Preliminary Results on Whale Shark (Smith, 1828) Distribution in the Cuban Archipelago

Evaluación Preliminar de las Poblaciones de Damero (Smith, 1828) En El Archipiélago Cubano

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TAMARA FIGUEREDO MARTÍN[1]*, YUDISLEYVIS VENTURA DÍAZ[1], YANDY RODRÍGUEZ CUETO[1], DORKA COBIÁN ROJAS[2], JORGE MARTÍNEZ FERNÁNDEZ[3], SANDRA CHAPMAN STABLE[4], JORGE TAMAYO FONSECA[5], YOENDRY A. PAZ RODRÍGUEZ[5], ALEXIS MEDINA VALMASEDA[6], ROBERTO FAJARDO VELOSO[6], YUSNIEL NUÑEZ ACOSTA[7], ALEXANDER PUPO SÁNCHEZ[7], RACHEL T. GRAHAM[8], y FABIÁN PINA AMARGÓS[1]**

[1]Centro de Investigaciones de Ecosistemas Costeros, Cayo Coco. [2]Nacional Guanahacabibes, Pinar del Río. [3]Centro de Investigaciones de Medio Ambiente Camagüey. [4]CATEDES, Guantánamo. [5]BIOECO, Santiago de Cuba [6]CSA, Sancti Spíritus. [7]UMA, Las Tunas. [8]Wildlife Conservation Society (WCS).

**tamara@ciec.fica.inf.cu*. ***fabian@ciec.fica.inf.cu*.

EXTENDED ABSTRACT

As the world's largest fish, the iconic whale shark (*Rhincodon typus* Smith, 1828) has been the increasing focus of interest by scientists and tourism operators over the past decade. Despite a listing by the IUCN as Vulnerable to extinction, and whale shark populations and behavior increasingly understood throughout the world, there is still relatively little known about their distribution and seasonal occurrence in Cuba. The aim of this study was to use traditional ecological knowledge to assess whale shark distribution and status throughout Cuba. To accomplish this objective structured interviews were applied. The sample was set as at least five interviews per fishing ports and diving centers throughout Cuba. Years of experience were the selection criterion for fishermen and dive masters interviewed. Cartographic schemes of each particular region were used as a support material, just to assist the localization of the sites. ArGis 9.3 software was used for the cartographic representations. Response rate from interviews was 88%. Using the interviews, occurrence and seasonality of whale sharks was collected from nine of Cuba's 15 Provinces. The 114 interviews (n = 83 fishermen, n = 31 dive masters) conducted in 2009 and 2010 suggest that whale shark occur more frequently in the west (Pinar del Río province), southwest (Isla de la Juventud and surroundings) and south-central Cuba (Jardines de la Reina archipelago). Most whale shark records are of 1 – 3 medium-sized individuals, (> 5 m TL). Whale sharks are commonly observed feeding horizontally on plankton and vertically on schools of pelagic clupeids. Whale sharks are associated with small tuna species and sharks, especially silky sharks (*Carcharhinus falciformis*). Whale sharks are often found by fishers and divers using seabirds flocking above surface-feeding small tuna fish. There is no tourism activity focused on Whale shark in Cuba. There were sporadic catches of Whale shark in Cuban waters around 20 years ago. Interviewees state that abundance and size of Whale shark are similar now when compared with decades ago. We aim to expand the survey effort to the remaining regions in Cuba to complete the historical and contemporary distribution maps for whale sharks.

KEY WORDS: Whale shark, vulnerable species, interviews, traditional knowledge.

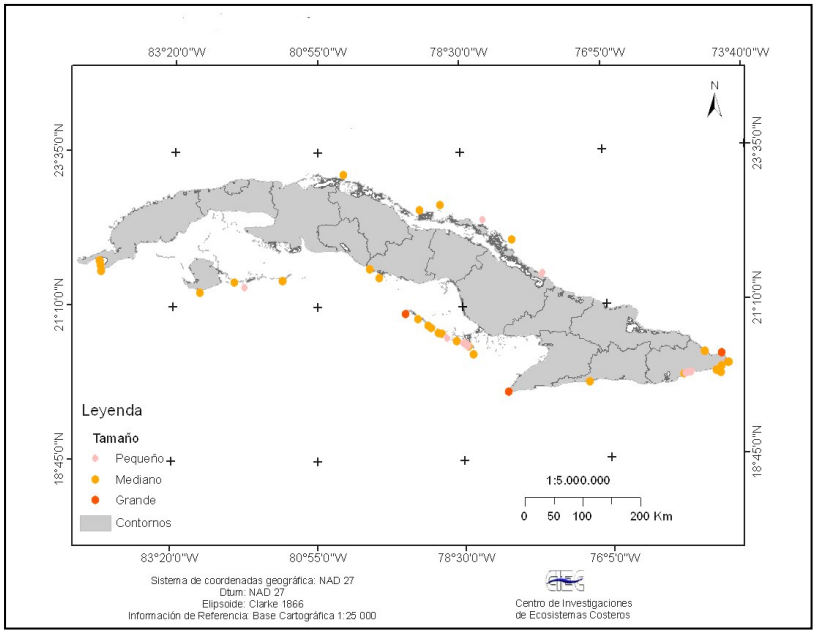

Figure 1. Sightings records of whale sharks in the Cuban archipelago according to individual's size (≤ 3 m TL), medium (4 – 9 m TL) and large (≥ 9 m TL).