

CHILE
Voluntary National Cetacean Conservation Report, 2012

Report Prepared by:
Undersecretariat for Fisheries & Directorate General of the Maritime Territory and
Merchant Marine.

Submitted by:
Department of Maritime Affaires
Direction of Environment and Maritime Affairs
Ministry of Foreign Affairs
Teatinos 180, 13th Floor
Santiago, Chile

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.

On May 2012 was approved the Regulation for the Observation of Hydrobiological species of mammals, reptiles and birds, in order to ensure sustainable development of watching tourism of whales and dolphins (D.S. 38 of 2012 - MINECON).

Future work will progress in formalizing protocols for rescue of individuals of vertebrate hydrobiological species (mammals, reptiles and birds) as well as in certification process of rehabilitation centers.

To date, nine cetacean species have been evaluated under the Classification Process of Wild Species according to D.S. 75 from 2004 of the Ministry General Secretariat of the Presidency. Species evaluated includes: *Balaenoptera borealis*, *Balaenoptera musculus*, *Balaenoptera physalus*, *Cephalorhynchus commersoni*, *Cephalorhynchus eutropia*, *Eubalaena australis*, *Megaptera novaeangliae*, *Physeter macrocephalus*, and *Tursiops truncatus*.

2. Current Government Programs Related to Cetacean Conservation

2.1 International cooperation

Chile is member of the Southern Ocean Research Partnership (SORP) and hosted the symposium and workshops '*Living whales in the Southern Ocean: Advances in methods for non-lethal cetacean research*' from 27-29 March 2012 in Puerto Varas, southern Chile under the auspice of International Whaling Commission. The focus of the symposium and accompanying workshop was to discuss recent advances in methods for non-lethal research on whales in the Southern Ocean. The first day was an open Symposium with invited experts who showcased new non-lethal research methods for whales in the Southern Hemisphere. The Symposium was followed by two days of workshops that covered specific research areas: 1) Health assessment of live cetaceans; 2) Advances in long term Satellite Tagging Techniques for Cetaceans; 2) Population dynamics and environmental variability; and 3) Estimation of diet and consumption rates from non-lethal methods. The Symposium was attended by 124 registered participants from 16 countries and was also live streamed on the web, allowing an additional 1,553 simultaneous viewers.

2.2 Regional cooperation

At a regional 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.

In May 2012, a workshop was held in Panama under the sponsorship of UNEP, in order to establish a large scale marine spatial planning and interregional transboundary management. This interregional initiative was launched by UNEP in June 2010. Initial activities and products include the mapping of critical habitats for marine mammals at regional scale and migration routes, along with socioeconomic information from human activities to support large-scale spatial planning and management of human impacts on large marine mammals in the Wider Caribbean, Southeast and Northeast Pacific Ocean. The project also aims to collaborate on capacity building for the development of marine spatial planning.

2.3 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. Considering the recent adoption of the Regulation of Whale Watching, this NGO is collaborating with the Chilean Navy to formally establish the Register of Whale Watching.

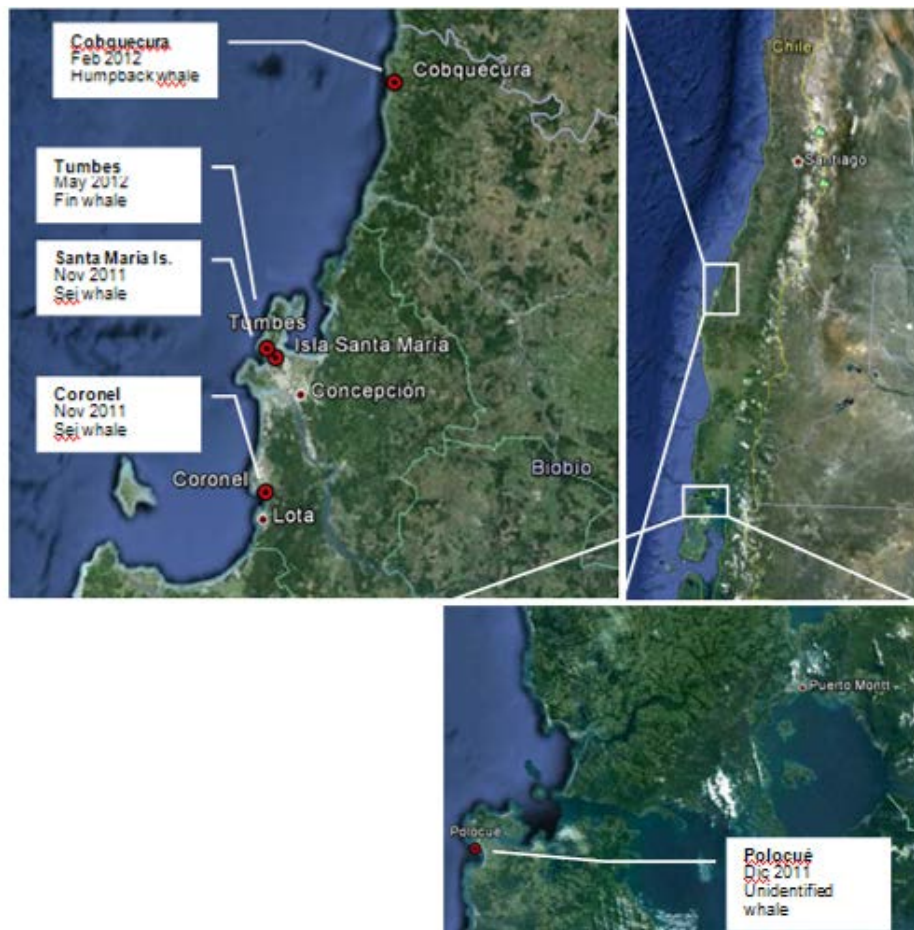
Chilean NGOs related to whales have also participated closely in the preparation of the Conservation Management Plan for the Eastern South Pacific Southern Right Whales.

3. Reporting Systems for Cetacean Sighting/Injuries/Mortality/Strandings

Currently, 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). The recently approved Regulation for the Observation of Hydrobiological species established the creation of a Register of Whale Sighting, to be administered by the Chilean Navy. Sighting made by tour guides or by persons developing scientific or educational projects should be informed.

According to the sighting record of the Chilean Navy, between May 2010 and April 2012, 362 reports of sighting have been received, with a total of 1070 whales.

During the last year, there have been four reports of stranding, all of them with result of death of the whales. In November 2011, two Sei whales stranded in different days but in near places, one in the coast of Coronel and the other in the coast of Santa Maria Island. On 2 February 2012 a Humpback whale stranded in the coast of Cobquecura. On 30 May 2012 a Fin whale stranded in the coast of Tumbes. All of these places are located in the central-southern area of Chile.



4. Southern Right Whale population of Chile-Peru

Heavily impacted by whaling operations during centuries, eastern South Pacific (ESP) southern right whales (*Eubalaena australis*) are classified as Critically Endangered and the population does not show increasing rates observed in other regions.

The government of Chile therefore decided in 2007 to propose its inclusion in the IWC Conservation Committee and last year, a draft national action plan for the recovery of the species was developed and the IWC agreed to nominate the South America southern right whale populations for a Conservation management Plan.

During 2012, a Conservation Management Plan for the Eastern South Pacific Southern Right Whales has been developed and a summary can be found below under point 6.

Also, new important pieces of information on eastern South Pacific southern right whales have appeared after the 2011 IWC Southern Right Whale Assessment and have been reported to Scientific Committee.

5. Whalewatching

As indicated under '1. Legal developments', on May 2012 was approved the Regulation for the Observation of Hydrobiological species of mammals, reptiles and birds, in order to ensure sustainable development of watching tourism of whales and dolphins. The work was conducted by the Undersecretariat for Fisheries, in close association with other government organisms (Navy and Tourism) and non-governmental organizations. This regulation includes the minimum distances of observation, as 100 meters for whales and 50 meters for dolphins. Taking into account recommendations of the IWC Scientific Committee, minimum distance for blue whale was established in 300 meters, while Southern right whales should be watched from land-based platforms. The regulation also includes measures to prevent harassment of animals and procedures that boat operators should consider to approach the animals.

6. 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 Sperm Whales and Killer Whales feed from the retained catches in the fishing lines. Fishermen try to avoid setting their lines in areas where they see whales.

7. Conservation Management Plans

7.1 Critically endangered eastern south Pacific Southern Right Whale

A Conservation Management Plan for the Critically Endangered Eastern South Pacific Southern Right Whales was developed in 2012 and its implementation is ongoing. The Plan aims to guide and encourage range state stakeholders (i.e. government, industry, coastal communities and civil society, among others) and international partners to take steps towards the recovery of this population to levels that will allow the species to withstand both environmental and anthropogenic impacts and ensure its long-term survival.

To achieve this long term objective, medium term objectives will focus in monitoring population status, anthropogenic threats and effectiveness of conservation measures implemented. In the short term, it will be required to 1) obtain baseline data, particularly referring to population size, areas of concentration of the species (breeding or feeding areas) and stock structure; 2) conduct a detailed assessment of potential impacts in identified areas of concentration and; 3) develop specific mitigation strategies.

7.2 Management Plans of Marine Reserves Isla de Choros & Damas

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.

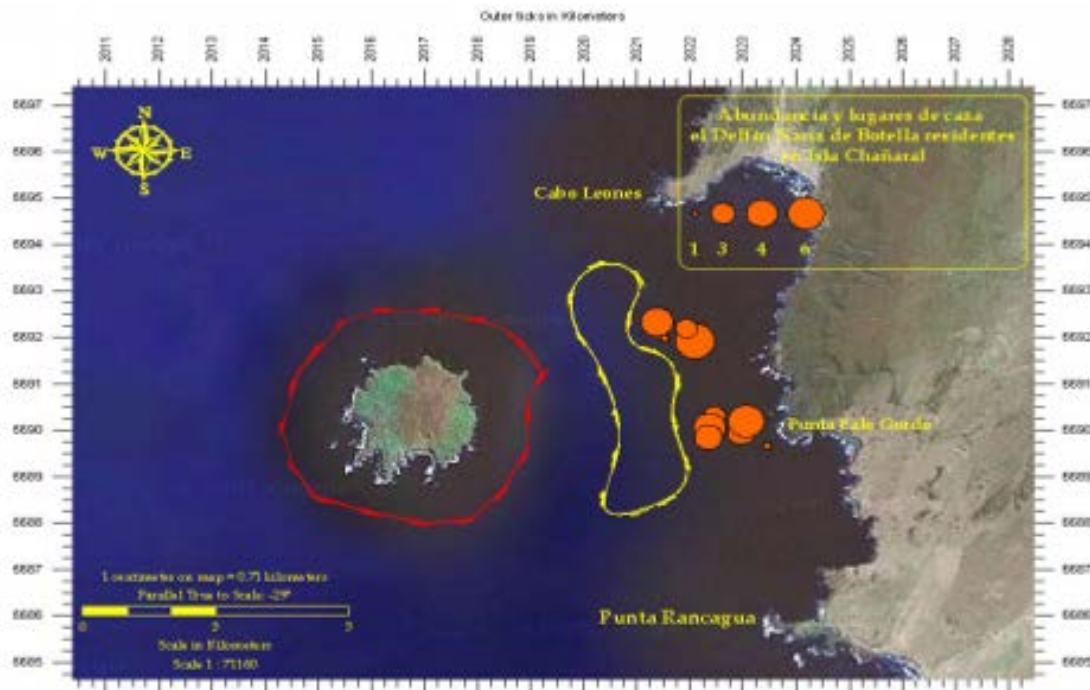


Figure 1: Bottlenose Dolphins in Isla Chañaral Marine reserve (Red line, main distribution area of Bottlenose Dolphin; Yellow line, Bottel Nose Dolphins near to coast)



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)

7.3 Francisco Coloane Marine and Coastal Protected Area

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.

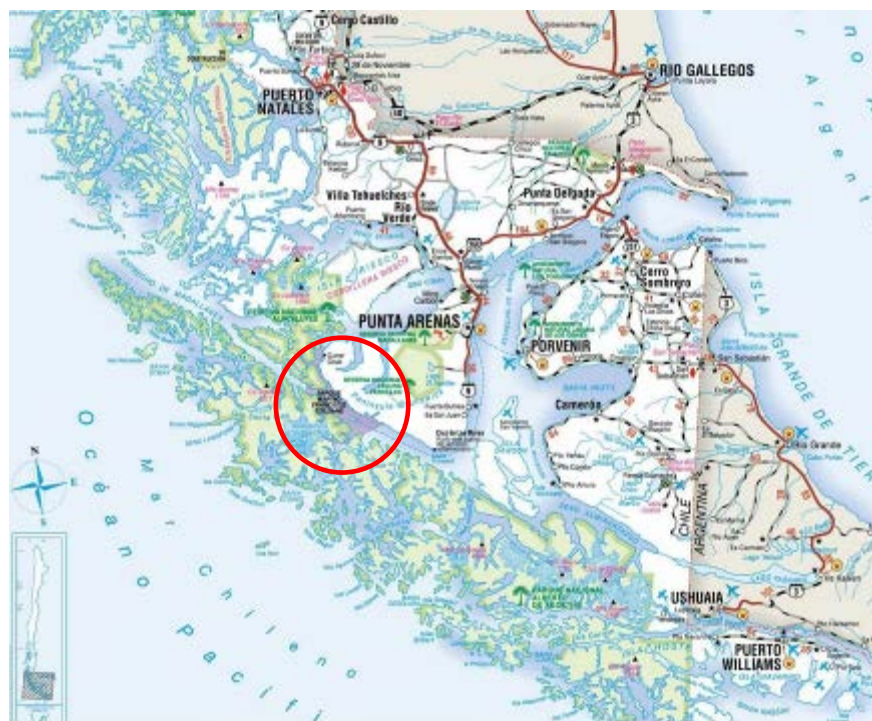


Figure 3: Francisco Coloane Marine Park localization.

7.4 Motu Motiro Hiva Marine Park

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.

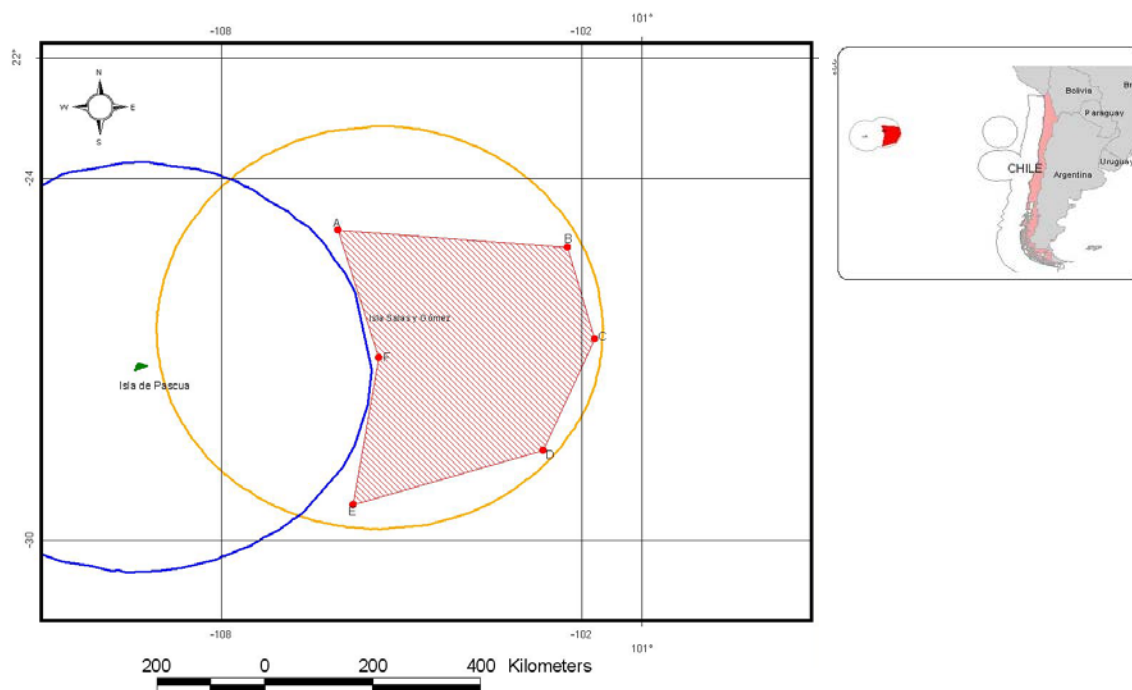


Figure 4: Motu Motiro Hiva Marine Protected Area localization.

8. Investigation permits

During 2011 and 2012, several permits have been issued for conducting cetacean research in Chilean jurisdictional waters. Non-lethal research has been authorized in all these studies:

- a. Study on cetacean species throughout the whole national territory: The study points at increasing the knowledge of the use of habitat, the distribution, stock size and conservation status of cetacean species present in Chile, with focus on blue whales. 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 2012.
- b. Study on marine mammals in the South end of Chile and the Antarctic Peninsula: The objective is to determine the spatial and temporal distribution, the use of areas and the residence times of three species of dolphins in the canal Fitz Roy, for

evaluation as potential tourist purposes. Also, the study will trophic aspects of Humpback whales in the Strait of Magellan and building ecological knowledge, biological and genetic marine mammals in the area of study.

- c. Study on the Chilean dolphins and other cetacean species in Chile: It is aimed at determining the structure and genetic differentiation of Chilean dolphin stocks along distribution range.
- d. Diagnosis of spatial and temporal distribution of the Humpback Whale in the Marine Protected Area "Francisco Coloane" (South end of Chile): The study focus on the Humpback whales, aiming to determine spatial and temporal distribution "Francisco Coloane" MPA. Also, the study aim to determine the preference of sites of mothers with calf.