

# First report of *Kogia sima* (Cetacea: Kogiidae) on the Caribbean coast of Honduras

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## ABSTRACT

The first report of *Kogia sima* on the Caribbean coast of Honduras and second in Central America was documented from an individual found stranded in Punta Izopo National Park located in Tela-Atlántida (February 6th 2011). The identification of the individual as *K. sima* was based on a combination of morphological and meristic characteristics.

## KEY WORDS

Dwarf sperm whale, Central America, Honduras, *Kogia sima*, Punta Izopo National Park

## RESUMEN

Primer reporte de *Kogia sima* en la costa Caribe de Honduras y el segundo en América Central; se documentó un individuo encallado en el Parque Nacional Punta Izopo situado en Tela, Atlántida (06 de febrero del 2011). La identificación del individuo como *K. sima* se basa en una combinación de características morfológicas y merísticas.

## PALABRAS CLAVE

Cachalote enano, América Central, Honduras, *Kogia sima*, Parque Nacional Punta Izopo

Thirty two species of cetaceans are reported to inhabit Central American marine waters (Reid, 1997) from which nine have been reported to occur along Honduras. Most of these reports come from specimens found stranded in the Caribbean coastline or from sightings (Magileviciute, 2007; Marineros & Martínez-Gallegos, 1998; Bolton, Bolton, Hoggard & Mullin, 1993; Kuczaj-II & Yeater, 2007), allowing the possibility that the number of cetaceans that may occur in Honduran waters may be larger than known (Marineros y Martínez-Gallegos, 1998).

The family Kogiidae consists of two cosmopolitan species: the pygmy sperm whale (*Kogia breviceps*) and the dwarf sperm whale (*Kogia sima*). Both occur in temperate and tropical pelagic waters. In Middle America the species have been reported in the Gulf of Mexico and the Caribbean Sea (Chivers, Leduc & Robertson, 2005; Bermudez-Villapol, Sayegh & León., 2008; Ward, Moscrop & Carlson, 2001). Because these two species primarily inhabit

deep waters, sightings are sporadic and identification cumbersome (Baird, 2005). Specific identification is further hindered by meristic counts and body proportions greatly overlapping between the species (Bermudez-Villapol et al., 2008; Leatherwood & Hobbs, 1988; Ward et al., 2001) and very little is known about the biologies and natural histories of these species. Due to identification difficulties, records include ambiguous reports and many sightings of these species are reported just as *Kogia sp.* (Ward et al., 2001).

Even though morphological characters greatly overlap between species, some measurements do allow for differentiation. For example, *K. breviceps* can be larger and heavier than *K. sima* and has a relatively smaller, more-rounded dorsal fin, which is positioned further back than in *K. sima*. A more accurate identifier is tooth count, with *K. breviceps* having 12 to 16 pairs of teeth and *K. sima* having just 8 to 13 pairs (Chivers et al., 2005; Reid, 1997;

Jefferson, Webber & Pitman, 2008; Leatherwood & Reeves, 1983; Caldwell & Caldwell, 1989). Another morphometric criteria used to verify specimens of *K. sima* is to refer to the average obtained when comparing the percentages of the dorsal fin's heights against the total animal's lengths; this value should be higher than 5% in *K. sima* (Jefferson et al., 1993).

On February 6th 2011, a dying whale was found stranded in the Caribbean coast of Honduras (Fig. 1), near the mouth of the Gamma River located in the Punta Izopo National Park (15° 48'N 087° 23'W). To identify the specimen the following measurements were taken; total body length, dorsal fin height, and distance from snout to the start of dorsal fin. The specimen was photographed and buried the next day where found. The following combination of characters allowed the identification of the specimen as *K. sima* (Fig. 2A): dorsal fin located midway along the back, presence of 16 teeth in the lower jaw (Fig. 2B), and a value of 8% when comparing the percentage of the dorsal fin's height (19cm)

against the total animal's length (235cm). The identification of the individual was confirmed by Susan Chivers (National Marine Fishery Service of the National Oceanic and Atmospheric Administration at La Jolla, California).

The only documented report of *K. sima* in the Central American Caribbean region is the one of Palacios-Alfaro (2009) from Costa Rica. Distributional maps of the species in the Caribbean, and in particular in Central America, occurrence gaps for most of the Central American countries (Palacios-Alfaro, 2009). Therefore, this report enriches the distributional information of this species and constitutes the second documented finding for the region as well as the first one for Honduras. According to Ward et al. (2001), lack of research effort in the completion of distribution mapping has led to limited information on population size in the Caribbean. Consequently, this species has been catalogued as DD (deficient data) in the red list of the International Union for Conservation of Nature (IUCN, 2010).



**FIG. 1.** *K. sima* stranded in Punta Izopo National Park. Entire individual depicting the position of the dorsal fin midway along the body.



**FIG. 2.** *K. sima* teeth in both jaws.

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