## **DWM SUMMER 2023**

Shark Research in Cozumel

Hello there,

A little bit about us. We are <u>Mar Sustentable</u>. Our mission is to research and inform on the need to protect and make changes, as individuals and as a community, for a healthier "planet ocean." And now, we are back again with our Dive with Martin family and friends to talk about our shark research on Cozumel.

Our shark research study requires two design elements. One is to interview fishermen and scuba divers to understand their valuable perceptions regarding the environment and knowledge of local sharks. These socio-ecological observations, along with our team's field observations, are integrated with methods of historical ecology and geospatial tools to gain a better understanding of the past, current and future of sharks found around Isla Cozumel.

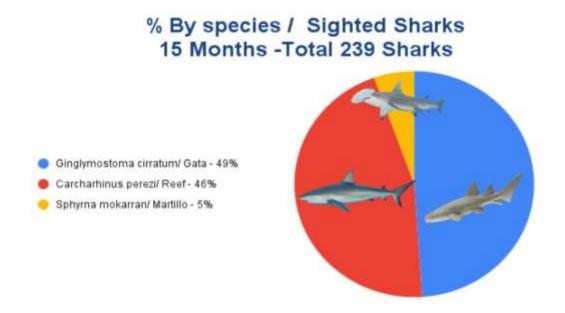


The second design element is to document sightings of sharks around Cozumel on weekly dives. During these dives, Dive With Martin's team works closely with us by providing boats, crew and local knowledge of the reefs. On our underwater surveys, our team documents sharks, fish and other ocean species on the reefs. We can tell you that a popular shark on the island is the Caribbean nurse shark. This shark has characteristic "whiskers", small eyes, tiny spiracles, and the precaudal tail shorter than the head and body. Nurse sharks do not have high commercial value; however, locals do capture the species in Quintana Roo.

Below you will find information about the types of sharks we have spotted in 15 months of observation during our fieldwork.



The nurse shark is the most popular shark sighted on Cozumel. We have documented nurse sharks of all ages on Cozumel reefs, along with important nursery habitats. Thanks to our diver friends and social media, we are also identifying anthropogenic threats to nurse sharks on Cozumel. Anthropogenic threats are any environmental changes caused or influenced by people. Besides fishing, nurse sharks face other anthropogenic threats, such as spearfishing and ornamental fish trade. In addition, the growing human development in coastal areas and the pollution of coastal waters threatens their habitat. Nurse sharks are "Near Threatened" on the IUCN Red List of Threatened Species since their population trend is decreasing.



Finally, today at the Arrecifes de Cozumel National Park, you can still observe the wild beauty of nurse sharks, but they need our protection. We believe that our project can contribute to the conservation of these animals. Our research is crucial because of limited knowledge of sharks in Cozumel. For more information about this project or if

you are interested in helping by donating, you can visit our website. www.marsustentable.org.

Thanks for reading and we will be back with more news soon. This project is being led by Dr. Nadia Rubio, who received a research award from the WWF (World Wildlife Fund) Education for Nature Program (EFN)

Our team at Mar Sustentable made this research possible. Teresa Martín, Juan Carlos Prieto, Berenice Martínez, Christina O Donovan, Steve Hazard, Izaizel L. Cruz-Gómez, Francisco Rodríguez-Castillo, Oscar Frausto-Martínez, Blanca A. Quiroga-García, Juan Carlos Pérez Jiménez, Félix A. Vázquez-Pech.