

ABSTRACT

CURRENT STATUS OF SMALL CETACEANS IN
VENEZUELA

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Interest in the research and conservation of cetaceans in Venezuela has increased remarkably during the past 10 years. As a result, the amount and quality of information regarding small cetaceans have also steadily improved, especially regarding strandings, causes of mortality, abundance, distribution, behaviour, legal aspects and whalewatching. In this paper, we review the current status of small cetaceans in Venezuela based on unpublished data and published information by the authors and a questionnaire sent to researchers who have worked on cetaceans. Species studied could be broadly classified into three categories: (I) only a few records known from strandings and/or sightings and (II) frequent sightings and biological/ecological information gathered. Category I includes *Kogia sima*, *Steno bredanensis*, *Lagenodelphis hosei*, *Feresa attenuata*, *Peponocephala electra*, *Grampus griseus*, *Pseudorca crassidens*, *Ziphius cavirostris* and *Mesoplodon europaeus*. *Orcinus orca*, *Stenella coeruleoalba* and *S. attenuata*. Category II includes *Tursiops truncatus*, *Stenella frontalis*, *S. longirostris*, *Delphinus capensis*, *Globicephala macrorhynchus*, *Sotalia sp.* and *Inia geoffrensis*. Regarding category II, both *Tursiops truncatus* and *Stenella frontalis* are commonly found all along the Venezuelan coast. In the state of Aragua, both species are the target of a responsible dolphin-watching program. In north-eastern Venezuela, the long-beaked common dolphin is the most common and abundant species. About 74% of cetacean strandings in the region are of *Delphinus capensis*. In the Mochima National Park, commercial trips for dolphinwatching are offered on a regular basis since the early 90's and a management plan is urgently recommended for an improved protection of the species. Both direct catches and bycatches of this species have been documented. Sightings of tucuxi *Sotalia sp.* are common inside the Lake of Maracaibo and in the Orinoco River Delta. These populations should be considered vulnerable because of high levels of anthropogenic pressure including bycatches and development projects. Some level of human consumption has been documented

although there is no evidence of direct catches. The taxonomic status of the Lake of Maracaibo *Sotalia* populations is uncertain and deserves additional research effort. The boto *Inia geoffrensis* occurs in most areas of the Orinoco River basin where sightings are quite common. Some level of direct captures and/or bycatch may occur and specimens are suspected to be used as bait in some specific fisheries for *Callophysus* catfish. Nation-wide cetacean conservation and management measures implemented up to now include the presence of independent observers and/or government officers aboard vessels involved in seismic surveys; inclusion of cetaceans in the terms of reference of development projects in coastal and offshore areas and proposals for responsible management of whale-watching presented to the authorities by local non-governmental organizations, among others. Conservation and research priorities for Venezuelan small cetaceans should include: 1) evaluation, monitoring and management of bycatch, 2) to stimulate and promote research efforts for evaluating the abundance, distribution, habitat use, natural history and threats of cetaceans in Venezuelan EEZ waters and 3) update the regulatory and legal framework. These and additional measures could be accomplished by means of the design and implementation of an “Action plan for the conservation of marine mammals of Venezuela” on the basis of the “Marine Mammal Action Plan for the conservation of Marine Mammals of the Wider Caribbean Region”, itself part of the Caribbean Environment Program (CEP) of the United Nations Environment Program (UNEP).

KEY WORDS:

VENEZUELA, SOUTH-EASTERN CARIBBEAN SEA, CONSERVATION, SMALL CETACEANS, REGULATIONS, WHALEWATCHING

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INTRODUCTION.

Despite the fact that traditionally little effort has been devoted to research on cetaceans in Venezuela, interest in research and conservation of this group has increased remarkably during the last decade. As a result, researchers from governmental and non governmental organizations and students from some universities have contributed to produce baseline information on such aspects as strandings, causes of mortality, abundance, distribution, behaviour, natural history, legal aspects and whalewatching (see, for example, Naveira 1996, Bolaños-Jiménez et al. 1998, González-Fernández et al. 2000, Bolaños-Jiménez and Villarroel-Marín 2003, Bermúdez-Villapol et al. 2003a,b, Bolaños et al. 2004, Bermúdez-Villapol and Sayegh 2005, Oviedo et al. 2005). On the basis of the results of current field research projects, environmental authorities count on a foundation to setup policies for conservation and management of wild cetacean

populations. In the present paper, we present the current status of small cetacean populations in Venezuelan EEZ waters.

MATERIALS AND METHODS.

A review was made of sighting and stranding records collected by the authors since 1989, as well as technical unpublished reports and published information. A questionnaire was sent to researchers who have worked on cetaceans. According to the amount and quality of the information gathered, species were broadly categorized into two categories: (I) only a few records known from strandings and/or sightings and (II) frequent sightings and biological/ecological information gathered.

RESULTS.

Category I.

Kogia sima. Dwarf sperm whale have stranded in southern Margarita Island (Bermúdez et al. 2003a) and the Gulf of Venezuela, State of Zulia (León and Barrios 2001). The specimen from Margarita Island -a 106 cm calf- presented six circular scars, probably produced by cookie cutter shark (*Isistius brasiliensis*) bites (Bolaños-Jiménez et al. 2001, Bermúdez-Villapol et al. 2003).

Steno bredanensis. Rough-toothed dolphin have stranded in la Tortuga Island, northeastern Venezuela (Naveira 1996) and Margarita Island (Bermúdez-Villapol and Sayegh, unpublished data). The specimen from Margarita Island live-stranded in the morning of April 22. External examination and vital signs were monitored and found to be apparently normal. The dolphin was later released and briefly monitored as long as sea condition permitted.

Lagenodelphis hosei. The Fraser's dolphin have live-stranded in the state of Carabobo, in central Venezuela. The animal died during transportation to a rehabilitation facility (Bolaños-Jiménez y Villarroel-Marín 2003). According to Bolaños-Jiménez and Villarroel-Marín (2003) this is the only record available for this species in Venezuela and the southern Caribbean.

Feresa attenuata. Live strandings of groups of three pygmy killer whales have been recorded in central Venezuela (Bolaños-Jiménez and Villarroel-Marín 2003) and Margarita Island (Bermúdez-Villapol et al. 2003b). Between June-August 2003, three sightings of groups of 3-4 pygmy killer whales, traveling eastward, were reported by trained observers aboard commercial ferries that cover the route between Margarita Island and Puerto la Cruz, in northeastern Venezuela (Bermúdez-Villapol et al. 2003b).

Peponocephala electra. The melon-headed whale have stranded in central Venezuela (Bolaños-Jiménez y Villarroel-Marín 2003) and Los Roques National Park, in the Venezuelan Caribbean Sea (Bermúdez-Villapol and Pombo 2003). External examination of the Los Roques' animal revealed some injuries, probably produced by both interaction with fishing gear and the hard bottom.

Grampus griseus. Strandings of Risso's dolphin have been recorded in La Blanquilla Island (Bolaños-Jiménez 1994) and Margarita Island, northeastern Venezuela (Bermúdez-Villapol et al. 2003a). The Margarita specimen -a very

old male- stranded alive in Playa el Tirano, north-eastern Margarita on the morning of October 4, 2002. According to external examination and monitoring of vital signs, the dolphin was considerably dehydrated and rehabilitation was considered not probable. Euthanasia was authorized by officers of the local Ministry of Environment Office. External and internal parasites were collected for further identification (Bermúdez-Villapol et al. 2003a).

Orcinus orca. Records of killer whale date back to the late 70's. In 1979, a male stranded in the Gulf of Venezuela, state of Zulia (Rodríguez et al. 1993). In 1989, one of us (GS) sighted a male killer whale 40 nm southwest of Isla de Aves, in the Venezuelan Caribbean. In early 2004, a male killer whale was photographed near the Península de Araya, north-eastern Venezuela (González pers. comm. 2004).

Pseudorca crassidens. False killer whale have stranded in central Venezuela (Castellanos y Casinos 1982), north-eastern Venezuela (Naveira 1996) and Archipelago of Aves in the Venezuelan Caribbean Sea (Miller 1921). Two groups of approx. __ and two individuals, respectively, sighted in the Mochima National Park and Gulf of Cariaco, north-eastern Venezuela, in the early 90's probably correspond to this species (G. Solé, unpubl. data). Diagnosis characters include: colour pattern black uniform, total length between 4-5 m and dorsal fin dolphin-like, not alike pilot whale's.

Stenella coeruleoalba. Strandings of striped dolphin have been recorded in Cubagua Island (Naveira 1996), la Blanquilla Island (Estévez and Rangel 2003) and Margarita Island (Bermúdez-Villapol et al. 2003c). The Cubagua specimen measured 222 cm in total length and weighted 82 Kg. In 1990, a group of approx. 30 striped dolphins was sighted by one of us (GS) 6.4 nm north-western of la Orchila Island.

Stenella attenuata. A strandings of the pantropical spotted dolphin was recorded in Margarita Island in 1991 (Bermúdez-Villapol et al. 2003d). A group of four adults and a calf was sighted by trained observers aboard a ferry-boat in the afternoon of November 15, 1991 (Bermúdez-Villapol et al. 2003d).

Ziphius cavirostris. Cuvier's beaked whale stranded in Margarita Island (Casinos 1981).

Mesoplodon europaeus. A cow-calf pair of Gervais' beaked whale stranded in central Venezuela in August, 1998 (González-Fernández et al. en prensa, Bolaños-Jiménez 1999).

Category II.

Globicephala macrorhynchus. Strandings of short-finned pilot whale have been recorded in Margarita Island (Casinos and Bou 1980 cit. by Naveira 1996), la Blanquilla Island and Puerto Píritu (Naveira 1996).

Stenella frontalis.

Stenella longirostris.

Tursiops truncatus.

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