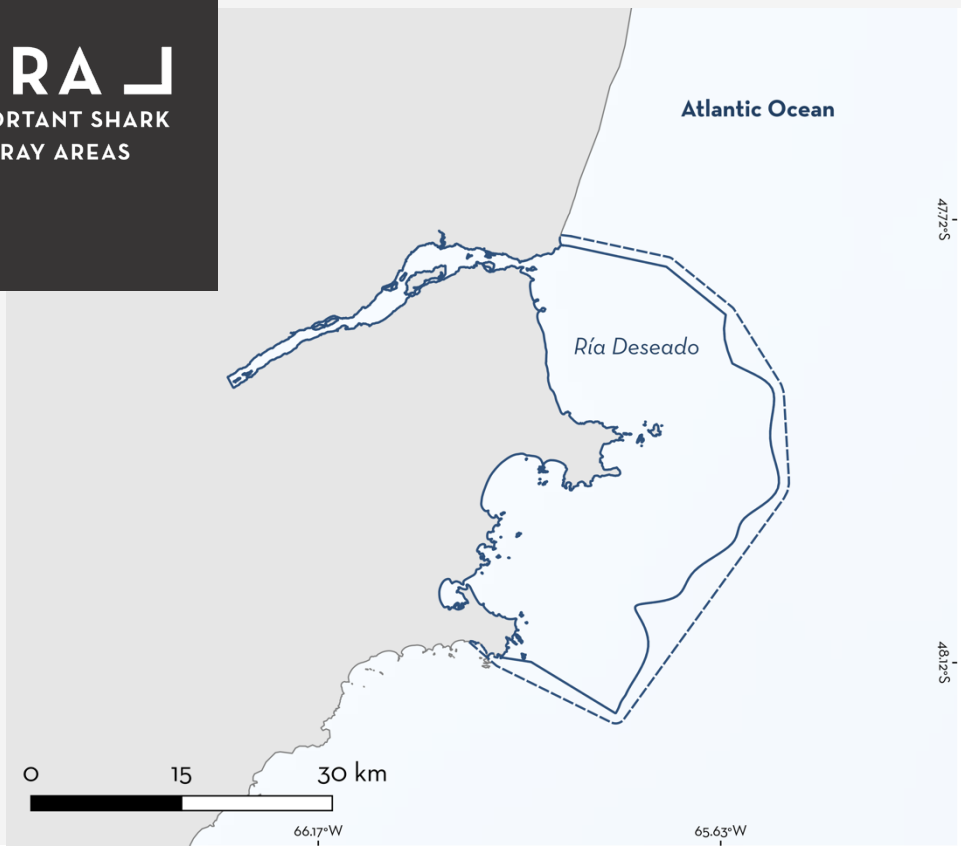
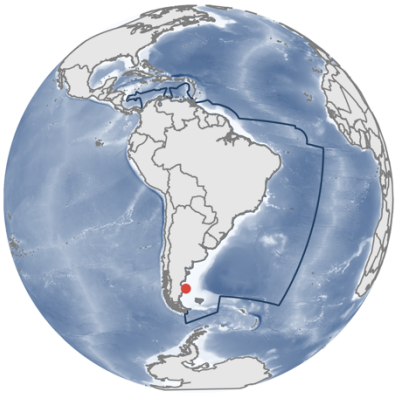
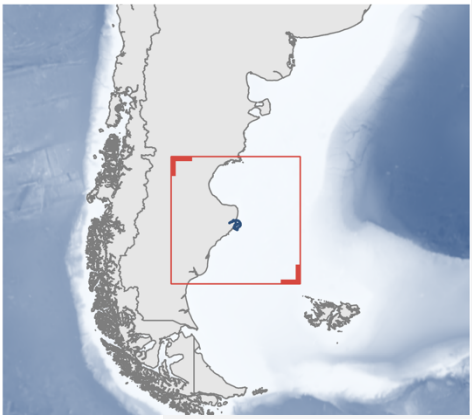
ISRA
IMPORTANT SHARK AND RAY AREAS







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

RÍA DESEADO ISRA

South American Atlantic Region

ARGENTINA

0–50 metres

886.9 km²

SUMMARY

Ría Deseado is located in southern Patagonia, in the Santa Cruz province of Argentina. It is an estuarine and inshore coastal environment with turbid conditions and is characterised by a large tidal range. Within this area there are: **threatened species** and **undefined aggregations** (Broadnose Sevengill Shark *Notorhynchus cepedianus*).

CRITERIA

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

DESCRIPTION OF HABITAT

Ría Deseado is located in southern Patagonia, in the Santa Cruz province of Argentina. The area is a 40 km long estuarine penetration of the South Atlantic Ocean into the Patagonian coast in Argentina. The Deseado River discharges into the area with a very low drainage restricted to austral spring and summer (Chiaramonte & Pettovello 2000). The mean surface temperature ranges from 4–14 °C. This area is characterised by a large tidal range with amplitudes of ~6 m, with very strong tidal currents (Chiaramonte & Pettovello 2000). During low tide, large areas of the rocky and/or muddy tidal zone are exposed, the former including many tide pools.

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 50 m based on the depth use of Qualifying Species 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 Vulnerable Broadnose Sevengill Shark (Finucci et al. 2020).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Ría Deseado is an important area for undefined aggregations of one shark species.

There are historical records of fishing tournaments targeting Broadnose Sevengill Sharks in the area. Since the 1970's fishing competitions have reported captures of young-of-the-year (YOY) and juvenile Broadnose Sevengill Sharks in this area (Cedrola et al. 2009; C Pantano & AJ Irigoyen unpubl. data 2025). In 2003–2004, interviews were conducted with recreational fishers (n = 15) in the area to gather information on the best fishing locations and seasons for Broadnose Sevengill Sharks (Caille & Cedrola 2007). Historical local ecological knowledge from fishers reported that the fishing season extends from November to February and that the best areas for fishing, due to the abundance of individuals, are located within the area, particularly inside the Ría, providing support for species aggregations in the area. They also noted that the majority of captured individuals are juvenile females (Caille & Cedrola 2007), suggesting there could be a reproductive purpose for this aggregation. A survey of the fishing tournaments and recreational fishery between 2004–2007 collected sex, size (total length; TL), and weight of sharks caught in the area (n = 63; Cedrola et al. 2009). Broadnose Sevengill Sharks caught in the area measured between 115–232 cm TL, with a mean of 178.1 cm TL. Demographically, juvenile females dominated the catches (Cedrola et al. 2009).

In January–February 2025, a combination of sports fishers and scientific fishing efforts using longlines caught and measured Broadnose Sevengill Sharks in the area (n = 44; 125–250 cm TL). During a four-hour shore fishing session, 15 sharks were caught demonstrating the aggregative nature of the species in the area (C Pantano & AJ Irigoyen pers. obs. 2025). Size-at-maturity for this species is ~150–180 cm TL (Ebert et al. 2021), indicating some of the individuals were immature. Most captures were of females (93.2%; n = 41) and captures were concentrated at La Ventana and El Puesto in the area.

Ría Deseado is potentially important for reproductive or feeding aggregations of this species. Regionally, the area has been proposed as a secondary nursery area for larger juvenile Broadnose

Sevengill Sharks (De Wysiecki et al. 2023). Aggregations of smaller individuals have been confirmed in northern Argentina, where it is presumed the warmer waters provide primary nursery habitat for the growth of younger life stages of this species. Whereas it is proposed the colder conditions of coastal aggregation areas further south may provide better feeding opportunities for larger juveniles (Irigoyen et al. 2019; De Wysiecki et al. 2023). Broadnose Sevengill Sharks are known to seasonally aggregate in other parts of the globe for feeding or reproductive purposes (Ebert 1989; Lucifora et al. 2005; Barnett et al. 2010; Abrantes & Barnett 2011; Williams et al. 2012; Stehfest et al. 2014; Hammerschlag et al. 2019). However more information is needed to determine the nature and function of this aggregation.

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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
SHARKS												
Notorhynchus cepedianus	Broadnose Sevengill Shark	VU	0–570	X						X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Galeorhinus galeus	Tope	CR
Mustelus fasciatus	Striped Smoothhound	CR
Mustelus schmitti	Narrownose Smoothhound	CR
Schroederichthys bivius	Narrowmouth Catshark	LC
Squalus acanthias	Spiny Dogfish	VU
RAYS		
Bathyraja griseocauda	Greytail Skate	EN
Myliobatis ridens	Shortnose Eagle Ray	CR
Sympterygia bonapartii	Smallnose Fanskate	NT
CHIMAERAS		
Callorhinchus callorynchus	American Elephantfish	VU

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 Ría Deseado is a potentially important reproductive area for one range-restricted shark species.

Gravid female Narrownose Smoothhounds were caught in the area in spring 1994 and 1995. A female caught in the first week of November 1994 carried six embryos of 20.8–22.4 cm TL, while another caught on 12 December 1995 carried embryos of 25.4–28.1 cm TL. Size-at-birth for this species is ~24–36 cm TL (Ebert et al. 2021). Between January–March 1995, YOY were caught in Ría Deseado. The smallest free swimming female neonate captured measured 25.2 cm TL and the smallest free swimming male captured measured 28.1 cm TL. Neonates were caught in February. Mature males ranged from 70.8–88.7 cm TL and mature females ranged from 79.5–91.3 cm TL (Chiaramonte & Pettovello 2000; Leyton & Chiaramonte 2024). Of 88 free-swimming individuals sampled, 11 were classified as neonates or YOY (with yolk sac scars). Sizes ranged from 25.2–91.3 cm TL (males [n = 56] 28.1–88.7 cm TL and females [n = 32] 25.2–91.3 cm TL; Chiaramonte & Pettovello 2000). Contemporary data are required to determine the importance of this area for this species.

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