161 sightings of Whale Sharks feeding were recorded (B Macena et al. unpubl. data 2025). It has been reported that Whale Shark observations increase in these months when the sea surface temperature is highest (22–24°C) and chlorophyll-α decreases (Afonso et al. 2014).

Photographs were also collected between 2008–2022 from UVCs and the diving community across the Azores (Alsina 2021; B Macena et al. unpubl. data 2025). Of 182 Whale Sharks photo-identified, 167 (91.7%) were recorded around the western coast of Santa María Island. Individuals were recorded between July–November with the higher number of observations in August and September (Alsina 2021; B Macena et al. unpubl. data 2025). This also matches the season when the tuna fishery operates in the area. In addition, Whale Sharks tagged either with satellite transmitters (n = 31) or with biologgers (n = 39), and monitored between 2019–2024, showed that individuals move around Santa María Island during summer months (B Macena et al. unpubl. data 2025).

Suggested citation

IUCN SSC Shark Specialist Group. 2025. Santa María Island 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												
Rhincodon typus	Whale Shark	EN	0–1,928	X			X					

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
Mobula tarapacana	Sicklefin Devil 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.
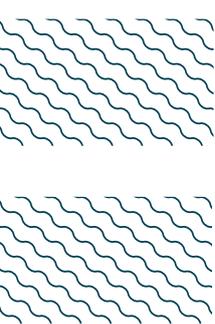
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