

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

CABO SAN LUCAS ISRA

Central and South American Pacific Region

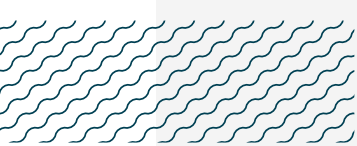
SUMMARY

Cabo San Lucas is located at the tip of the Baja California Peninsula in Mexico. The area includes one protected area, the Protection Area of Fauna and Flora Cabo San Lucas. The coastal landscape around Cabo San Lucas is a succession of sandy beaches, rocky cliffs, and mangrove ecosystems. The continental shelf in the area is narrow with the continental slope rapidly descending to 1,000 m depth towards an area of canyons, such as the San Lucas submarine canyon and the Vinorama canyon that ends in the Banco Gordo seamount. Within this area there are: **threatened species** (e.g., Silky Shark *Carcharhinus falciformis*); areas important for **movement** (e.g., Spinetail Devil Ray *Mobula mobular*); and **undefined aggregations** (e.g., Whale Shark *Rhincodon typus*).

CRITERIA

**Criterion A - Vulnerability; Sub-criterion C4 - Movement;
 Sub-criterion C5 - Undefined Aggregations**

— —
MEXICO — —
 — —
0-1,928 metres — —
 — —
3,779 km² — —
 — —





DESCRIPTION OF HABITAT

Cabo San Lucas is located on the tip of the Baja California Peninsula in Baja California Sur state, Mexico. It has a narrow continental shelf that quickly reaches depths greater than 1,000 m. Situated within the Gulf of California Large Marine Ecosystem, this area contains prominent submarine canyons, including the San Lucas and Vinorama canyons, and the Banco Gordo seamount. Within this area, three water masses converge: cold water with lower salinity (~34 ppt) from the California Current; temperate water with medium salinity (~34.5 ppt) from the Eastern Tropical Pacific; and warm water with higher salinity (~34.9 ppt) from the Gulf of California. The sea surface temperature varies from 20°C in winter to 30°C in summer (Fiedler & Talley 2006; CONANP 2012; Mascareño-Suárez 2019). This area includes one protected area, the Protection Area of Fauna and Flora Cabo San Lucas (CONANP 2012).

This Important Shark and Ray Area is delineated from inshore and surface waters (0 m) to a depth of 1,928 m based on the maximum depth of the Qualifying Species.

ISRA CRITERIA

CRITERION A - VULNERABILITY

Three Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species™ regularly occur in the area. Threatened sharks comprise the Endangered Whale Shark (Pierce & Norman 2016) and the Vulnerable Silky Shark (Rigby et al. 2021); threatened rays comprise the Endangered Spinetail Devil Ray (Marshall et al. 2022).

Additionally, Whale Shark is listed as 'Threatened' and Spinetail Devil Ray as 'Subject to special Protection' in the Official Mexican Standard NOM-059-SEMARNAT-2010 for wildlife protection (DOF 2010).

CRITERION C4 - MOVEMENT

Cabo San Lucas is an important area for the movement of two shark and one ray species.

Tracking data show that Silky Sharks move to this area near the coast during the boreal summer and autumn as part of their migrations to other areas in the Mexican Pacific, such as Revillagigedo Archipelago and the coasts of Sinaloa and Nayarit (Ketchum et al. 2020; J. Ketchum unpubl. data 2022).

Satellite tracking shows that adult and juvenile Whale Sharks move to Cabo San Lucas and Banco Gordo from Bahía La Paz during boreal spring and summer. Based on satellite telemetry and photo-identification, the movements of adult females from Banco Gordo (that were presumably pregnant) to Revillagigedo Archipelago and back have been recorded (Eckert & Stewart 2001; Ramírez-Macias et al. 2012, 2017; SEMARNAT 2018; Ketchum et al. 2020).

Spinetail Devil Rays (n = 13) tagged with satellite transmitters between 2004-2008 showed movements from the area of La Paz to areas near Cabo San Lucas during summer (June-August) (Croll et al. 2012).

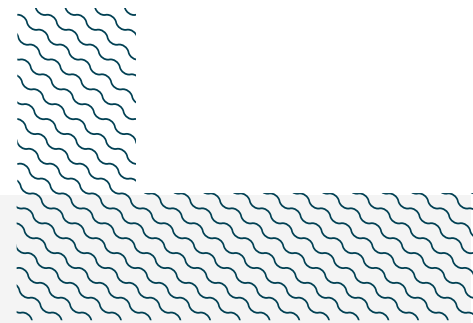


SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Cabo San Lucas is an important area for undefined aggregations of two shark species.

The presence of adult female Silky Shark aggregations was reported from the waters around Banco Gordo during the boreal summer 2021. Out of the 210 observed females, 63 presented recent mating scars (Whitehead et al. 2022) which suggests that this area is used for mating. However, more evidence confirming that mating occurs within the area is needed.

Aggregations of Whale Sharks around the seamounts near Cabo San Lucas are recorded between April-June. These are composed mostly of large females (9-15 m total length [TL]), most are thought to be pregnant based on distended abdomens (Ramírez-Macías et al. 2017; SEMARNAT 2018). However, additional information to confirm their reproductive state is needed. Furthermore, juvenile Whale Sharks aggregate in Cabo San Lucas for unknown purposes, however, they are known to aggregate for feeding purposes in nearby La Paz.



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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												
<i>Carcharhinus falciformis</i>	Silky Shark	VU	0-500	X					X	X		
<i>Rhincodon typus</i>	Whale Shark	EN	0-1,928	X					X	X		
RAYs												
<i>Mobula mobular</i>	Spinetail Devil Ray	EN	0-1,112	X					X			

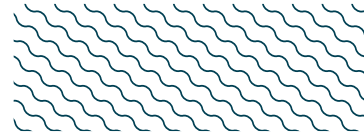
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Alopias pelagicus</i>	Pelagic Thresher	EN
<i>Carcharhinus limbatus</i>	Blacktip Shark	VU
<i>Carcharhinus obscurus</i>	Dusky Shark	EN
<i>Galeocerdo cuvier</i>	Tiger Shark	NT
<i>Isurus oxyrinchus</i>	Shortfin Mako	EN
<i>Prionace glauca</i>	Blue Shark	NT
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR
<i>Sphyrna zygaena</i>	Smooth Hammerhead	VU
<i>Squatina californica</i>	Pacific Angelshark	NT
RAYS		
<i>Mobula munkiana</i>	Munk's Pygmy Devil Ray	VU
<i>Mobula birostris</i>	Oceanic Manta Ray	EN
<i>Mobula thurstoni</i>	Bentfin Devil Ray	EN

IUCN Red List categories: *CR*, Critically Endangered; *EN*, Endangered; *VU*, Vulnerable; *NT*, Near Threatened; *LC*, Least Concern; *DD*, Data Deficient.

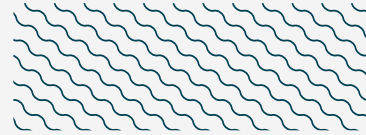


SUPPORTING INFORMATION



There are additional indications that this area is important for reproductive purposes. Pregnant female Shortfin Makos ($n = 3$) and Smooth Hammerheads ($n = 6$) have been observed using the area. In addition, a neonate Shortfin Mako (60 cm TL) was recorded (Mascareño-Suárez 2019). Reported size-at-birth of the species is 60-70 cm TL (Ebert et al. 2021).

Other shark species seasonally aggregate in the area. Shortfin Mako is present during boreal winter and spring and Smooth Hammerhead during spring and the first months of summer. More information is needed to confirm the regular presence of these aggregations and their function (Mascareño-Suárez 2019).



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