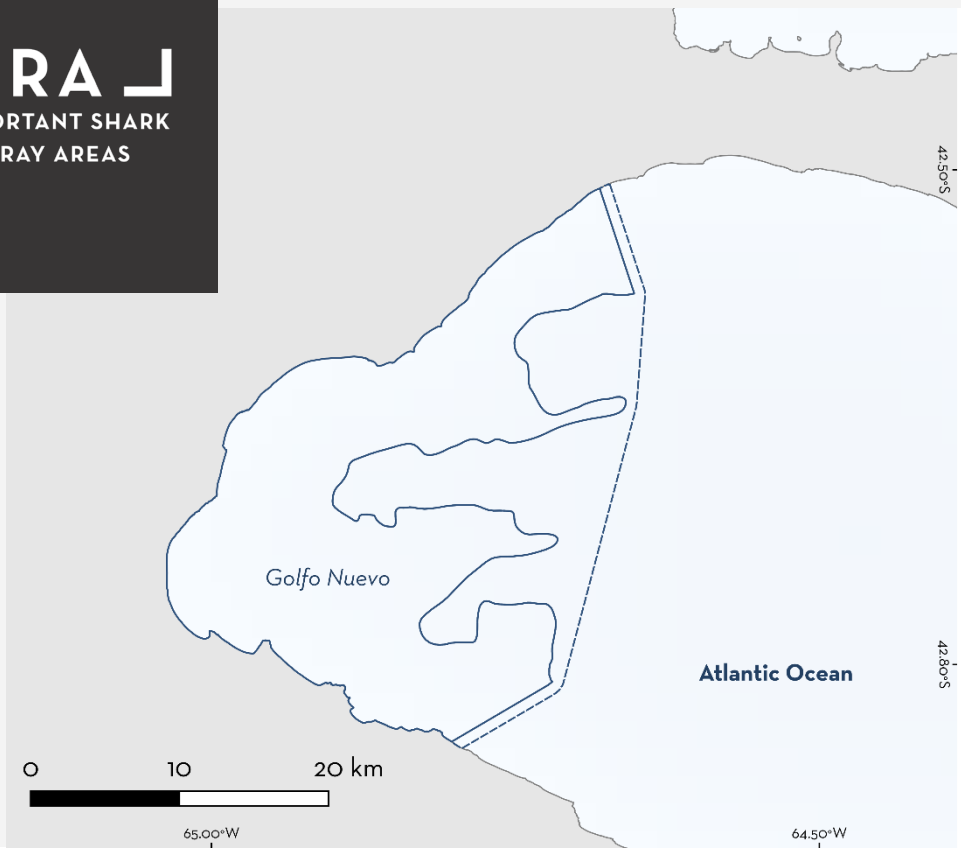
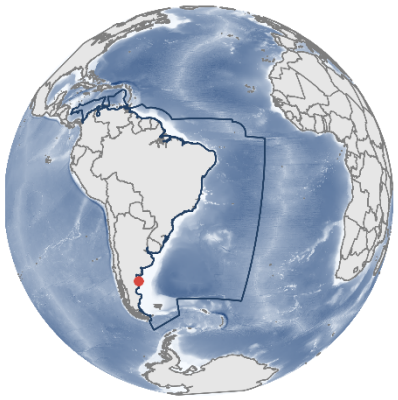
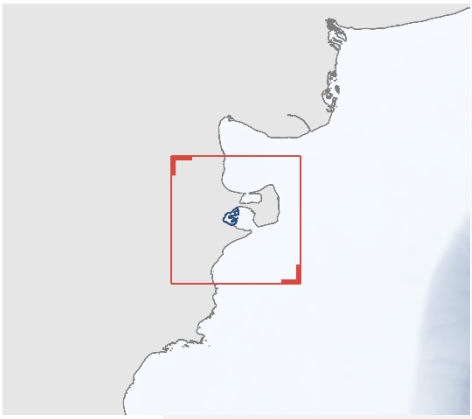
ISRA
IMPORTANT SHARK AND RAY AREAS







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

GOLFO NUEVO ISRA

South American Atlantic Region

ARGENTINA

0–110 metres

500.9 km²

SUMMARY

Golfo Nuevo is located in the northeast of Chubut Province in Argentina. The area encompasses the western and central areas of the gulf that is formed by the Carlos Ameghino Isthmus with the Peninsula de Valdés. It is characterised by sandy substrates and rocky reefs and is influenced by a strong austral summer stratification. Within the area there are: **threatened species** and **undefined aggregations** (Tope *Galeorhinus galeus*).

CRITERIA

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

DESCRIPTION OF HABITAT

Golfo Nuevo is located in the northeast of Chubut Province in Argentina. The area is situated south of the Carlos Ameghino Isthmus, which connects the Peninsula de Valdés with the continent. The gulf is 56 km long and 40 km wide, with a 16 km wide entrance, and reaches depths of up to 170 m at its entrance. The area is characterised by sandy substrates and rocky reefs. It is influenced by a strong summer stratification, with cool benthic water temperatures of 11–12ºC and warmer surface waters of 16–17ºC (Rivas & Pipa 1989). The tidal regime in Golfo Nuevo is semidiurnal, with mean amplitudes of 4.7 m and 2.9 m (Villaverde et al. 1974).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 110 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 Critically Endangered Tope (Walker et al. 2020).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Golfo Nuevo is an important area for undefined aggregations of one shark species.

Tope aggregates seasonally during the austral summer and early autumn in the area. In 2011, 2012, 2015, and 2017 scientific surveys captured and tagged Tope using a longline at a depth between 80–110 m. Between 2011–2012, a total of 17 fishing trips were conducted, with at least one fishing day per month. A bottom-set longline measuring between 500–1,200 m, with hooks spaced every 10 m, was deployed for a maximum duration of 120 min (Irigoyen et al. 2015). Captured Tope were sexed, tagged using traditional dart tags, and their sizes were visually estimated. Catch-per-unit-effort (CPUE) was used to calculate the relative abundance as individuals captured hooks^{-1} h^{-1}. A total of 228 Tope were captured (129 females, 98 males, and one undefined) with higher values of CPUE (0.20 captures hooks^{-1} h^{-1}) during summer and early autumn compared to the CPUE ranging from 0.13–0.02 during the rest of the year (Irigoyen et al. 2015).

Additionally, in 2015 (n = 3) and 2017 (n = 1), scientific fishing days were conducted during February and March using an 800 m bottom longline equipped with 110 baited hooks and set for 120 min (Jaureguizar et al. 2018; AJ Irigoyen unpubl. data 2025). Across these fishing days, a total of 13, 63, and 14 individuals were captured respectively in 2015, while 36 individuals were captured during one fishing day in 2017 (Jaureguizar et al. 2018; AJ Irigoyen unpubl. data 2025). The individuals measured 90–150 cm total length (TL) (AJ Irigoyen unpubl. data 2025). These sizes indicate that individuals captured were immature or subadults, as the species reaches maturity at ~120–170 cm TL for males and 130–185 cm TL for females (Ebert et al. 2021). During the same period, three prospective longline deployments were conducted in surrounding areas of the eastern section of Golfo Nuevo, as well as in San José and San Matías Gulf to the north (AJ Irigoyen unpubl. data 2025). The recorded CPUE values were 92.5% lower than those observed in the area during the high season and even lower than those of the low season, with a CPUE of 0.015 (captures hooks^{-1} h^{-1}) (AJ Irigoyen unpubl. data 2025).

Further, in 2021 Baited Remote Underwater Video Station (BRUVS) surveys were undertaken with >400 deployments along the coast of the southwest Atlantic between 41–55°S, including several deployments within the area (n = 97) (PJ Merlo unpubl. data 2025). Despite the low visibility in the area during January, four BRUVS deployments recorded a MaxN (maximum number of individuals of a species observed in a single frame) of two individuals, and one deployment in the area recorded three individuals in the same frame (PJ Merlo unpubl. data 2025). Based on the maximum value of MaxN and the medium MaxN, Golfo Nuevo had a high relative abundance of Tope compared with the rest of the areas surveyed, suggesting that this area serves as an aggregation site for the species (Irigoyen et al. 2015; Jaureguizar et al. 2018; PJ Merlo unpubl. data 2025).

Historical data from commercial fisheries during February and April in 2001 reported a total of 319 Tope with full stomachs, including prey items such as Argentine Hake *Merluccius hubbsi*, Cuskeels *Genypterus blacodes* and *Raneya brasiliensis*, and squid *Illex argentinus*, with 90% of stomachs surveyed containing food (Elias et al. 2004). It is possible that Tope aggregate in this area to feed, but further information is required to confirm the nature and function of these aggregations.

Acknowledgments

Alejo J Irigoyen (Fish Ecology Lab – Centro para el Estudio de Sistemas Marinos – Centro Nacional Patagónico), Gaston Trobbiani (Fish Ecology Lab – Centro para el Estudio de Sistemas Marinos – Centro Nacional Patagónico), Pablo J Merlo (Fish Ecology Lab – Centro para el Estudio de Sistemas Marinos – Centro Nacional Patagónico), María Lourdes Estalles (Dirección Nacional de Áreas Marinas Protegidas – Administración de Parques Nacionales), Paula Cedrola (Dirección Nacional de Áreas Marinas Protegidas – Administración de Parques Nacionales), Andrés J Jaureguizar (Comisión de Investigaciones Científicas – Universidad Provincial del Sudoeste), and Marta D Palacios (IUCN SSC Shark Specialist Group – ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2025 ISRA Region 05 – South American 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. Golfo Nuevo 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												
Galeorhinus galeus	Tope	CR	0–826	X						X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Carcharhinus brachyurus	Copper Shark	VU
Mustelus schmitti	Narrownose Smoothhound	CR
Notorynchus cepedianus	Broadnose Sevengill Shark	VU
Squalus acanthias	Spiny Dogfish	VU
RAYS		
Myliobatis goodei	Southern Eagle Ray	VU
Myliobatis ridens	Shortnose Eagle Ray	CR
CHIMAERAS		
Callorhinchus callorhynchus	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 Golfo Nuevo is part of a movement corridor for Tope between Golfo Nuevo and southern Brazil-Uruguay, Mar del Plata, Necochea, and San Blas (Irigoyen et al. 2015; Jaureguizar et al 2018; De Wysiecki et al. 2022). Of 390 Topes tagged in Golfo Nuevo, a high number of recaptures occurred within the tagging program in the area, showing a high degree of site fidelity between and within seasons (Irigoyen et al. 2015; AJ Irigoyen unpubl. data 2025). However, 10 recaptures from recreational and commercial fishers were reported from southern Brazil, northern Uruguay, Mar del Plata, Necochea, and San Blas. This represents the first evidence of a potential seasonal migration pattern for part of the population (Irigoyen et al. 2015; Jaureguizar et al 2018; De Wysiecki et al. 2022). Further information is required to establish whether movements between these locations are regular and predictable, and what the importance of this area is for movement purposes.

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