

CHILE
Voluntary National Cetacean Conservation Report, 2011

Report Submitted by:
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1. Legal developments (laws, regulations and other regulatory measures related to cetaceans):

All cetacean species in Chilean waters are protected since 2008 by Law 20.293. It declares the spaces of national sovereignty and jurisdiction as free of cetaceans hunting, prohibiting the killing, hunting, pursuing, having, possessing, transporting, landing, slaughtering or carrying out any transformation process as well as commercialization or storing of any species of cetacean that inhabit or cross maritime spaces of national sovereignty and jurisdiction. The Law also introduced important amendments to the General Law on Fisheries and Aquaculture in terms of protection, rescue, rehabilitation, reintegration, watching and monitoring of other marine mammals, reptiles and seabirds.

Two additional Supreme Decrees were enforced in 2008 by the Ministry of Economy. Supreme Decree N° 230 of 2008 declares all cetacean species found in Chilean waters as Natural Patrimony and Supreme Decree N° 179 of 2008 permanently bans the hunting as well as the capture of live cetacean species recorded in Chilean jurisdictional waters. It also bans the commercialization, transport, process, production of products and maintenance, dead or alive, of whole specimens and/or parts of cetaceans.

Since the enactment of the Law, the Regulation for the Observation of Hydrobiological species of mammals, reptiles and birds was developed and is currently in process of being approved by the official authorities.

Additionally, contingency plans for fishing vessels in case of collision, damage or by-catch of any cetacean as well as the proceedings that shall govern the rescue of individuals of vertebrate hydrobiological species (mammals, reptiles and birds) are under development. Rescue procedures are the first stage, which will be followed by the recognition of Rehabilitation Centers and development of a procedure to the reintegration to their environment.

2. Current Government Programs Related to Cetacean Conservation

2.1 Regional cooperation

At an international level, Chile, Colombia, Ecuador, Peru and Panama participate in the Action Plan for the protection of the Marine Environment and Coastal Areas of the South-East Pacific. The purpose of this Plan is to protect the marine environment and coastal areas through regional cooperation to promote the preservation of the health and wellbeing of future generations.

Under the Action Plan, a meeting was held May 2011 in Ecuador to create the Regional Technical-Scientific Committee on Marine Mammals, aiming to identify threatened stocks, promote coordinated scientific research and collect regional scientific information for the establishment of a database to be used in the development of conservation strategies.

2.2 Cooperation with Non-Governmental Organizations

Since 2004 systematic monitoring of blue whales has been undertaken by the Chilean NGO Cetacean Conservation Center with the support of the Chilean Navy and the Ministry of Foreign Affairs. Aerial surveys have been conducted to estimate abundance of blue whales and distribution. Results highlighted the northwestern coast of Chiloe Island and northern Los Lagos Region as the most important aggregations of the species in the Southern Hemisphere.

The Symposium and Workshops *‘Living whales in the Southern Ocean: Advances in methods for non-lethal cetacean research’* organized under the Southern Ocean Research Partnership (SORP) will be hosted from 27-29 March 2012 in Puerto Varas, southern Chile. The focus of the symposium and accompanying workshop is to review the strengths and weaknesses of current and new methods for studying living whales in the Southern Ocean. Specifically, the objectives are to advance the synergies of non-lethal methods for investigations addressing three broad themes: population dynamics, health status and life history parameters of recovering whales; ecological linkages, functional roles and relationships of whales in their ecosystem(s); and, the response of whales to climate change and anthropogenic impacts.

3. Reporting Systems for Cetacean Injuries/Mortality/Strandings

Sighting efforts of cetacean species are conducted along the Chilean coast and Chilean jurisdictional waters through two national sightings networks implemented by the Chilean Navy and the Chilean NGO Cetacean Conservation Center (CCC).

According to the sighting record of the Chilean Navy, 366 cetaceans have been sighted during 2010. It should be said that the sightings did drop down, since the Navy units were dedicated to emergency activities related to the earthquake of 27th February 2010.

4. Southern Right Whale population of Chile-Peru

The Chile/Peru sub-population of Southern Right Whale (*Eubalaena australis*) was classified as “critically endangered” by the IUCN in 2008. It is probable that less than 50 mature individuals and at least seven reproductive females exist.

On March 3, 2009 the population of southern right whales was officially classified under Chilean legislation as “endangered” under the Fourth Species Classification Process conducted by the National Environmental Commission (CONAMA). This is the highest level of classification under Chilean legislation for endangered species.

The South American populations of southern right whales have been nominated at this year meeting for a Conservation Management Plan by the Governments of Argentina, Brazil, Chile and Peru. At national level considerable efforts has been undertaken document all sightings of the species and develop a proposal for an action plan for the conservation of the species in Chilean waters that will further contribute with the discussion at the Comprehensive Assessment of Southern Right Whales and CMP meeting in Puerto Madryn, Argentina.

4. Whalewatching

According to the national policy of non-lethal use of cetaceans, a process to regulate whale watching operations is being implemented since 2009, in order to guarantee that activities related to the observation of these animals are conducted in a responsible, regulated and sustainable manner. The regulation, which is

currently in its approval process, refers in general to the observation of marine mammals, sea birds and marine reptiles, and establishes procedures and requirements for the recording of sightings. The work is being conducted by the Undersecretariat for Fisheries, in association with other government organisms (Navy and Tourism) and non-governmental organizations.

5. Fisheries interaction

Mammals and Birds Excluder Device or MBED (also named *Cachalotera*) has been used in the last years by longlines fisheries of Toothfish in southern Chile. It is a fishing gear device that avoids the depredation of the fish caught in the line for Marine Mammals, and avoids the entanglement of seabirds when the line is set and hauled. This device was designed mainly for the interactions with toothed whales: Sperm Whales and Killer Whales. The MBED works in two aspects: the weight attached gives a superior sinking rate, and the mesh sleeve that surrounds the captured piece avoids the access from mammals and marine birds to the fish or the hooks during the hauling of the gear. Considerable reduction of whale interaction has been observed by using this device.

Another fishery that has eventual interaction with whales is the swordfish fishery. Some Killer whales have been eventually caught. Fishermen try to avoid setting their lines in areas where they see whales.

6. Conservation Management Plans

Governmental agencies and private associations jointly developed general plans for the management of the Marine Reserves Isla Choros & Damas, located in the Coquimbo Region. Same work has been undertaken for the Marine Reserve of Chañaral de Aceituno, located in the Atacama Region. Both reserves protect dolphins, among other species. It is also estimated that both areas are corridors in the migration patterns of whales.

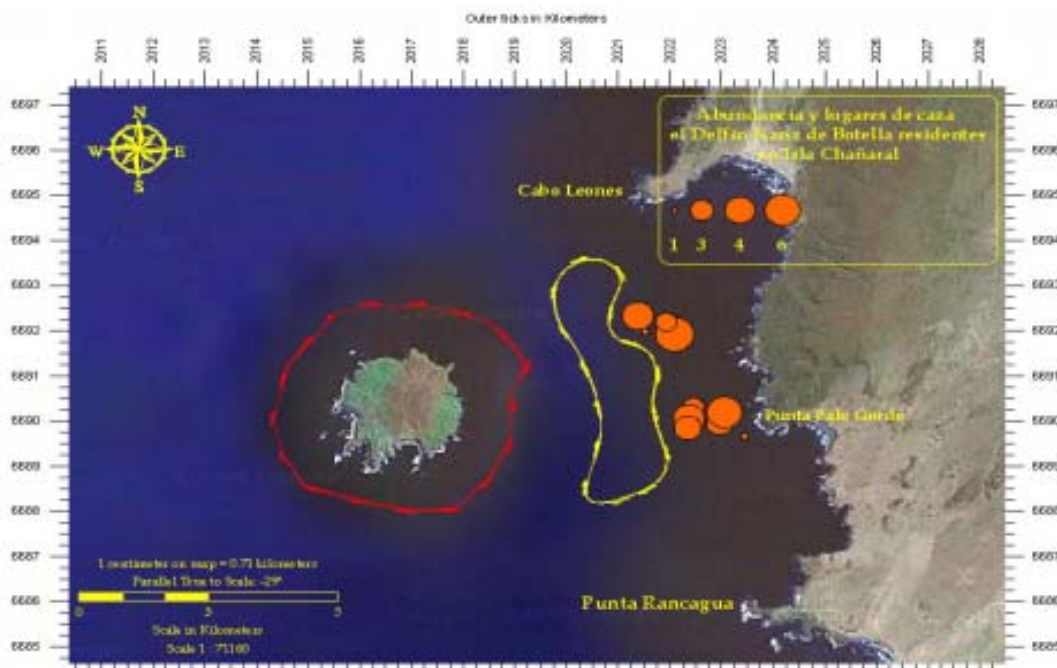


Figure 1: Bottlenose Dolphins in Isla Chañaral Marine reserve (Red line, main distribution area of Bottlenose Dolphin; Yellow line, Bottlenose Dolphins near to coast)

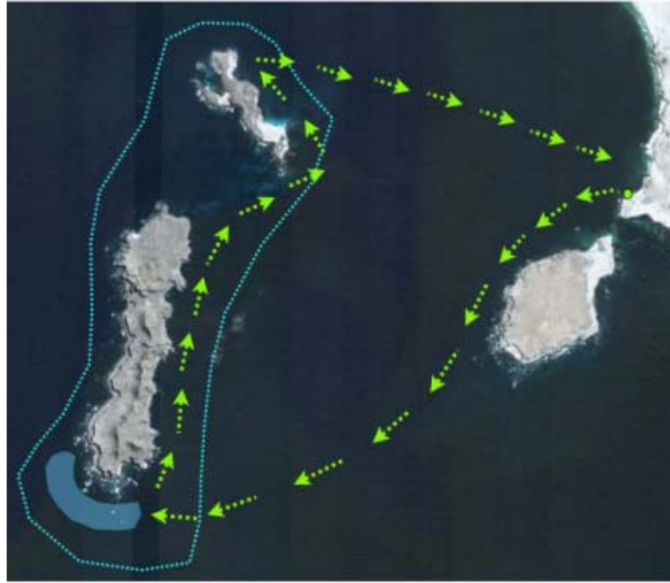


Figure 2: Common Dolphins in Islas Choros y Damas (Green line, typical route of whalewatching vessels; Blue line, main distribution area of Common Dolphins; Blue area, main observation area of Common Dolphins)

In the Punta Arenas region -far south of Chile- is found the Francisco Coloane Marine and Coastal Protected Area, a total area of 67,197 hectares which includes a core no-take reserve (the "marine park") of 1,507 hectares of marine territory. The area is an important feeding and nursing area for many marine mammals such as the sea lion, South American fur seal, Austral dolphin, and some seasonal species such as sea elephants and orcas, sei, and minke whales. Also, the area is one of the most important feeding grounds for the humpback whale in the southern hemisphere. Austral sardine is one of the main feeding items for humpback whales. No catch of this fish has been authorized for the Punta Arenas Region, improving this way the feeding availability for the whales and other marine mammals.

Francisco Coloane Marine Park and Glacier Bay National Park and Preserve (Alaska) has recently signed a Sister Park Arrangement. Both areas share a number of cultural, ecological, and geological characteristics that make them prime candidates to work as sister parks. Glacier Bay and Francisco Coloane intend to work together to advance their knowledge with the overall goal of improving protected area management.

In December 2010 was created the "Motu Motiro Hiva" Marine Park. The park is located 1890 NM off Chile's continental territory and at 216 NM distance from Eastern Island. It has an area of 150.000 km², which amounts to 4,7% of the whole of Chilean jurisdictional waters. The park was created with the purpose of preserving marine ecosystems that surround the island and those linked to submarine mountains that conform part of the Chilean continental shelf (Salas and Gomez Islands), as well as the natural aquatic biota that exists within the protected area, all this with a view to contribute to protect national and international biodiversity. Moreover, the area is also considered an important whale's feeding area.

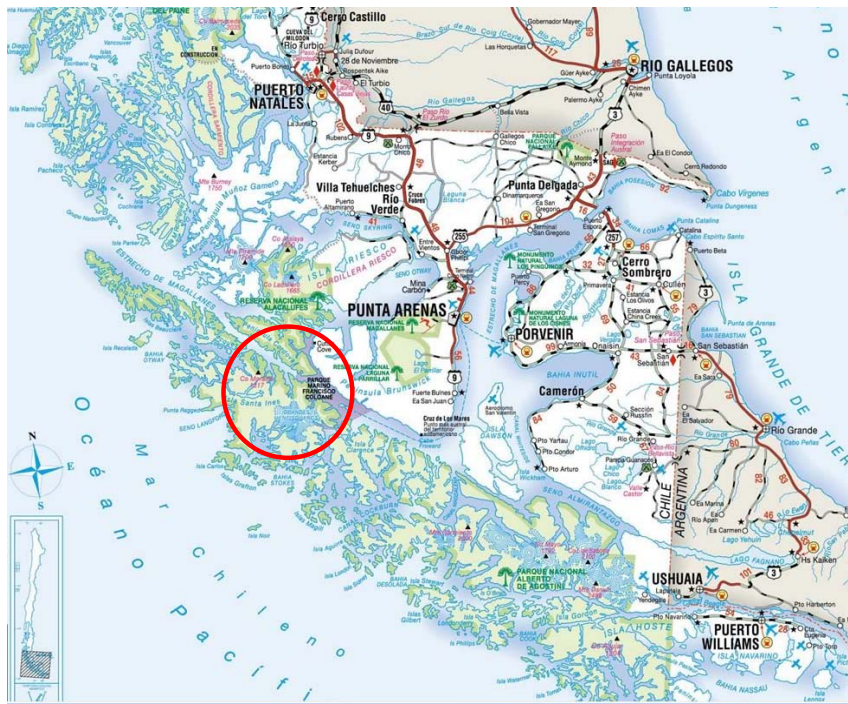


Figure 3: Francisco Coloane Marine Park localization.

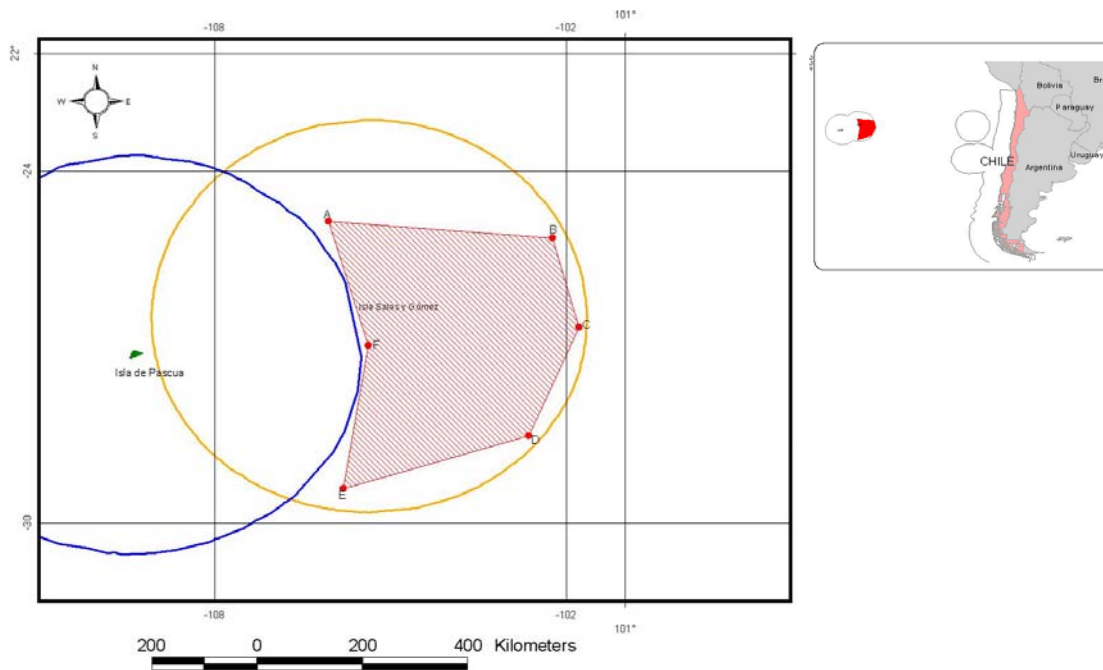


Figure 4: Motu Motiro Hiva Marine Park localization.

7. Investigation permits

During 2010 and 2011, several permits have been issued for conducting cetacean research in Chilean jurisdictional waters. Non-lethal research has been authorized in all these studies (mainly sighting and photo identification permits), as well as the use of satellite tags. For the purposes of genetic analysis, permits have been issued for biopsy sampling. These studies are increasing the scientific knowledge of the cetacean species in the country.

- a. Trophic ecology of marine birds and mammals in the National Reserve Pingüino de Humboldt: The study conducted by the Universidad de Valparaíso aims at determining the diet composition and trophic position of mammals of the reserve (Islas Choros y Damas), through stable isotopes of carbon and nitrogen. Tissue samples of 20 individuals of Common Bottlenose Dolphin were authorized. The period of the study was extended until January 2011.
- b. Study on the Chilean dolphin and other cetacean species: It is aimed at determining the structure and genetic differentiation of Chilean dolphin stocks along distribution range. The conduction of biopsies and skin and fat sampling was authorized. The period of the study was extended until December 2010.
- c. Study on cetacean species throughout the whole national territory: The study, conducted by the Cetacean Conservation Center (CCC), points at increasing the knowledge of the use of habitat, the distribution, stock size and conservation status of cetacean species present in Chile. The study is conducted throughout the whole national territory and considers the sampling of cetacean tissues and photo identification. The period of the study has been extended until December 2011.
- d. Study on marine mammals and birds in central and southern Chilean: It is aimed to develop biologic studies on marine mammals and birds in central and southern Chilean, considering studies on *Lagenorhynchus australis*, *Cephalorhynchus eutropia* and *Phocoena spinipinnis*. The period of the study at determining the structure and genetic differentiation of Chilean dolphin stocks along distribution range. The conduction of biopsies and skin and fat sampling was authorized. The period of the study was extended until December 2010.