

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

CEDROS ESCARPMENT ISRA
North American Pacific Region

SUMMARY

Cedros Escarpment is located in oceanic waters off Baja California, Mexico. The area is highly productive and that covers precious characterised by a steep continental slope and multiple canyons. The influence of the California Current and Equatorial Pacific waters brings upwelling events during the boreal spring and summer. Within this area there are: **threatened species** and **reproductive areas** (Shortfin Mako *Isurus oxyrinchus*).

CRITERIA

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

—	—
MEXICO	—
—	—
0-1,888 metres	—
—	—
7,105.6 km²	—
—	—





DESCRIPTION OF HABITAT

Cedros Escarpment is located off Baja California Sur, Mexico. It is situated ~15 km off the coast extending from Asunción Bay to Punta Abreojos. The area is characterised by a steep continental slope with multiple canyons.

The area is located in the transition zone between the influence of the California Current and Equatorial Pacific waters. The California Current is a surface current carrying water equatorward along the Pacific coast of North America which is characterised by low temperatures, low salinities, and high dissolved oxygen (Lynn & Simpson 1987). Equatorial Pacific waters are subsurface, warm, and saline, with low-oxygen and high-nutrient content. The mixing of these waters creates a high-productivity areas due to high levels of upwelling, especially during the boreal spring and summer (Zaytsev et al. 2003).

This Important Shark and Ray Area is pelagic and is delineated from surface waters (0 m) to 1,888 m based on the global depth range of Qualifying Species.

ISRA CRITERIA

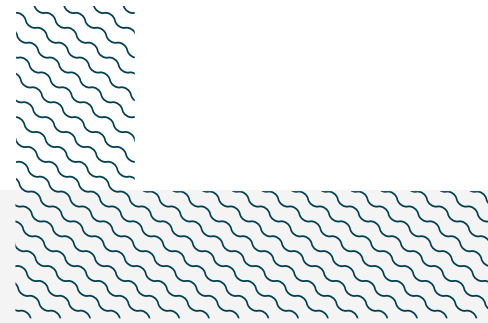
CRITERION A – VULNERABILITY

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 Shortfin Mako (Rigby et al. 2019).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Cedros Escarpment is an important reproductive area for one shark species.

Neonate and young-of-the-year (YOY) Shortfin Makos have been regularly recorded in the area by scientific observers (Carreón-Zapiain et al. 2018). Industrial shark longline fisheries operating off the west coast of the Baja California Peninsula were monitored by on-board observers between 2006–2013 and 2006–2018 (Carreón-Zapiain et al. 2018; Carrillo-Colín et al. 2021). During the first period, 5,740 Shortfin Makos were measured, ranging between 70–362 cm total length (TL; Carreón-Zapiain et al. 2018). The smallest individuals had similar sizes to the reported size-at-birth for the species (60–70 cm TL; Ebert et al. 2021). YOY were defined as individuals <100 cm TL which coincides with age-and-growth studies from the region (Rodríguez-Madrugal et al. 2023). Of the individuals measured, ~530 (~9.2%) were classified as neonate/YOY. Cedros Escarpment was the area with the second highest number of neonate/YOY recorded across the whole west coast of the Baja California Peninsula and these life-stages were recorded in higher numbers between July–September (Carreón-Zapiain et al. 2018). This species is caught inside the area by the longline fleet based in Ensenada, Baja California (Carrillo-Colín et al. 2021). Between 2006–2018, 3,116 Shortfin Makos were measured by on-board observers monitoring this fleet, of which ~610 (19.6%) measured between 60–100 cm TL and were classified as neonate/YOY. Shortfin Makos were caught in the same months (July–November) and fishing areas as the previous report suggesting this area is still important for early life-stages (Carrillo-Colín et al. 2021)



Acknowledgments

María Teresa Carreón-Zapiain (Universidad Autónoma de Nuevo León) 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 2026 ISRA Region 11 - North American Pacific region 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. 2026. Cedros Escarpment ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

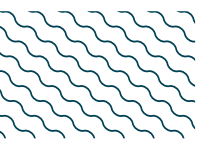
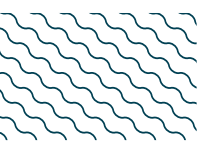
QUALIFYING SPECIES

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												
<i>Isurus oxyrinchus</i>	Shortfin Mako	EN	0-1,888	X		X						

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Alopias vulpinus</i>	Common Thresher	VU
<i>Prionace glauca</i>	Blue Shark	NT

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.





REFERENCES

- Carreón-Zapiain MT, Favela-Lara S, González-Pérez JO, Tavares R, Leija-Tristán A, Mercado-Hernández R, Campeán-Jiménez GA. 2018.** Size, age, and spatial-temporal distribution of shortfin mako in the Mexican Pacific Ocean. *Marine and Coastal Fisheries* 10: 402-410. <https://doi.org/10.1002/mcf2.10029>
- Carrillo-Colín LD, Castillo-Géniz JL, Haro-Ávalos H. 2021.** Programa de observadores de tiburón (POT) en la pesquería industrial del Pacífico. In: Tovar-Ávila J, Castillo-Géniz JL, eds. *Tiburones mexicanos e importancia Pesquera en la CITES Parte II*. Mexico City: Instituto Nacional de Pesca y Acuicultura, 39-58.
- Ebert DA, Dando M, Fowler S. 2021.** *Sharks of the world: A complete guide*. Princeton: Princeton University Press.
- Lynn RJ, Simpson JJ. 1987.** The California Current system: The seasonal variability of its physical characteristics. *Journal of Geophysical Research: Oceans* 92: 12947-12966. <https://doi.org/10.1029/jc092ic12p12947>
- Rigby CL, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Jabado RW, Liu KM, Marshall A, Pacoureaux N, et al. 2019.** *Isurus oxyrinchus*. *The IUCN Red List of Threatened Species* 2019: e.T39341A2903170. <https://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T39341A2903170.en>
- Rodríguez-Madrigal JA, Tovar-Ávila J, Castillo-Geniz JL, Godínez-Padilla CJ, Márquez-Farías JF, Corro-Espinosa D. 2023.** Re-estimation of juvenile *Isurus oxyrinchus* growth in the Mexican Pacific through a multimodel inference approach and verification of growth band periodicity. *Journal of Fish Biology* 102: 1373-1386. <https://doi.org/10.1111/jfb.15381>
- Zaytsev O, Cervantes-Duarte R, Montante O, Gallegos-Garcia A. 2003.** Coastal upwelling activity on the Pacific shelf of the Baja California Peninsula. *Journal of Oceanography* 59: 489-502. <https://doi.org/10.1023/A:1025544700632>