

MEXICO

Voluntary National Cetacean Conservation Report, 2007

While recognizing the existence of differing views regarding the IWC Conservation Mexico considers that with the submission of national information on a voluntary basis is a way to address cetacean conservation matters, in a spirit of cooperation, and a via to learn from experiences in other Countries.

National Governmental Authority Submitting the Report:

Instituto Nacional de Ecología (INE)- Secretaría del Medio Ambiente y Recursos Naturales (Ministry of the Environment and Natural Resources)

1. Legal Developments (laws, regulations and other regulatory measures related to cetaceans)

Mexico is a pioneer in protecting marine mammals. Our own national legislation has historically privileged the establishment of sanctuaries, refuges and protected breeding areas for the many species of cetaceans, both large and small, that exist in Mexican jurisdictional waters.

Mention should be made that in December 1971, the President of Mexico at that time, signed a legislation order that established Laguna Ojo de Liebre as a whale refuge, the first of its kind in the world (Diario Oficial, 1972). In 1979, Laguna San Ignacio was declared as a Whale Refuge and Maritime Tourist Attraction Zone. The decree established a permitting mechanism for scientific research and tourism in the area, under the administration of the Ministry of Fisheries. In 1980 the decree provided reserve status for Laguna Manuela and Laguna Guerrero Negro. In 1988 the Mexican President signed a law that created the Vizcaino Biosphere Reserve within the frame of the National System of Protected Areas (SINAP) established in 1984 (Poder Ejecutivo Federal, 1984; SEDUE, 1986; Diario Oficial, 1988). In 1993 portions of El Vizcaino Biosphere Reserve consisting of the gray whales breeding lagoons Ojo de Liebre and San Ignacio lagoons were added to the World Heritage Site list of the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

A decree published Mexico's Federal Register in May 2002 (*Diario Oficial de la Federación* del 24 de mayo de 2002) by the Secretaría de Medio Ambiente y Recursos Naturales (Ministry of Environment and Natural Resources) declares Mexico's marine zones of the national territory and, of equal way, those in which the nation exerts sovereignty and jurisdiction as a Refuge for large whales and several other cetacean species. . This means that cetaceans, as much odontocetes as mysticetes, will have in our territorial sea, contiguous zone and exclusive economic zone, a refuge and protection area.

As mentioned last year, here is a brief review of Mexico's legislation to protect marine mammals

- The Constitución Mexicana (Mexican Constitution) recognizes the need to preserve and conserve our ecosystems and delegates the creation of specific laws to the Union Congress (leyes con concurrencia competencial) that include the participation of the Federal, State and Municipalities (artículo 73, fracción XXXIX-G).
- Article 27 3rd paragraph of the Constitution establishes that the Mexican State should take any measures to preserve, restore and maintain the quality of the environment and the ecological equilibrium. Based on this the *Ley General del Equilibrio Ecológico y Protección al Ambiente (LGEEPA)*, was published in 1988 in the Mexican Federal Register (*Diario Oficial de la Federación* el 28 de enero de 1988).
- LGEEPA in the chapter pertaining to wildlife (Flora y fauna Silvestre) third fraction of Article 79, establishes the criteria for the conservation of endemic species, threatened, in danger of extinction and subject to special protection
- Ley de Pesca (General Law for Fisheries) Third article fraction V allows the fisheries authorities, to dictate measures towards the protection of sea mammals and other marine organisms
- Article 24 establishes specific infractions to those who capture, harass or hunt any marine mammal.
- Fraction 1 article 420 of the Código Penal federal imposes 6 months to 6 years of prison and penalties to those who capture in a deceptive manner or kills or harvests any marine mammal or commercializes in any form products or sub products of marine mammals (without any proper authorization).

México has never been engaged in harvesting whales but granted a few permits to foreigners in the late and early 1800's and 1900's.

Mexican Standards (normas oficiales mexicanas). Those related to whales and other cetaceans are NOM-059-ECOL-2001 and NOM-131-ECOL-1998. The former establishes a catalog of species, subspecies and populations that are considered extinct, in danger of extinction or threatened, vulnerable and subject to special protection. All cetaceans are included in the latter except for right whales. Today, under Mexican law, "no marine mammal species in waters under national jurisdiction may be captured for commercial or subsistence uses". Only special permits for non-invasive scientific research by accredited institutions will be considered, and then only when accompanied by a complete scientific research protocol. The latter (NOM-131-ECOL-1998) establishes regulations to whale-watching and whale's habitat in whale watching areas. A proposal to review NOM-131 is being considered by authorities and the Mexican Society for Marine Mammalogy.

2. Information on Whale-watching Operations (scale, target species/populations and relevant management issues)

INE is in the final stages of the project "Economic assessment of whalewatching in Mexico". This project is designed to estimate current income from whale watching activities in our Country. It is estimated that annually 46,000 tourists visit Mexico for whalewatching tours. Preliminary results indicate that the total amount spent by tourists is around \$25 million USD with an estimated growth rate of 7%/yr. The main target species are gray and humpback whales, but also blue and fin whales are starting to be an attraction for tourists in the Gulf of California.

3. Current Government Programs Related to Cetacean Conservation

As mentioned before, the Program for the Protection of the Vaquita was published in the Federal Register (December 29 2006) and included transfers of \$1 million to the State Governments of Baja California and Sonora to implement actions within the Vaquita Refuge Zone.

Recently the President of Mexico announced the Conservation Program for Endangered Species (Programa de Conservación de Especies en Riesgo-PROCER) which will instrument specific Species Conservation Action Programs (Programas de Acción para la Conservación de Especies- PACE) for a list of selected species. Among the top five vaquita is listed. The specific conservation actions will be announced shortly. Mention should be made that an intense effort by the Federal Government is taking place and that includes a coordinated program by the Ministry of Environment and that responsible for fisheries (SAGARPA) and all stakeholders, including fishermen (artisanal and industrial), NGOs and NAFTA's Commission for Environmental Cooperation (CEC).

Currently and as a core part of the Recovery plan, a group of economists from Mexico's INE, US-SWFSC and several NGOs are working jointly to evaluate the socioeconomic alternatives to reduce vaquita bycatch to zero.

Several aerial surveys have taken place to monitor fishing effort within all of vaquita's distribution range. A continuous acoustic monitoring of vaquita has been in place for some years thanks to the generous support of IFAW-Mexico. This acoustic monitoring will not only continue but is increasing its effort throughout the Northernmost part of the Gulf of California.

The joint project with the University of Baja California Sur and US researchers Ecosystem Approach for Scientific Monitoring for the Laguna San Ignacio Wetlands Complex (LSIWC) to establish a long-term sustained science based monitoring program that will provide scientific information relevant to lagoon resource management questions and concerns about development, ecotourism, and the sustainability of the LSIWC over time. The status of the lagoon *ecosystem* will be monitored routinely by measuring a suite of key physical and biological parameters or "*ecological indicators*" that will: (1) provide an index of the ecological health of the Lagoon and its living marine resources (e.g., whales, dolphins, turtles, select finfish & shell fish, birds, plankton, water quality), and (2) ensure over the long term that scientific information is available to evaluate trends in the marine life that depend on Laguna San Ignacio as a primary habitat.

The project "Characterizing Nutritional Status of Eastern North Pacific Gray Whales (*Eschrichtius robustus*)" is underway jointly with NMFS and the University of California-Riverside. The aim of this project is to evaluate the lipid and protein metabolite composition in exhaled breath samples of fasting gray whales wintering in the breeding lagoons of Baja California Sur, Mexico, and feeding gray whales from the same population when off-shore of in US waters. This evaluation will allow us to assess the nutritional status of free-ranging gray whales using minimally invasive means.

4. Current threats to Cetacean Conservation and Management Measures Taken/Proposed

Main threats to cetaceans in Mexico, as in other Countries are fisheries interactions: incidental captures in gillnets, longlines and other fishing gear and coastal habitat degradation by development programs, mainly in the Gulf of California. In future reports we will mention in more detail these issues.

Humpback whales

As mentioned above, this is the one of the two main targets for whale watchers in Mexico. Its primary grounds are the tip of the Baja California Peninsula (Los Cabos region) and in the Bahía de Banderas area. The latter, has a coastline of 161 km, is the seventh largest bay in the world. It is located on the Pacific coast of México off the States of Jalisco and Nayarit.

The Bay is a multi-use area that supports thriving water sports, fishing, sailing and whale watching ventures. The whale watch industry in the Bay, centered in Puerto Vallarta, had 15 licensed operators with over 35 boats in 2000. However, the industry is growing rapidly, and in addition to operations with moderate to large boats, several fishermen with small boats offer whale watch tours from Puerto Vallarta, Jalisco to Punta de Mita in the State of Nayarit. Several other boat owners offer reasonable, opportunistic, flexible tours during high season. The characteristics mentioned above make this area a very complex one, in terms of use, and regulating whale-watching has been a challenge. Currently, an experimental approach to evaluate the impact of vessel activity on humpback whales in Bahía de Banderas is being planned with researchers from Australia and probably New Zealand.