A review of marine protected areas in Argentina and their overlap with current cetacean distribution

A Report prepared for OceanCare, May 2022
A review of marine protected areas in Argentina and their overlap with current cetacean distribution

A Report prepared for OceanCare, May 2022

ISBN 978-3-9525671-0-4

Hevia, M.1, Iñíguez Bessega, M.A.1,2, Reyes Reyes, M.V.1, Zuazquita, E.P.1

Design/Layout: Roman Richter, cover photo: Fundación Cethus

OceanCare
Gerbestrasse 6
P.O.Box 372
CH-8820 Wädenswil
Switzerland
T. + 41 (0) 44 780 66 88
F. + 41 (0) 44 780 68 08
OceanCare
MarineConservationPolicy
oceancare.international
www.oceancare.org

Fundación Cethus
FundacionCethus
fundacion_cethus
info@cethus.org
www.cethus.org

To receive further information about OceanCare’s work and this report, please contact:
Fabienne McLellan, Managing Director, fmclellan@oceancare.org
Nicolas Entrup, Director International Relations, nentrup@oceancare.org

1 Fundación Cethus, Cap. Justo Bermúdez 2634 (B1636EMX), Olivos, Buenos Aires, Argentina
2 Whale and Dolphin Conservation (WDC) NA, Plymouth, MA 02360, United States

* Authors listed alphabetically. All authors contributed equally to the manuscript.
Corresponding author: miguel.iniguez@cethus.org
ABSTRACT

Protected Areas (PAs) are effective tools to preserve biodiversity and may help to address the global decline in biological diversity. Cetaceans play important roles in marine ecosystems usually as top predators, but also as prey in some cases. Additionally, healthy whale and dolphin populations are essential for a fully functioning ocean. This report reviews 66 coastal and marine protected areas (CMPAs) in Argentina, their overlap with the current distribution of 12 cetacean species, including beaked whales, and the main threats facing them. Presence of at least one species was found in all CMPAs, with most of them having three or more species. There is a need to better understand the impact that threats have on cetacean populations in the Argentine Sea and adjacent areas. There is a lack of basic information (e.g. population estimates) for several species and efforts should be made to rectify this situation by monitoring populations, including before and after a potentially risky activity is authorised or completed.

None of the CMPAs include migratory corridors, which are essential for the survival of migratory species. Therefore, there is a need to assess areas of importance for these species to evaluate the establishment of new marine protected areas (MPAs) or to adopt mitigation measures if potentially harmful activities have been authorised or are taking place. While the common bottlenose dolphin is the most threatened species in Argentina, the franciscana is also threatened and both species are in desperate need of specific conservation measures. Dolphins of both species inhabit the Río Negro Estuary where their populations are considered Evolutionarily Significant Units (ESUs). The creation of an MPA here and in the surrounding waters, with proper implementation, would be of great benefit for the conservation of these species and is highly recommended. Most PAs in Argentina were not created for the protection of cetacean populations but some have later included them. It is important that PAs with cetaceans within their limits incorporate them into their Management Plans or, if it has already been created and established and there is strong scientific basis of its relevance for a given species, there might be a need to expand the limits of the CMPAs to provide maximum protection. Most CMPAs lack a Management Plan and it is recommended that the process to provide them with their own Management Plans be initiated. It might be necessary to grant improved funding to each CMPA to ensure their proper functioning. This review can contribute to processes initiated in Argentina to expand or strengthen the CMPAs, as well as to the South Atlantic International Union for the Conservation of Nature Important Marine Mammals Areas (IUCN IMMAS) process which will start in 2023. It will also contribute to the Action Plan for the Protection and Conservation of South Atlantic Whales under the auspices of CMS. In the case of cetaceans, it is important to gather more information on all species to provide solid support for the creation of new CMPAs or to expand the boundaries of existing ones.

INTRODUCTION

The United Nations stated in the First Global Integrated Marine Assessment that:

“The impacts of humanity on the ocean are parts of our inheritance and future. They have helped to shape our present and will shape not only the future of the ocean and its biodiversity as an integral physical and biological system, but also the ability of the ocean to provide the services that we use now, that we will increasingly need to use in the future and that are vital to each of us and to human well-being overall.

Managing our uses of the ocean is therefore vital. The successful management of any activity, however, requires an adequate understanding of the activity and of the context in which it takes place”
(United Nations, 2016).

Cetaceans play important roles in marine ecosystems, usually as top predators, but also as prey in some cases. These species not only affect entire food webs but are also affected by the dynamics of the physical and biological environment (Bowen, 1997). There is a growing amount of scientific evidence that shows that
Cetaceans may increase marine primary productivity by moving nutrients through the water column and during their latitudinal movements, which contributes to fertilizing the ocean. The large biomass of baleen whales also represents a large reservoir of carbon, and, when they die, whale carcasses provide a unique habitat for deep sea species, contributing to increased biodiversity (James et al., 2017). In 2016, the International Whaling Commission (IWC) recognised the potential importance of whales as ‘ecosystem engineers’ by adopting Resolution 2016-3 “Resolution on Cetaceans and Their Contribution to Ecosystem Functioning”.

The Argentine shelf and its shelf-break constitute one of the richest biological areas of the world’s oceans (Lutz et al., 2010). Commercially important species of fish and molluscs (Cousseau and Perrota, 2000), as well as seabirds and marine mammals (Campagna et al., 1998) are important in this region. Out of the nearly 90 species of cetaceans, about 37 have been reported, at least occasionally, in Argentinian waters (Bastida and Rodríguez, 2003; SAyDS-SAREM, 2019). This high number of species highlights the importance of creating and/or adequately maintaining protected areas in the Argentine Sea.

Following the definition of protected area (PA) provided by the International Union for Conservation of Nature (IUCN): “a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (Dudley, 2008), Hoyt (2018) states that a marine protected area (MPA) “is simply a PA in the marine realm which extends from the intertidal zone to the deep ocean” and explains that ”MPA’ is a common generic term (...) referred to by dozens of other names including marine reserves, marine parks, special areas of conservation (SACs), marine wildlife refuges, and national marine sanctuaries” (the latter term only used in this context in the US). Protected areas are effective tools to preserve biodiversity and may help to address the globally measured loss in biological diversity (Secretariat of CBD, 2014).

In 2010, at its tenth meeting of the Parties, the Convention on Biodiversity (CBD) adopted the Aichi Biodiversity Target 11, for the 2011-2020 period, which called for the conservation of “at least 17% of terrestrial and inland water areas and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape” (CBD, 2010).

Argentina has a total of 500 protected areas (PAs) that represent an area of 36,947,536 ha (13.3% of the national territory). These areas include those administered by the National Parks Administration, provinces and marine protected areas. Out of the 500 PAs, 31 are coastal marine protected areas, 3 MPAs and 34 marine protected territories (SIFAP, 2020). For this report, the Bahía Samborombón PAs have been merged and considered as one PA and the Humedal Caleta Olivia PA has not been included as it is purely terrestrial and has no coastal marine area.

The aim of this work is to review the current state of coastal and marine protected areas within the Argentine Sea, their overlap with cetacean distribution and anthropogenic activities, and propose future directions to increase the effectiveness of such areas in cetacean conservation.

**METHODOLOGY**

**Study area**

The study area (figure 1) comprises coastal and shelf waters within 200 nm from the continental Argentinian shore, Tierra del Fuego and Islas Malvinas (Falkland Islands). The international border between Argentina and Uruguay is considered the northern limit of the study area.
Figure 1. Study area
Coastal Marine Protected Areas and Cetacean Natural Monuments in Argentina

The information on Coastal and Marine Protected Areas in Argentina was obtained from the Sistema Federal de Áreas Protegidas (SIFAP) (Federal System of Protected Areas - https://www.argentina.gob.ar/ambiente/areas-protegidas/sifap), which was updated in September 2020, UNEP-WCMC and IUCN (2021) and AMP Argentina (https://beta.ampargentina.org). For each identified PA the IUCN category was included (https://www.iucn.org/theme/protected-areas/about/protected-area-categories), a total of seven IUCN categories are used: Ia (strict nature reserve), Ib (wilderness area), II (National Park), III (natural monument or feature), IV (habitat/ species management areas), V (protected landscapes/ seascape) and VI (protected area with sustainable use of natural resource).

Data on Natural Monuments in Argentina were extracted from national and provincial legislation.

Anthropogenic activities

The anthropogenic activities considered in this work as primarily important (but not the only ones that have been described) for cetacean ecology in the study area were hydrocarbon-related activities, vessel traffic, whale-watching tourism activities, and fisheries:

- Hydrocarbon-related activities: marine and coastal areas were mapped where there are concessions for hydrocarbons exploitation, exploration permissions, and marine seismic surveys under Public Contest (Res. 65/2018 of Secretary of Energy, Ministry of Economy). The information was obtained from www.argentina.gob.ar/economia/energia/hidrocarburos and from https://rockhopperexploration.co.uk (figures 3-15: orange shapes within maps showing presence of species in the study area).

- Vessel traffic: information on vessel traffic was consulted in sources such as www.marinetraffic.com and Prefectura Naval Argentina (Argentine Coastguard). The analysis was carried out on the annual traffic corresponding to 2019, which was the most recent available information at the moment of writing this report.

- Whale-watching tourism activities: boat-based activities were mapped from current legislation of Río Negro province (Law N°4066; Res.272/SADYS/2013-Annex III), and Chubut province (Law N°5714; Dec.167/08; Disp. 04/10; Management Plan of Península Valdés, Península Valdés Protected Natural Area Administration); for sites that do not have specific regulations for the activity, such as Santa Cruz province, maps were generated according to the current operation of tour companies. Although they have a less direct impact on cetaceans, land-based whale-watching sites were also indicated if they have been promoted to tourists.

- Interaction between fisheries and cetaceans: the information on fisheries in Argentine waters was obtained from the most recently published report under the project “Fortalecimiento de la Gestión y Protección de la Biodiversidad Costero Marina en Áreas Ecológicas clave y la Aplicación del Enfoque Ecosistémico de la Pesca (EEP)” GCP/ARG/025/GFF (Strengthening of the Management and Protection of Marine Coastal Biodiversity in key Ecological Areas and the Implementation of the Ecosystemic Approach to Fisheries) and from the “Plan de Acción Nacional para reducir la interacción de mamíferos marinos con pesquerías en la República Argentina” (National Action Plan to reduce interactions between marine mammals and fisheries in the Republic of Argentina), Consejo Federal Pesquero (CFP, Federal Fisheries Council, 2016).

Species distribution and conservation status

In order to assess cetacean species distribution in waters over the Argentinian Continental Shelf, visual, strandings and acoustic records were searched for in published peer-reviewed papers as well as in the
grey literature (unpublished reports, conference articles, papers submitted to meetings of international
agreements or conventions as well as the Ocean Biodiversity Information System (OBIS) global open-access
database, and Fundación Cethus’ database of shore-based, ship and aerial surveys data). The complete list of
sources is given in Annex I.

To depict current species distribution, a cut-off point at the year 2000 was established, hence information
prior to that year was not included into the analysis and distribution data plotted in each map correspond
to records collected from 2000 to early 2021. This lower cut-off point was set in order to exclude historical
information and present the most up to date situation possible regarding the presence of cetaceans in
Argentina’s coastal and marine protected areas (CMPAs) and the potential threats whales, dolphins and
porpoises may face. However, when there was an information gap for a given species for the period of
interest so that mapping was not possible, data reported a few years before 2000 was included, especially
given that some papers published information with blocks of years that sometimes included a few years
before 2000. Additionally, the distribution range of each species in the study area was obtained from
the “Categorización 2019 de los mamíferos de Argentina según su riesgo de extinción. Lista Roja de los
mamíferos de Argentina”- Red List of Argentinian Mammals- (SAyDS-SAREM, 2019) and the IUCN’s Red List of
Threatened Species.

A sample of species of cetaceans that can be found within the study area was selected. The criteria were
that this sample was representative of the bigger collective in terms of taxonomy, conservation status,
distribution and scientific knowledge. The list of species included in this report is as follow: humpback whale
(*Megaptera novaeangliae*), sei whale (*Balaenoptera borealis*), southern right whale (*Eubalaena australis*),
sperm whale (*Physeter macrocephalus*), orca (*Orcinus orca*), common dolphin (*Delphinus delphis*), common
bottlenose dolphin (*Tursiops truncatus*), Commerson’s dolphin (*Cephalorhynchus commersonii*), Peale’s
dolphin (*Lagenorhynchus australis*), dusky dolphin (*Lagenorhynchus obscurus*), franciscana (*Pontoporia
blainvillei*), Burmeister’s porpoise (*Phocoena spinipinnis*), and the species of the family Ziphiidae: Arnoux’s
beaked whale (*Berardius arnuxii*), southern bottlenose whale (*Hyperoodon planifrons*), Andrew’s beaked
whale (*Mesoplodon bowdoini*), Gray’s beaked whale (*Mesoplodon grayi*), Hector’s beaked whale (*Mesoplodon
hectori*), strap-toothed beaked whale (*Mesoplodon layardii*), Shepherd’s beaked whale (*Tasmacetus
shepherdii*), and Cuvier’s beaked whale (*Ziphius cavirostris*). All species of beaked whales found in the study
area were considered together as “beaked whales” or “ziphiids” for analysis since information about them is
scarce, they are rarely seen at sea and, when they are, they are usually difficult to identify at species level.

*T. t. truncatus* and *T. t. gephyreus* are the two subspecies of *T. truncatus* recognised in the region but they
are not always identified to subspecies level at sea. Whenever possible, separate information on each is
presented, otherwise reference to *T. truncatus* is made.

While a recommendation to move *L. australis* and *L. obscurus* into the genus *Sagmatias* has been made
(Vollmer et al., 2019), *Lagenorhynchus* is retained here for both species reflecting use in the taxonomy
lists consulted. Taxonomy and English common names used in this report follow those of the International
Whaling Commission (IWC) and The Society for Marine Mammalogy (Committee on Taxonomy, 2021), while
the Spanish common names follow those used by the SAyDS-SAREM (2019).

Conservation status of the species under study was obtained from the SAyDS-SAREM (2019) and the IUCN
Red List of Threatened Species. Additionally, the websites of the Convention on International Trade in
Endangered Species of Wild Fauna and Flora (CITES) and the Convention on the Conservation of Migratory
Species of Wild Animals (CMS) were consulted to determine whether these species were included in their
Appendices (table 1).
Appendix

CITES

I  Lists species that are the most endangered among CITES-listed animals and plants. They are threatened with extinction. Their international trade is prohibited by CITES.

II  Lists all species that although not necessarily now threatened with extinction may become so unless trade is subject to strict regulation in order to avoid utilization incompatible with their survival. It also includes species not affected by trade but which must be subject to regulation in order to allow an effective control of trade in species that need protection.

III  Lists species included at the request of a Party that already regulates trade in the species and that need global cooperation to control their trade.

CMS

I  Lists endangered species to be placed under strict protection by the Parties.

II  Lists species with unfavorable status that require international agreements for their conservation and management and those which would benefit significantly from international cooperation.

Additionally, the 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea (Forum for the Conservation of the Patagonian Sea, 2019) was also consulted for regional conservation status.

Maps

Maps were generated using software QGis version 3.10.5. Species’ distribution maps were based on sightings coordinates and maps were digitized and transformed into a shape file to represent the presence of the species throughout the study area. Whale-watching activities were digitised in points and polygons according to type. Coastal and marine protected areas of Argentina, as well as areas of hydrocarbon-related activities, were transformed into polygon shape files. All these layers were used for crossover analysis on GIS-based maps.

RESULTS AND DISCUSSION

Current situation on coastal and marine protected areas in Argentina

In 2003, the SIFAP (Sistema Federal de Áreas Protegidas/Federal System of Protected Areas) was established following an agreement among the Administración de Parques Nacionales (APN-National Parks Administration), the Ministerio de Ambiente y Desarrollo Sostenible (Environment and Sustainable Development Ministry) and the Consejo Federal de Medio Ambiente (CoFEMA-Environment Federal Council).

Current coastal and marine protected areas in Argentina administered by the Federal government, the National Parks Administration and the provinces are summarized in table 2 (see Annex II) and figure 2.

A total of 66 coastal and marine protected areas have been identified as associated with the presence of cetaceans through sightings or strandings. The first PA was established in the 1960s and the period when most PAs were created was during the 1990s when 13 PAs were established. However, the three MPAs were only established in the last decade.

The category of Natural Monument was established by Law 22,351/1980 and, in its description, it could be considered equivalent to category III and IV of IUCN. Only four species of cetaceans are classified as Natural Monuments in Argentina: southern right whale, Commerson’s dolphin, Peale’s dolphin and franciscana. Table 3 summarises species of cetaceans classified as Natural Monuments in Argentina and the corresponding legislation that classified them, either at national or provincial level (see table 3 in Annex II).
Figure 2. Coastal and marine protected areas of Argentina. a. Protected areas in Buenos Aires and Río Negro provinces. b. Protected areas in Tierra del Fuego province and Namuncurá-Banco Burdwood I and II and Yaganes MPAs. c. Protected areas in Chubut and Santa Cruz provinces. Numbers correspond to protected areas as in Table 2 (see Annex II). Dark green: coastal and marine protected areas. Light green: coastal and marine biosphere reserves.
Anthropogenic activities

Seismic surveys in the Argentine Sea are increasing at an alarming rate. In November 2018, the Government of Argentina opened the “International Public Tender Offshore No. 1” for exploration in national waters (12-200 nm) of the Argentine continental shelf with the objective of increasing hydrocarbon production. The exploration permits cover around 200,000 square kilometres, representing a total of 38 blocks and concern the Austral Marina, Malvinas Oeste and Argentina Norte basins. There have also been rounds of intense oil exploration activities, including seismic surveys and drilling, in Islas Malvinas (Falkland Islands) since 2010. These areas are shown in figures 3 to 15 as orange shapes within the maps showing species presence within the study area, along with other areas that are already at the production and extraction stage. Marine seismic surveys for oil and gas introduce high levels of impulsive sounds generated by the use of airguns. Argentina also has important fisheries given its large continental shelf and extensive coast, with easily accessible, important fishing resources. These activities along with intense marine traffic represent major threats for the species of cetaceans distributed throughout the waters of the study area. In addition to ship noise, some fisheries are responsible for cetacean bycatch, and cetaceans are also susceptible to ship strikes, especially in areas of high-density marine traffic.

Species distribution and conservation status

Table 4 (see Annex II) displays the conservation status of the species analysed according to the 2019 Argentinian Red List (SAyDS-SAREM) and IUCN. While the scale of the first specifically refers to the species within the Argentine Sea and the latter to the global level, both classify 12 of these species into the same categories, with seven of the remaining eight species classified into different categories involving DD in either of the Lists consulted. SAyDS-SAREM (2019) includes nine species as Data Deficient (DD)-eight of which are the beaked whales included in this report-, seven as Least Concern (LC), three as Vulnerable (VU) and one as Endangered (EN). It also includes the common bottlenose dolphin subpopulations and categorises the Lahille’s bottlenose dolphin (T. t. gephyreus) as EN and the common bottlenose dolphin (T. t. truncatus) as DD. IUCN globally categorized four of these species as DD, 12 as LC, one as Near Threatened (NT), two as VU and one as EN. Additionally, it includes T. t. gephyreus as VU (which includes not only Argentina but also Brazil and Uruguay). CITES includes six of these species in its Appendix I and the remaining 14 in Appendix II, while CMS lists three in Appendix I, five in Appendix II and three in both Appendices I and II.

The coastal and marine protected areas in Argentina where each cetacean species was recorded are shown in table 4 (see Annex II).
The humpback whale is a cosmopolitan species that, as with all large whales in the Southern Hemisphere, suffered a reduction of its populations as a result of commercial whaling during the first half of the 20th century (Allison, 2006; Findlay, 2001). Nowadays there is evidence that shows that the West South Atlantic humpback whale population is growing (Zerbini et al., 2011). It is distributed throughout the study area (Dellabianca and Gribaudo, 2019), although sightings of humpback whales were scarce throughout the Argentine Sea and relatively more frequent in the Beagle Channel (figure 3). These findings do not necessarily mean that the species is rare. It was thought that whales recorded in the study area belonged to the IWC “Breeding Stock A” which undertakes long migrations from Antarctic and subantarctic waters, where they feed, to Brazilian waters (mostly to the Abrolhos Bank) where they mate and have their calves, and that they were passing through the Argentine Sea on their migration (IWC, 1998; 2005). However, telemetry and whaling data seem to contradict this, at least for whales breeding in waters on the Abrolhos Bank and feeding near Islas Georgias del Sur (South Georgia Islands) and Islas Sandwich del Sur (South Sandwich Islands), as they fail to show any whales within the Argentine Sea (Horton et al., 2020). Sightings and strandings have increased recently with some individuals detected swimming in the study area and several stranded whales found in all coastal provinces (figure 3), which are considered to be whales that occasionally enter the Argentine Continental Shelf (CFP, 2016). No genetic assessment has been done yet to determine whether they belong to “Breeding Stock A” or not, hence there is a need to undertake genetic assessment and to better understand migratory routes of whales seen from shore and found stranded along the Atlantic coast of Argentina and of those recorded in the Beagle Channel. The species is considered rare in Islas Malvinas (Falkland Islands), with only one stranding in 1984 (Otley, 2012).

Records of humpback whales, either sightings or carcasses on shore, have been reported in the southwestern portion of the Argentine Sea partially overlapping with areas where oil and gas exploration and/or production has been permitted (figure 3). Other threats that have been described for humpback whales are bycatch and ship strikes (Dellabianca and Gribaudo, 2019). The species has been increasingly found in the Beagle Channel in recent years where it is opportunistically encountered during touristic boat trips in the austral summer and fall. Additionally, it might be opportunistically seen from shore at provincial Natural Reserves Caleta Olivia and Costa Norte, as well as at Punta Marqués Protected Area (Dellabianca and Gribaudo, 2019).

This species has been recorded in the protected areas mentioned in table 4 (see Annex II). The species was classified as EN by IUCN in the 1980s, then VU in the 1990s and, as of 2008, is included in the LC category. The humpback whale in Argentina was considered VU from 1997 to 2019 when it was included locally into the LC category by SAyDS-SAREM. It is listed in Appendix I of CMS and CITES (table 4-see Annex II).
Figure 3: Presence of humpback whales in the study area (2000-2020).
According to historic records from whaling activities, sei whales may have occurred regularly off the Argentinian coast in the past (Hart, 2002; Schwarz, 1934). Over the last two decades there have been some reports of sightings and strandings of this species along the Patagonian coast of Argentina (Iñíguez et al., 2010b). A few stranded animals have been found in the northern part of the study area in Buenos Aires province. Even though according to the literature this species seems to prefer offshore waters, sei whales are increasingly sighted in coastal waters of the Beagle Channel, Tierra del Fuego province, and Bahía Camarones and Parque Interjurisdiccional Marino Costero Patagonia Austral (PIMCPA), Chubut province, during the austral summer and winter (figure 4). Calves have been seen in these areas and, recently, feeding animals have been recorded in Bahía Camarones and PIMCPA. The species is also found around Islas Malvinas (Falkland Islands) which have been reported as a feeding ground for sei whales (Weir et al., 2020; Iñíguez et al., 2010b; White et al., 2002). The numbers of sei whales recorded in that area increase in November and remain high until April (Weir et al., 2020; White et al., 2002).

Like most balaenopterids, sei whales are found in all oceans and migrate long distances north-south from high latitude summer feeding grounds to lower latitude winter areas. However, unlike most other balaenopterids, sei whales tend to be restricted to more temperate waters (Rice, 1998). Historic and current information on the distribution and abundance of sei whales in the Southwest Atlantic is scarce. The use of Brazilian waters as a winter calving ground from May to October has been confirmed (Weir et al., 2020; Wedekin et al., 2018; Heissler et al., 2016) and evidence of migration between Brazil and Islas Malvinas (Falkland Islands) has recently been reported (Weir et al., 2020). Records in Argentina may correspond to animals migrating from and towards their feeding grounds in subantarctic waters (Iñíguez et al., 2010b). However, the fact that in recent years sei whales have been seen regularly at the mouth of the Beagle Channel, Bahía Camarones and PIMCPA suggests that these areas could have an ecological relevance for the species.

The species has been recorded near areas of seismic survey and hydrocarbons exploration (figure 4). Other potential threats suggested for sei whales include ship strikes, but currently they are not considered a major concern (Hevia et al. 2019a).

The species occurs in the protected areas in Argentina listed in table 4 (see Annex II) and is included both locally and globally in the EN category by SAyDS-SAREM as well as IUCN and in Appendices I and II of CMS and Appendix I of CITES (table 4-see Annex II).
Figure 4: Presence of sei whales in the study area (2000-2020).
Southern right whale (SRW) is one of the whale species to have been most affected by commercial whaling and was driven close to extinction during the nineteenth and twentieth centuries (IWC, 2011). The most recent estimates of population growth rate suggest that this species is recovering at 6-7% per year on both sides of the Atlantic Ocean and in Australia (IWC, 2013; Cooke et al., 2013; Crespo et al., 2011).

Península Valdés (PV), Argentina, is an important nursery ground for SRWs in the western South Atlantic Ocean. Every year they can be observed in relatively large aggregations in the winter-spring season. Their abundance in this region was estimated at 4,245 (95% CI=3,765-4,725) individuals in 2010 (IWC, 2013). Although their abundance is increasing, the rate of increase is slowing down. Differences in rates of increase of group types and changes in habitat use are thought to be the consequence of a density-dependence process (Crespo et al., 2019).

Their presence during the austral winter in their breeding ground is well known but their migration routes and feeding grounds are still being studied. There are three grounds that appear to contribute most to the diets of Península Valdés SRWs which correspond to areas previously documented in the logbooks of whaling ships: the Patagonian Shelf, Islas Georgias del Sur (South Georgia Islands), and the waters of the Polar Front (Valenzuela et al., 2018). Satellite tagging surveys on whales from PV and Golfo San Matías showed that, apparently, there is not only one pattern of movement when the whales leave this area (Zerbini et al., 2018, 2016).

Southern right whales can be sighted along almost the entire Argentine coast (figure 5). The main whale-watching (WW) activity occurs in Península Valdés and surrounding areas between April and December, with land-based WW promoted from Puerto Madryn, El Doradillo and PV. Boat-based WW takes place only in a restricted area in Puerto Pirámides (PV). The recent increase of sightings along the coast has incentivised WW activities in other areas such as Bahía San Antonio, in Golfo San Matías, where the boat-based activity is also regulated (Arias et al., 2018), and, additionally, land-based WW occurs in Cabo Virgenes (Santa Cruz province) and Buenos Aires coast (Mandiola et al., 2019; Zuazquita et al., 2018). In Argentina, there were 22 confirmed
and 3 probable vessel collision cases between 1970 and 2000 (Van Waerebeek et al., 2007; Rowntree et al., 2001). In order to mitigate these kind of events in PV, the Prefectura Naval Argentina promulgated the Order MADR-RIA N°122/12 which establishes a navigation corridor in Golfo Nuevo area during the calving season (from 1st June to 30th November). Cases of entanglement have been recorded in Golfo Nuevo and Golfo San Matías. Outside this zone, many of the SRW records on the Argentine continental shelf and Buenos Aires zone coincide with areas of high shipping traffic.

Overlaps were found between records of this species and northern and southern seismic survey areas. They have also been reported in areas where exploration and exploitation of hydrocarbons takes place (figure 5).

The species occurs in the protected areas in Argentina listed in table 4 (see Annex II).

In 1984, the SRW was declared a “National Natural Monument” by Law 23,094 which was followed in 2003 by Santa Cruz province and in 2006 by Río Negro province declaring the species a “Provincial Natural Monument” by Law 2,643 and Law 4,066, respectively.

The southern right whale is included both locally and globally in the LC category by SAyDS-SAREM as well as IUCN and in Appendix I of CMS and CITES (table 4-see Annex II). The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the LC category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 5: Presence of southern right whales in the study area (2000-2020).
In Argentina there have been records of sperm whales associated with fisheries in the northern part of the study area near the Brazil-Malvinas Confluence, and also in Tierra del Fuego and Islas Malvinas (Falkland Islands), at the 200 m isobath. Additionally, strandings of mainly solitary mature males have occurred all along the coast of Argentina (figure 6). The sperm whale is a cosmopolitan species, with females and juveniles normally found in warm waters, while young males move to higher latitudes in summer, and old males migrate to the cold waters of Antarctica (Whitehead, 2003).

Interactions between sperm whales and longline fisheries have frequently been reported in Argentinian waters, and mitigation measures have been taken to reduce the impacts of such interactions (Mandiola et al., 2019). The species has also been recorded close to vessels conducting marine seismic surveys (Mandiola et al., 2015) and in areas of hydrocarbons exploration and production (figure 6).

Strandings of individual sperm whales have been recorded in several coastal protected areas, and over the last year the presence of the species has been reported near the Namuncurá-Banco Burdwood I and II and Yaganes MPAs (table 4-see Annex II). There is no knowledge on abundance estimates or population trends for this species in the Argentine Sea. The species is listed both locally and globally in the VU category by SAyDS-SAREM as well as IUCN and in Appendices I and II of CMS and Appendix I of CITES (table 4-see Annex II).
Figure 6: Presence of sperm whales in the study area (2000-2020).
Orca can be found throughout the study area where it is considered a resident species (figure 7, Coscarella et al., 2019a). Sightings of the species are believed to have increased over the last two decades (Crespo and García, 2016). Some animals migrate over the shelf-break from Antarctica where the species is abundant (Durban and Pitman, 2012). Based on stable isotope analysis, three groups have been distinguished: resident animals in Patagonian waters, migrating animals from the south of Brazil, and migrating animals from Antarctica (Loizaga et al., 2018). There are no abundance estimates for the species in the Argentine Sea, but it is considered a moderately frequent species. Sightings are common from February to April in Punta Norte, Península Valdés, where they feed on southern sea lion (Otaria flavescens) pups (Iñíguez, 2001). The same individuals can be seen from October to November in other areas of PV feeding on southern elephant seal (Mirounga leonina) pups and dusky dolphins, and also in Golfo San Matías (Coscarella et al., 2015). Between 1972 and 2000, 117 orca – southern right whale encounters were observed in the PV area and 12 of them involved attacks (Sironi et al., 2008).

Recently two unusual mass stranding events of orca were registered in Buenos Aires province: in August 2018 between Nueva Atlantis and Punta Mogotes which involved five individuals (Infobae, 27th August 2018) and, in September 2019, in Mar Chiquita, involving seven individuals (Diario Clarín, 16th September 2019). In both years there were vessels conducting seismic surveys in the area, although the causes of these strandings remain unconfirmed. The overlap between sightings of orcas and seismic surveys in the southern area is shown in figure 7.

Orcas have been recorded in the protected areas included in table 4 (see Annex II). The species is locally considered as LC by SAyDS-SAREM and globally as DD by IUCN. It is included in Appendix II of CITES and CMS. The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the LC category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 7: Presence of orcas in the study area (2000-2020).
The common dolphin is a cosmopolitan species found in tropical and cold waters of the Atlantic and Pacific Oceans (Hammond et al., 2008). In Argentina these dolphins are distributed along the coast of Buenos Aires, Río Negro and Chubut provinces and in waters far from shore (figure 8, Romero et al., 2019). It is an abundant species throughout the year along the shelf waters off Buenos Aires province and in Golfo San Matías in Río Negro. A record of a skeleton found on a beach in the southeast of Tierra del Fuego in 2002 is considered a vagrant (figure 8; Goodall et al., 2008). It is commonly seen in large groups and is frequently registered in mixed groups with dusky dolphins.

Interactions with fisheries is considered the main threat for this species in Argentina with the highest bycatch numbers registered in midwater trawling fisheries in Buenos Aires province (Romero et al., 2019; Forum for the Conservation of the Patagonian Sea, 2019; CFP, 2016). Bycatch has also been reported in pelagic trawling nets in Patagonian waters (CFP, 2016). Analysis of stable isotopes found that offshore common dolphins’ diet is composed mainly of juvenile Argentine hake (Merluccius hubbsi). This raises concerns off Buenos Aires province since stocks of this prey item in the area were reduced due to fisheries pressure there and only a few age classes remained as of the 1986-2005 period, leading to a potential risk of disappearance of larger groups (Loizaga de Castro et al., 2016). This could have, as yet unknown, consequences for the common dolphins feeding on them.

High values of organic pollutants have been found in common dolphins making contamination of waters near the coast and over the shelf a potential threat (Romero et al., 2019).

These dolphins are opportunistically sighted during whale-watching trips in Bahía San Antonio (Romero et al., 2019).

The species is found in the protected areas shown in table 4 (see Annex II) and it is included both locally and globally in the LC category by SAYDS-SAREM as well as IUCN and in Appendix II of CITES (table 4-see Annex II). The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the LC category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 8: Presence of common dolphins in the study area (2000-2020).
COMMON BOTTLENOSE DOLPHIN (TURSIOPS TRUNCATUS)

This species is widely distributed globally (Wells et al., 2019). The national distribution range encompasses all the study area, from northern Buenos Aires province to Tierra del Fuego, with the southernmost records occurring between 53°S and near 55°S (Vermeulen et al., 2019; Goodall et al., 2011; figure 9).

Two subspecies are recognised in the southwest Atlantic Ocean: Lahille’s bottlenose dolphin, Tursiops truncatus gephyreus and common bottlenose dolphin, Tursiops truncatus truncatus. The former is endemic to the coastal waters of southern Brazil, Uruguay and Argentina, with the population from Argentina constituting an Evolutionary Significant Unit (Vermeulen et al., 2017; Fruet et al., 2014).

*T. t. truncatus* is associated with oceanic dolphins on the continental platform of southern Brazil (Fruet et al., 2017). Two morphotypes are described for coastal bottlenose dolphins in Argentina: “T” and “F” (Vermeulen and Cammareri, 2009a) which interact with each other and live in sympathy (Vermeulen et al., 2017). The Scientific Committee of the IWC has encouraged gathering more genetic and morphological data on common bottlenose dolphins from the southwest Atlantic in order to clarify the taxonomic level of Lahille’s bottlenose dolphin (i.e. whether species or subspecies) and to better understand coastal vs. offshore forms (IWC, 2018).

The situation of the species is extremely fragile in Argentina, and it is currently one of the cetacean species of major conservation concern in the country. Its distribution was once considered to be continuous and sightings were frequently recorded, particularly along the coasts of Buenos Aires, Río Negro and in Chubut provinces; the situation was different in Santa Cruz and Tierra del Fuego provinces where records were scarce (Vermeulen et al., 2017). Sightings of dolphins have been decreasing in recent years and, even though nationwide abundance has not been assessed yet, based on local abundance estimations it is considered that there are less than 300 individuals for all areas in Argentina; a clear explanation for this very low value is yet to be found (Vermeulen et al., 2017). Estimated figures are worryingly low for Chubut province (n=34, 95% CI 22-51), Bahía San Antonio, Río Negro province (n=83, 95% CI 45.8-151.8) and in Bahía Blanca and San Blas, southern Buenos Aires province (less than 50 individuals), while in northern Buenos Aires province the species seems to have disappeared (Vermeulen et al., 2018; Vermeulen and Bräger 2015; Coscarella et al.,
In Islas Malvinas (Falkland Islands) the species is considered rare, with very few records up to the mid-1990s (Otley, 2012).

Boat and land-based whale-watching of *T. t. gephyreus* takes place in Bahía San Antonio (Vermeulen *et al.*, 2019) and land-based WW in El Cóndor, Río Negro province (Failla *et al.*, 2014; figure 9).

Ship traffic might pose a risk to common bottlenose dolphins, particularly in Bahía San Antonio where the increase in traffic of WW, fishing and cargo ships is considered a threat due to chemical and acoustic pollution (Vermeulen *et al.*, 2019). These authors also consider overfishing, destruction of habitat due to fisheries, and inorganic trace element pollution to be threats.

Bycatch does not seem to be a major threat for common bottlenose dolphins in the study area (CFP, 2016), however there were some records of individuals incidentally caught in pelagic nets for anchovies (CFP, 2016) and gillnets in the mouth of the Río Negro (M. Failla, pers. comm).

The species has been reported in protected areas listed in table 4 (see Annex II). The common bottlenose dolphin is included locally in the VU category by SAyDS-SAREM and globally in the LC category by IUCN and in Appendix II of CITES (table 4—see Annex II). *T. gephyreus* is classified as EN by SAyDS-SAREM and VU by IUCN while *T. t. truncatus* is considered DD by the Argentinian Red List. The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included *T. truncatus* under the VU category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 9: Presence of common bottlenose dolphins in the study area (2000-2020).
Commerson’s dolphin is frequently found in many coastal areas in Patagonia. The main concentrations occur in Rawson, Bahía Camarones, Comodoro Rivadavia (Chubut province), Puerto Deseado, Bahía San Julián, Puerto Santa Cruz, Río Gallegos (Santa Cruz province) and Tierra del Fuego (figure 10). The species is also found in the Strait of Magellan and around Islas Malvinas (Falkland Islands) (figure 10).

This species is the subject of boat-based dolphin watching in Rawson, Puerto Deseado and Bahía San Julián. In May 2019, the Municipality of Puerto San Julián adopted Ordinance No 3,394 which declared that the watching of Commerson’s dolphins is of Municipal interest and also promoted land-based watching in the city.

Vessel noise has been considered a potential threat for the species in Puerto Deseado and Bahía San Julián (Reyes Reyes et al., 2018). Bycatch is also a threat for the species, though its actual impact is unknown (CFP, 2016). However, the Commerson’s dolphin is the cetacean species most impacted by fisheries in the coastal waters of southern South America south of 41ºS, mainly by gillnets (Iñíguez et al., 2003). Non-responsible whale-watching is considered a potential threat as well as organic and inorganic trace elements, and noise pollution (Coscarella et al., 2019).

The distribution of Commerson’s dolphins overlaps with several coastal protected areas in Santa Cruz and Chubut as listed in table 4 (see Annex II).

In 2001, the species was declared a “Natural Monument” in Santa Cruz (Provincial Law 2,582).

The species is included both locally and globally in the LC category by SAyDS-SAREM as well as IUCN and in Appendix II of CMS and CITES (table 4-see Annex II). The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the LC category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 10: Presence of Commerson’s dolphins in the study area (2000-2020).
Peale’s dolphin is an endemic species that is only found in Argentina and Chile and whose distribution range encompasses from 38°S to 59°S in the east and up to 33°S in the west (Heinrich and Dellabianca, 2019; Hevia et al., 2019b). It has been widely reported in waters of the Argentine continental shelf from slightly north of 40° to 56°S (figure 11), with records increasing towards the southern region both in coastal locations as well as in the open sea. It is the species most frequently recorded in ship-based surveys in Islas Malvinas (Falkland Islands) where its presence is considered “regular” (Baines and Weir 2020; Dellabianca et al., 2016; Otley 2012; White et al., 2002). When close to shore these dolphins are found along open coasts and, in the south, in channels and fjords. They often associate with areas of kelp beds of the genus Macrocystis (Goodall et al., 1997).

Peale’s dolphin suffered from interactions with fisheries in the past, particularly with trawl nets and coastal gillnets, but these are considered sporadic interactions. It was used as bait for southern king crab (Lithodes santolla) in the channels of southern Tierra del Fuego, but this practice no longer takes place in Argentina (CFP, 2016). Overfishing and an increase in seismic surveys are considered the main threats (Hevia et al., 2019b). Records of Peale’s dolphin in some areas overlap or are close to seismic surveys and areas of hydrocarbons exploration and production (figure 11).

In Chubut and Santa Cruz provinces the species is included as an attraction in boat-based WW trips in Bahía Camarones, Parque Marino Isla Pingüino; and land-based dolphin-watching in Playa La Mina, near Puerto San Julián, and Cabo Virgenes (figure 11).

Peale’s dolphins have been recorded in the protected areas listed in table 4 (see Annex II).

In 2009, the species was declared a “Natural Monument” in Santa Cruz (Provincial Law 3,038).

The species is included both locally and globally in the LC category by SAyDS-SAREM as well as IUCN and in Appendix II of CMS and CITES (table 4-see Annex II). The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the LC category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 11: Presence of Peale’s dolphins in the study area (2000-2020).
The dusky dolphin is considered a frequent species in the study area where it occurs along the coast from Buenos Aires to Tierra del Fuego. Occurrence of the species in the Beagle Channel has increased since 2000 and, since 2009, dusky dolphins are normally seen during the austral summer and autumn, suggesting the existence of a resident population (Dellabianca et al., 2018). One dead stranded animal was recently found in Islas Malvinas (Falkland Islands) (figure 12; Weir and Black, 2018). Mixed groups of dusky and common dolphins are frequently seen in Golfo San Matías in Río Negro province and in Península Valdés and occasionally they can be seen in mixed groups with Peale’s dolphins in shelf waters.

The species is the subject of boat-based WW activities in Bahía San Antonio, Golfo San Matías and Golfo Nuevo (figure 12), where short-term impacts such as changes in feeding behaviour in the presence of tourist boats have been measured (Dans et al., 2012).

Bycatch in trawl-net and seine-net fisheries is the main threat for the species (Dans et al., 2003; Mandiola and Rodríguez, 2017). There are also records of the species overlapping with marine seismic surveys and hydrocarbon exploration and production areas (figure 12).

Dusky dolphins have been recorded in the protected areas listed in table 4 (see Annex II). The species is included both locally and globally in the LC category by SAyDS-SAREM as well as IUCN and in Appendix II of CMS and CITES (table 4-see Annex II). The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the LC category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 12: Presence of dusky dolphins in the study area (2000-2020).
The franciscana dolphin is a small odontocete inhabiting coastal waters of the Southwestern Atlantic Ocean from Itaúnas (18°25’S), Espírito Santo State, Brazil, to Golfo San Matías (41°10’S), Chubut province, Argentina (Denuncio et al. 2019; Crespo, 2018; Siciliano et al. 2002; Crespo et al. 1998). The species’ distribution range has been divided into five ‘Franciscana Management Areas’ (FMAs Ia, Ib, II, III and IV) (IWC, 2016; Cunha et al., 2014; Secchi et al., 2003), with FMA Ia, Ib and II located in Brazil, FMA III shared between Brazil and Uruguay and FMA IV located in Argentina. There are studies by Méndez et al. (2010, 2008) and Garibaldi et al. (2016, 2015) that found 5 genetically distinct populations in FMA IV: FMA IVa (Samborombón West / Samborombón South), FMA IVb (Cabo San Antonio /Buenos Aires East), FMA IVc (Necochea /Claromecó / Buenos Aires Southwest), FMA IVd (Monte Hermoso), and FMA IVe (Río Negro). However, the population structure of the franciscana is still under discussion by the IWC (2020, 2021).

In Argentina, incidental mortality in the artisanal demersal fisheries has been a major conservation concern for franciscanas (Negri et al., 2012; Cappozzo et al., 2007; Bordino and Albareda, 2004; Corcuera et al., 1994; Crespo et al., 1994). Annual mortality in small artisanal gillnet fisheries in coastal Buenos Aires was estimated at about 500-800 individuals (Negri et al., 2012; Cappozzo et al., 2007; Bordino and Albareda, 2004). The species is also exposed to other threats of potential concern throughout its range, such as coastal development, marine debris, chemical and noise pollution, diseases and vessel traffic (e.g. Di Beneditto and Ramos, 2014; Denuncio et al., 2011).

Land-based dolphin-watching of franciscana is promoted in El Cóndor, Río Negro province (figure 13; Failla et al., 2014).

The species is found in the protected areas listed in table 4 (see Annex II).

In 2018, the species was declared a “Natural Monument” in Buenos Aires province (Provincial Law 14,992).

The franciscana has been considered the most threatened small cetacean in South America (Secchi, 2010) and is listed as VU in the IUCN Red List of threatened species as well by SAyDS-SAREM, and in Appendices I and II of CMS and II of CITES (table 4-see Annex II). The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the EN category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 13: Presence of franciscanas in the study area (2000-2020).
Burmeister’s porpoises are distributed from Tierra del Fuego northwards to Peru (~5°S) in the Pacific and to southern Brazil (~29°S) in the Atlantic, although it remains unclear whether or not that distribution is continuous (Félix et al., 2018). There are records all along the coast of Argentina (figure 14), but it is considered a non-frequent species in the country (Dellabianca et al., 2019). However, there is a resident population in the Beagle Channel, Tierra del Fuego, where animals are seen year-round (Dellabianca et al., 2019). The first record of the species in Islas Malvinas (Falkland Islands) was obtained in 2019 from a stranding of a freshly dead adult male (Weir and Rutherford, 2019).

Throughout its range, the species has been poorly studied due to the cryptic behaviour of individuals which make them difficult to see, especially in poor weather conditions. The main threat the species faces is bycatch in artisanal and coastal nets in Buenos Aires, Santa Cruz and Tierra del Fuego provinces (CFP, 2016). Intense marine traffic in Ushuaia is also a potential risk that should be monitored alongside other potential threats to the species such as prey reduction and pollution (Dellabianca et al., 2019).

The species is present in the protected areas listed in table 4 (see Annex II).

Globally, the species is listed as NT by IUCN and included in Appendix II of CMS and CITES. Locally it is included in the DD category by SAyDS-SAREM (table 4—see Annex II). The 2016 IUCN Regional Red List Workshop for Species of the Patagonian Sea included this species under the DD category (Forum for the Conservation of the Patagonian Sea, 2019).
Figure 14: Presence of Burmeister’s porpoises in the study area (2000-2020).
BEAKED WHALES

The beaked whales are deep water species, they are rarely seen at sea and, when they are, they are usually difficult to identify to species level.

Most records of ziphiids within the study area were obtained south of 46°S with most of them concerning stranded individuals (figure 15).

Arnoux’s beaked whale (*Berardius arnuxii*) has a circumpolar distribution in the Southern Hemisphere. In the Atlantic it can be found from 24°S to the ice edge in the Antarctic (Brownell, 2020; Iñíguez et al., 2019d). Its presence has been confirmed in Buenos Aires, Chubut, Santa Cruz and Tierra del Fuego provinces, although records in the 21st century have been scarce with at least one individual stranded in northern Buenos Aires province and another in Santa Cruz province (figure 15; Iñíguez et al., 2019a; Zuazquita et al., 2016). The species is considered rare for Islas Malvinas (Falkland Islands) and there have been no records reported since 2000 (Otley et al., 2012).

The southern bottlenose whale (*Hyperoodon planifrons*) has a circumpolar distribution in the Southern Hemisphere from near 30°S to Antarctic waters, mostly in deep oceanic waters (Lowry and Brownell, 2020; Hevia and García, 2019). Since 2000 it has been recorded in Santa Cruz and Tierra del Fuego provinces as well as in Islas Malvinas (Falkland Islands) (figure 15; Iñíguez et al., 2019a; Otley et al., 2012; White et al., 2002). It is one of the most frequently sighted ziphiid species in Antarctic waters (MacLeod et al., 2006; van Waerebeek et al., 2004).

Andrew’s beaked whale (*Mesoplodon bowdoini*) is considered to have a circumpolar distribution but data are scarce and based only on strandings, meaning that more data need to be gathered before a proper statement of distribution can be made (Pitman and Brownell, 2020; Paso Viola and García, 2019a). For the study period, only two strandings have been reported, one in Bahía San Sebastián, Tierra del Fuego (Goodall et al., 2008) and one in Islas Malvinas (Falkland Islands) (figure 15; Otley et al., 2012).

Gray’s beaked whale (*Mesoplodon grayi*) has circumpolar distribution in the Southern Hemisphere in deep oceanic waters with records from 30°S to 45°S in the north to the Polar Front, with some sightings up to 65°S (Pitman and Taylor, 2020; Rodriguez et al., 2019). Stranding records have been obtained from the Islas Malvinas (Falkland Islands) (figure 15; Otley et al., 2012). Goodall et al. (2008b) reported that this species was
the second most numerous in the collection of beaked whales at the Acatushún Museum (Museo Acatushún de Aves y Mamíferos Marinos Australies, AMMA), but that they had had no new records since 1994.

**Hector’s beaked whale** (*Mesoplodon hectori*) has an, as yet, unconfirmed distribution in cool-temperate waters of the Southern Hemisphere with most records corresponding to strandings (Pitman and Brownell, 2020; Paso Viola and García, 2019b). Strandings have been reported in Buenos Aires province (two individuals stranded alive and then died, a male in Mar del Plata and a female near Puerto Quequén, in August and September 2002, respectively) and in Islas Malvinas (Falkland Islands) (figure 15; Cappozzo *et al*., 2005; Otley *et al*., 2012). Plastic materials were found in a stranded individual in Claromecó, Buenos Aires province (Denuncio *et al*., 2017).

The **strap-toothed beaked whale** (*Mesoplodon layardii*) is distributed in deep waters of the Southern Hemisphere between 35° to 63°S beyond the continental platforms (Pitman and Brownell, 2020; Iñíguez *et al*., 2019b). Since 2000 they have been reported in Buenos Aires, Santa Cruz, Tierra del Fuego and Islas Malvinas (Falkland Islands) (figure 15; Aves Argentinas, 2021; Iñíguez *et al*., 2019a; Otley, 2012; Otley *et al*., 2012; Goodall *et al*., 2008).

**Shepherd’s beaked whale** (*Tasmacetus shepherdi*) distribution is inferred to be circum-polar in cold temperate waters in the Southern Hemisphere (Iñíguez *et al*., 2019c; Braulik, 2018). Reports include strandings in Santa Cruz and Tierra del Fuego provinces (figure 15; Iñíguez *et al*., 2019a; Goodall *et al*., 2008; Grandi *et al*., 2005). A specimen stranded in Tierra del Fuego presented longline hooks in its stomachs and intestines (Goodall *et al*., 2008).

**Cuvier’s beaked whale** (*Ziphius cavirostris*) is a cosmopolitan species, distributed in deep offshore waters of both hemispheres (Baird *et al*., 2020; Cáceres-Saéz *et al*., 2019). It has been recorded in Buenos Aires, Río Negro, Chubut, Santa Cruz provinces and Islas Malvinas (Falkland Islands) (figure 15; Cáceres-Saéz *et al*., 2019; Iñíguez *et al*., 2019a; Vilches *et al*., 2018; Otley *et al*., 2012; Bachara and Norman, 2013). Heavy metals have been found in stranded specimens in Argentina (Vilches *et al*., 2018).

Population trends are unknown for all species of beaked whales in the Argentine Sea.

Over the last two decades and particularly since 2010, there has been an increase in the number of strandings along the Santa Cruz coast (Iñíguez *et al*., 2019a).

Beaked whales are vulnerable to seismic exploration and mid-frequency sonar (1kHz - 10kHz) (Barlow and Gisiner, 2006). A few stranded animals might have presented signs of possible acute decompression syndrome, but as necropsies could not be conducted, the cause of death could not be determined (Iñíguez *et al*., 2019a).

Other potential threats reported for these species are prey depletion due to fisheries in subantarctic waters (Lowry and Brownell, 2020), the effects of climate change (Learmonth *et al*., 2006), plastic pollution (Denuncio *et al*., 2017) and inorganic trace element pollution (Vilches *et al*., 2018).

The general cryptic behaviour and oceanic distribution of beaked whales prevent them from being the target of the WW industry but opportunistic sightings may occur during cruises (Iñíguez *et al*., 2019d).

Stranded individuals have been found in the protected areas listed in table 4 (see Annex II).

All species of beaked whale that occur in Argentina are locally included in the DD category by SAyDS-SAREM. Globally, three are classified as DD and five as LC by IUCN. CMS includes Cuvier’s beaked whale in its Appendix I while CITES lists Arnoux’s beaked whale and the southern bottlenose whale in Appendix I and the remaining species in Appendix II (table 4-see Annex II).
Figure 15: Presence of beaked whales in the study area (2000-2020).
General remarks

The distribution data plotted on each map correspond to records collected from 2000 to early 2021. This cut-off point was set in order to exclude historical information and present as up to date information as possible regarding the presence of cetaceans in Argentina’s coastal and marine protected areas (CMPAs) and the potential threats which whales, dolphins and porpoises may face. The objective of this report was not to estimate abundance nor to obtain novel distribution maps but, rather, to collate information from available and, in some cases, unpublished sources to compare this information to existing coastal and marine protected areas in Argentina, and potential threats cetaceans may face by plotting the data on maps that facilitate visualization and help us reach conclusions. The data used to write this report reflect information from, mostly, studies undertaken in coastal zones and some from ship or aerial surveys undertaken by trained dedicated observers and none of which cover the entire study area. In the case of southern right whales, data was also extracted from telemetry studies (Zerbini et al. 2018, 2016) that allow free swimming tagged whales to be followed for a certain period.

Stranding records have been mapped as a proxy for species occurrence, although they should be interpreted cautiously in terms of representing species presence. Hence, the distribution maps may be biased due to all of these considerations. For example areas on the maps, particularly in the open ocean, where no data has been collected does not necessarily mean that a given species is not present in that area. Instead, it may mean that the area has not been surveyed yet. Survey effort was not always easily available, so it was not possible to assess the level of bias on presence data. The distribution information obtained from the maps presented in this report should be interpreted as a minimum. Additionally, especially for those species where information is lacking, the known distribution range was considered to help to understand and interpret the maps. Notwithstanding the shortcomings discussed above, information gleaned from the data presented here is still relevant as it allows a number of conclusions to be reached.

Distribution of all the analysed species since 2000 overlap to some extent with coastal and marine protected areas in the Argentine Sea.

It is of great concern that a large area of the Argentine Sea is already exposed to marine seismic surveys or to plans to start surveys in the near future. In particular, the proximity of some survey areas and the Namuncurá-Banco Burdwood I and II marine protected areas may mean that habitat in the protected areas is threatened.

Marine seismic surveys for oil and gas prospecting substantially contribute to the elevation of noise above ambient levels around the world. Seismic surveys use high-energy sources of sound or vibration to create seismic waves in the earth’s crust beneath the sea. The most common energy sources used are called “airgun arrays” which inject high pressure air into the water to produce high intensity impulsive sounds at intervals of 10-15s, over periods of days, weeks or months, with broadband source levels of 220-255dB re 1 Pa (Richardson et al., 1995). The dominant spectral content of airgun pulses is in the low frequency range up to 200 Hz, which overlaps with the sounds produced by baleen whales. In addition, significant wasted energy is produced at the high frequency range up to 20 kHz (Madsen et al., 2006; Goold and Fish, 1998) which overlaps with communication and echolocation sounds of most odontocetes. Characteristics of the sound pulses depend on array design, including airgun size, number, spacing, and air pressure (Barger and Hamblen, 1980; Kramer et al., 1968) and are often detectable in the water tens or even hundreds of kilometres from the source (Green and Richardson, 1988), having even been recorded at 4,000 km from the survey vessel (Nieuwirk et al., 2012). These activities in Argentina proceed without robust environmental impact assessments and effective mitigation plans to minimize impacts on marine life. Ocean noise is recognized as a major threat to marine ecosystems by several international bodies such as the United Nations Convention on the Law of the Sea (UNCLOS), the Convention on Biological Diversity (CBD), the Convention on Migratory Species (CMS), the International Union for Conservation of Nature (IUCN), the International
Maritime Organization (IMO), and the International Whaling Commission (IWC). At the 19th Meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (18-22 June 2018, New York, USA; https://undocs.org/A/73/124, 20pp.) the main topic discussed was “Anthropogenic Underwater Noise” and it was recognised that seismic surveys for hydrocarbons are the main, but not the only, cause of negative effects of anthropogenic sound on marine ecosystems and it was strongly recommended that appropriate planning and mitigation measures be taken. Namuncurá-Banco Burdwood I and II jointly comprise two unified marine protected areas established by National Laws 26,875 and 27,490 in 2013 and 2018, respectively. The elaboration process of a management plan for this unified area started in 2019 and is currently under development. This plan will set out guidelines for the activities carried out within this area and adjacent waters for a period of five years. The main activities are scientific research, commercial fisheries, vessel traffic, and oil and gas explorations. There is an urgent need to establish a mitigation zone around the MPA to reduce the impacts of airgun noise within the area.

Hydrocarbon exploration within Golfo San Jorge also poses a risk to the marine life that inhabit the coastal protected areas of Cabo Blanco, Monte Loayza, Barco Hundido, Humedal Caleta Olivia, Punta del Marqués and Patagonia Azul. The protected areas of Cabo Virgenes in the south of Santa Cruz province, and Costa Atlántica de Tierra del Fuego and Isla de los Estados in Tierra del Fuego are similarly threatened. These activities should be monitored, and mitigation measures applied to reduce any potential impact on marine life if the effectiveness of the adjacent protected areas is to be guaranteed.

Legislation and coastal and marine protected areas

In Argentina, cetaceans are protected by national and provincial laws, such as Law 25,577/02, Law 25,052/98, Resolution 351/95 and Provincial Ordinance 9,702/94, among others, that prohibit their capture, persecution and harassment. For a total of 37 cetacean species identified in Argentinian waters (SAyDS-SAREM, 2019), only four are Natural Monuments, representing less than 15% of the total.

Of the 66 CMPAs, six are exclusively under the jurisdiction of the National Parks Administration (APN), 46 are provincial, four are municipal and 10 are mixed, i.e. two jurisdictions, non-governmental organisations or the private sector are involved. Of the 46 provincial CMPAs, 16 correspond to the Province of Santa Cruz, 13 to Buenos Aires, nine to Chubut, five to Rio Negro and three to Tierra del Fuego.

Except for UNESCO-MAB Biosphere Reserves, which are not classified within the IUCN management categories, out of 63 CMPAs listed in table 2, 65.1% allow sustainable extraction of natural resources (categories IV, V and VI) and 20.6% are not determined or reported yet under IUCN categories. It follows that the No Takes categories (Ia, Ib, II and III) are really very few (15.8%). Monte León is classified under two IUCN categories (II and VI). It is also striking that out of the 63 coastal marine protected areas analysed, less than half, only 22 (34.9%), have management plans in place and two are in the process of developing plans (Namuncurá- Banco Burdwood II and Makenke). All of the management plans have been in place since 2001 and 16 were established between 2010 and 2020, showing clear progress in this regard.

The establishment of the SIFAP in 2003 has been a positive step, strengthening all management carried out on issues related to protected areas.

At least one cetacean species (or taxonomic group in the case of beaked whales) has been found in all of the CMPAs analysed, with Valdés (UNESCO-MAB Biosphere Reserve) being the most diverse with 11, followed by Patagonia Azul (UNESCO-MAB Biosphere Reserve) and Península Valdés (Tourist Nature Reserve /Ramsar Site) with 10 cetacean species according to records presented in this report (table 2-see Annex II).

The four most threatened species reported within the study area are sei whale (EN), sperm whale (VU), common bottlenose dolphin (VU, with Lahille’s bottlenose dolphin included into the EN category), and
franciscana (VU) (table 4—see Annex II). All of these have been recorded in several protected areas most of which are, of course, coastal (tables 3 and 4—see Annex II) and do not necessarily protect these species in open water. In Golfo San Jorge the sei whale occurs within the Patagonia Azul UNESCO-MAB Biosphere Reserve in the northern area of the gulf, but it also occurs in the central area, where hydrocarbons exploration and production areas are in place, both at sea and on land, respectively. Even when PAs exist there, they are small and purely coastal. This is also the case at the southern tip of the continent and in Tierra del Fuego. In the open sea, there are three MPAs located in the southern region, close to seismic exploration zones, but the central and northern region lacks MPAs, even when there is a large area being used for seismic surveys and hydrocarbons exploration (figure 4). A similar situation is found for the sperm whale, but with more records near the 200 nm (figure 6). The case of the common bottlenose dolphin is not much different, with the main gap on PAs located in the southeast of Buenos Aires province and, particularly, at the Río Negro Estuary and nearby waters (figure 9; see below for more detail). The franciscana is present in several PAs but it would also benefit from new PAs in the southeast of Buenos Aires province and in the Río Negro Estuary and surroundings waters (figure 13; see below for more detail).

GAPS AND FUTURE DIRECTIONS

It is necessary to understand the impact that bycatch and other threats have on cetacean populations of the Argentine Sea and adjacent areas. Currently, there is a lack of basic information (e.g. population estimates) for several species, even the best-known ones. To make progress on these issues, long-term studies and monitoring are required to determine, for example, the population size of the cetacean species involved and their population trends. Ideally, the aim should be to assess the population status of a species before starting a potentially threatening activity as well as at the end of the activity. Additionally, ecosystem management guidelines should be generated which take into account the behaviour of the system in which a certain population is found.

The common bottlenose dolphin is the most threatened cetacean species in Argentina, with fewer than 300 individuals remaining, though the figure could be even lower as the estimate has been achieved by adding abundance estimates from different localities and some individuals might be shared among them. Furthermore, the species has not been recorded in northern Buenos Aires province since the 1990s, an area where it used to be frequent. It needs urgent protection measures, particularly taking into account that this population is considered to be an Evolutionarily Significant Unit, and that threats to the species need to be better understood. The situation of the franciscana is not much better, with the population inhabiting the coastal waters of Río Negro being considered the southernmost population of the species and a distinct population within Franciscana Management Area IV. Both species are found in the Río Negro Estuary, franciscanas year-round (Failla et al., 2012) with common bottlenose dolphins mainly seen in the autumn (Failla et al., 2016), and both desperately need the implementation of conservation measures. Threats to these species need to be assessed and biological and population parameters better understood. No protected area (neither coastal nor marine) exists here (figures 2, 9 and 13) and the creation of a CMPA, with its management plan and proper implementation, would be of great benefit for these species and it is strongly recommended that this protection measure be taken. This has been identified as a priority action by the IWC Conservation Management Plan (IWC CMP) for Franciscana (IWC/66/CC11). Additionally, both species would benefit from higher protection in the southeast of Buenos Aires province.

Furthermore, considering the critical situation of *Tursiops truncatus gephyreus*, it is recommended that it be included in Appendices I and II of CMS at its next CoP on 2023.

Regarding National or Provincial Natural Monuments it is clear that only the southern right whale is protected at the national level and in only in two (Río Negro and Santa Cruz) of the five coastal marine provinces of Argentina. It is striking that the province of Chubut, where the largest nursery ground for SRW in
the Southwest Atlantic is located, has not yet declared the species a Provincial Natural Monument. We also believe that the two small cetaceans (the franciscana and the Lahille’s bottlenose dolphin) should be declared National Natural Monuments and Provincial Natural Monuments in the provinces that cover their range of distribution. At present, out of these two, only the franciscana is a Natural Monument of the province of Buenos Aires. This should not be interpreted as these cetaceans being the only ones deserving this kind of recognition rather that knowledge about other species in Argentine waters needs to be better understood for them to be considered as candidates to receive this type of protection.

Normally, PAs include breeding/ nursery/ calving and feeding grounds but, in many cases, migratory corridors, which are essential for the survival of some species, are not taken into account. In this sense, it should be noted that there are no PAs that include these migratory corridors and, therefore, it is important to evaluate areas of importance for migratory species to study the feasibility of the establishment of MPAs or, at least, to ensure that mitigation measures are adopted when an activity that could harm these species (e.g. seismic exploration, fishing, marine traffic) is carried out.

There is also a remarkable lack of information for some commonly recorded species (or subspecies) such as orca, dusky dolphin, Peale’s dolphin, Commerson’s dolphin, Lahille’s bottlenose dolphin (in some areas), and others.

Most of the revised CMPAs were not created in order to protect marine mammal populations, although some of them have subsequently included them, as is the case of Península Valdés and Bahía San Blas. It is, therefore, important that other PAs that include populations of cetaceans within their limits should consider them and incorporate them into their Management Plans. Also, if a CMPA has already been created and established and there is a strong scientific basis that shows its importance for a given species, it is necessary to evaluate the need to expand the limits of the PA to provide maximum protection to the species.

This report highlights the lack of Management Plans in most of the CMPAs and that it is essential for the proper establishment of these CMPAs to have a Management Plan. It is therefore recommended that a process be initiated to provide all of these PAs with their own Management Plans. The lack of Management Plans could be associated with the lack of or only limited funding granted to each protected area. Adequate funding is of the utmost importance for their correct functioning.

Finally, it is necessary to highlight that this review can contribute to the different processes initiated in the country to expand or strengthen CMPAs. It will also contribute to the following:

i. the South Atlantic IUCN IMMA process, which will start in 2023;
ii. the Action Plan for the Protection and Conservation of South Atlantic Whales under the auspices of CMS (Resolution 12.17);
iii. the IWC CMP on the Southwest Atlantic population of Southern right whales and for the franciscana; as well as
iv. the IWC Task Team on Lahille’s bottlenose dolphins.

In the specific case of cetaceans, we believe that it is important to continue increasing and interpreting information regarding all species recorded in Argentine waters. This will provide solid support for the creation of new CMPAs or to expand the boundaries of existing ones.
RECOMMENDATIONS

The data presented here can contribute to activities or processes carried out or to be carried out in different areas such as the United Nations Convention on the Law of the Sea biodiversity beyond national jurisdiction (UNCLOS BBNJ), CITES, CMS, IWC, and the IUCN IMMAs.

In order to mitigate the impact caused by anthropic activities on the different species of cetaceans identified in the Argentine Sea, it is advisable to generate an open and sincere dialogue between the different stakeholders, including governmental representatives, academia, industry sectors, other users or civil society organisations.

It is also important for MPAs to carry out a periodic review process. This could help those protected areas identified as important for some species, in particular those that are threatened such as the franciscana or the bottlenose dolphin, to redefine their areas, extend the protection of the species involved, elaborate or update their management plans, and add to their management plans the species that are identified within their boundaries.

Argentina currently has only three MPAs, Yaganes and Namuncurá/ Banco Burdwood I and II. We consider that it is crucial that the country extends its protected areas based on solid scientific information and, in this way, come closer to the targets agreed in the CBD in order to achieve the goals set for 2030. New areas could incorporate not only breeding or feeding grounds, but also important migratory corridors for species, such as for the southern right whale or the sei whale, to mention just two species.

ACKNOWLEDGEMENTS

Special thanks to Fundación Cethus’ colleagues who contributed to the collection of the data used in this report for species distribution assessment: Andrés Albalat, Jimena Belgrano, Mauricio Failla, Cecilia Gasparrou, Alexander Marino, Mariana Melcón, Vanesa Tossenberger, Nicolás Tossenberger and Nicolás Valese. This project was funded by OceanCare, www.oceancare.org.

REFERENCES


ANNEX I. REFERENCES USED FOR SPECIES DISTRIBUTION INFORMATION


## ANNEX II. TABLES

### Table 2. Coastal and marine protected areas of Argentina (APN: National Parks Administration; n/d: Not Determined)

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Category IUCN</th>
<th>IUCN Category</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Legal instrument</th>
<th>Number</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Campos del Tuyú</td>
<td>3,040</td>
<td>National Park / Ramsar Site</td>
<td>II</td>
<td>APN</td>
<td>2009</td>
<td>National Law</td>
<td>26499/09</td>
<td>Yes (2018)</td>
<td>southern right whale, orca, common bottlenose dolphin, franciscana, Burmeister’s porpoise</td>
</tr>
<tr>
<td>3</td>
<td>Namuncurá - Banco Burdwood II</td>
<td>24,697,370</td>
<td>Marine Protected Area</td>
<td>Ia</td>
<td>APN</td>
<td>2018</td>
<td>National Law</td>
<td>27490/18</td>
<td>In process</td>
<td>sei whale, Peale’s dolphin</td>
</tr>
<tr>
<td>4</td>
<td>Yaganes</td>
<td>5,582,985</td>
<td>Marine Protected Area</td>
<td>II</td>
<td>APN</td>
<td>2018</td>
<td>National Law</td>
<td>27490/18</td>
<td>Not reported</td>
<td>humpback whale, sei whale, sperm whale, orca, Peale’s dolphin</td>
</tr>
<tr>
<td>5</td>
<td>Isla Pingüino</td>
<td>159,526</td>
<td>Interjurisdictional Marine Park</td>
<td>n/d</td>
<td>APN and Santa Cruz province</td>
<td>2012</td>
<td>National Law</td>
<td>26818/12</td>
<td>Not reported</td>
<td>southern right whale, orca, Commerson’s dolphin, Peale’s dolphin, dusky dolphin</td>
</tr>
<tr>
<td>7</td>
<td>Makenke</td>
<td>72,663</td>
<td>Interjurisdictional Marine Park</td>
<td>n/d</td>
<td>APN, Santa Cruz province and Municipality of Puerto San Julián</td>
<td>2012</td>
<td>National Law</td>
<td>26817/12</td>
<td>In process</td>
<td>humpback whale, southern right whale, orca, Commerson’s dolphin, Peale’s dolphin, beaked whale</td>
</tr>
<tr>
<td>10</td>
<td>Tierra del Fuego</td>
<td>68,910</td>
<td>National Park</td>
<td>II</td>
<td>APN</td>
<td>1960</td>
<td>National Law</td>
<td>1554/60</td>
<td>Yes (2020)</td>
<td>sei whale, Burmeister’s porpoise</td>
</tr>
<tr>
<td>11</td>
<td>Campo Mar Chiquita – Dragones de Malvinas</td>
<td>1,753</td>
<td>Nature Reserve</td>
<td>VI</td>
<td>National</td>
<td>2009</td>
<td>Agreement between the Argentine Navy and APN</td>
<td>Not reported</td>
<td>Not reported</td>
<td>southern right whale, common dolphin, franciscana, Burmeister’s porpoise</td>
</tr>
<tr>
<td>12</td>
<td>Baterías - Charles Darwin</td>
<td>1,000</td>
<td>Nature Reserve of Defence</td>
<td>Not Reported</td>
<td>National</td>
<td>2013</td>
<td>Agreement between Argentine Navy and APN</td>
<td>Not reported</td>
<td>Not reported</td>
<td>franciscana, sperm whale, southern right whale, common bottlenose dolphin</td>
</tr>
<tr>
<td>13</td>
<td>Punta Buenos Aires (included within the Península Valdés Protected Area)</td>
<td>7,500</td>
<td>Nature Reserve of Defence</td>
<td>Not reported</td>
<td>National</td>
<td>2008</td>
<td>Agreement between Argentine Navy and APN</td>
<td>Additional Protocol 01/08</td>
<td>Not reported</td>
<td>southern right whale, orca, common dolphin, common bottlenose dolphin, dusky dolphin, Burmeister’s porpoise</td>
</tr>
</tbody>
</table>

Table 2. Coastal and marine protected areas of Argentina (APN: National Parks Administration; n/d: Not Determined)
## MARINE COASTAL PROVINCIAL PROTECTED AREAS

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Category</th>
<th>IUCN Category</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Legal instrument</th>
<th>Number</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Punta Rasa</td>
<td>522</td>
<td>Protected Area with sustainable use</td>
<td>VI</td>
<td>Municipal</td>
<td>1991</td>
<td>Provision Decree</td>
<td>1023 380</td>
<td>Yes (2003)</td>
<td>southern right whale, orca, common bottlenose dolphin, franciscana, Burmeister’s porpoise</td>
</tr>
<tr>
<td>17</td>
<td>Faro Querandi</td>
<td>5,575</td>
<td>Protected Landscape</td>
<td>V</td>
<td>Buenos Aires province</td>
<td>1987/1996</td>
<td>Municipal Ordinance; Provincial Law</td>
<td>1487 010420/87</td>
<td>Not reported</td>
<td>franciscana</td>
</tr>
<tr>
<td>18</td>
<td>Mar Chiquita</td>
<td>9,007</td>
<td>Multiple Use Nature Reserve</td>
<td>VI</td>
<td>Buenos Aires province</td>
<td>1989</td>
<td>Provincial Decree</td>
<td>1581/89</td>
<td>Not reported</td>
<td>southern right whale, common dolphin, dusky dolphin, franciscana, Burmeister’s porpoise</td>
</tr>
<tr>
<td>19</td>
<td>Mar Chiquita</td>
<td>56,030</td>
<td>Wildlife Refuge</td>
<td>VI</td>
<td>Buenos Aires province</td>
<td>1998</td>
<td>Provincial Law</td>
<td>12270/98</td>
<td>Not reported</td>
<td>southern right whale, common dolphin, franciscana, Burmeister’s porpoise</td>
</tr>
<tr>
<td>20</td>
<td>Restinga del Faro</td>
<td>706</td>
<td>Provincial Nature Reserve</td>
<td>IV</td>
<td>Buenos Aires province</td>
<td>2011</td>
<td>Provincial Decree</td>
<td>469/11</td>
<td>Not reported</td>
<td>humpback whale, southern right whale, orca, common dolphin, common bottlenose dolphin, dusky dolphin, franciscana, beaked whale</td>
</tr>
<tr>
<td>21</td>
<td>Arroyo Zabala</td>
<td>1,847</td>
<td>Multiple Use Nature Reserve</td>
<td>VI</td>
<td>Buenos Aires province</td>
<td>2001</td>
<td>Provincial Law</td>
<td>12743/01</td>
<td>Not reported</td>
<td>southern right whale, orca, common dolphin, common bottlenose dolphin, dusky dolphin, franciscana, beaked whale</td>
</tr>
<tr>
<td>22</td>
<td>Arroyo Los Gauchos</td>
<td>770</td>
<td>Multiple Use Nature Reserve</td>
<td>VI</td>
<td>Buenos Aires province</td>
<td>2011</td>
<td>Provincial Decree</td>
<td>469/11</td>
<td>Not reported</td>
<td>humpback whale, southern right whale, common bottlenose dolphin, dusky dolphin, sperm whale</td>
</tr>
<tr>
<td>23</td>
<td>Pehuén-Co Monte Hermoso</td>
<td>2,542</td>
<td>Nature Reserve</td>
<td>IV</td>
<td>Buenos Aires province</td>
<td>2005</td>
<td>Provincial Law</td>
<td>13394/05</td>
<td>Not reported</td>
<td>southern right whale, common bottlenose dolphin, sperm whale, franciscana</td>
</tr>
<tr>
<td>24</td>
<td>Reserva Costera de la Bahía Blanca</td>
<td>3,190</td>
<td>Municipal Nature Reserve</td>
<td>Not reported</td>
<td>Buenos Aires province &amp; Municipality of Bahía Blanca</td>
<td>2011</td>
<td>Provision Decree</td>
<td>13892 469</td>
<td>Not reported</td>
<td>southern right whale, common bottlenose dolphin, dusky dolphin, sperm whale, franciscana</td>
</tr>
<tr>
<td>25</td>
<td>Bahía Blanca, Falsa y Verde</td>
<td>254,354</td>
<td>Multiple Use Nature Reserve</td>
<td>VI</td>
<td>Buenos Aires province</td>
<td>1998</td>
<td>Provincial Law</td>
<td>12101/98</td>
<td>Not reported</td>
<td>southern right whale, common bottlenose dolphin, dusky dolphin, sperm whale, franciscana</td>
</tr>
<tr>
<td>#</td>
<td>Name</td>
<td>Surface (ha)</td>
<td>Category</td>
<td>IUCN Category</td>
<td>Administered by</td>
<td>Designation date</td>
<td>Legal instrument</td>
<td>Number</td>
<td>Management Plan</td>
<td>Cetacean species recorded</td>
</tr>
<tr>
<td>----</td>
<td>-------------------------------------------</td>
<td>--------------</td>
<td>----------</td>
<td>---------------</td>
<td>------------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>--------</td>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>26</td>
<td>Islote de la Gaviota Cangrejera</td>
<td>81</td>
<td>Integral Nature Reserve</td>
<td>I</td>
<td>Buenos Aires province</td>
<td>2011</td>
<td>Provincial Decree</td>
<td>469/11</td>
<td>Not reported</td>
<td>common bottlenose dolphin, franciscana</td>
</tr>
</tbody>
</table>

**Río Negro province**

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Category</th>
<th>IUCN Category</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Legal instrument</th>
<th>Number</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Punta Bermeja</td>
<td>1,900</td>
<td>Protected Nature Area</td>
<td>Not reported</td>
<td>Río Negro province</td>
<td>1971</td>
<td>Provincial Decree</td>
<td>898/71</td>
<td>Yes (2009)</td>
<td>sei whale, southern right whale, orca, common bottlenose dolphin, Commerson’s dolphin, dusky dolphin, sperm whale, franciscana, Burmeister’s porpoise</td>
</tr>
<tr>
<td>29</td>
<td>Caleta de los Loros</td>
<td>9,084</td>
<td>Multiple Use Reserve</td>
<td>VI</td>
<td>Río Negro province</td>
<td>1984/2008</td>
<td>Provincial Law</td>
<td>3222/98</td>
<td>Yes (2019)</td>
<td>southern right whale, common dolphin, common bottlenose dolphin, dusky dolphin, franciscana</td>
</tr>
<tr>
<td>30</td>
<td>Bahía San Antonio</td>
<td>80,856</td>
<td>Protected Landscape</td>
<td>V</td>
<td>Río Negro province</td>
<td>1993/2008</td>
<td>Provincial Law</td>
<td>2670/93 and 2670/08</td>
<td>Yes (2013)</td>
<td>humpback whale, sei whale, southern right whale, orca, common dolphin, common bottlenose dolphin, dusky dolphin, sperm whale</td>
</tr>
<tr>
<td>32</td>
<td>Puerto Lobos</td>
<td>62,121</td>
<td>Protected Landscape</td>
<td>V</td>
<td>Río Negro province</td>
<td>1998/2007</td>
<td>Provincial Law</td>
<td>3211/98</td>
<td>Not reported</td>
<td>southern right whale, common dolphin, common bottlenose dolphin, dusky dolphin</td>
</tr>
</tbody>
</table>

**Chubut province**

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Category</th>
<th>IUCN Category</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Legal instrument</th>
<th>Number</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Península Valdés</td>
<td>840,000</td>
<td>Tourist Nature Reserve / Ramsar Site</td>
<td>VI</td>
<td>Chubut province</td>
<td>1983</td>
<td>Provincial Law</td>
<td>4722/01</td>
<td>Yes (2001 and 2015)</td>
<td>humpback whale, sei whale, southern right whale, orca, common dolphin, common bottlenose dolphin, Commerson’s dolphin, dusky dolphin, sperm whale, Burmeister’s porpoise</td>
</tr>
<tr>
<td>34</td>
<td>Golfo San José</td>
<td>136,000</td>
<td>Tourist Nature Reserve (also included under Península Valdés)</td>
<td>II</td>
<td>Chubut province</td>
<td>1974</td>
<td>Provincial Law</td>
<td>1238</td>
<td>Not reported</td>
<td>humpback whale, sei whale, southern right whale, orca, common dolphin, common bottlenose dolphin, dusky dolphin, Burmeister’s porpoise</td>
</tr>
<tr>
<td>#</td>
<td>Name</td>
<td>Surface (ha)</td>
<td>Category</td>
<td>IUCN Category</td>
<td>Administered by</td>
<td>Designation date</td>
<td>Legal instrument</td>
<td>Number</td>
<td>Management Plan</td>
<td>Cetacean species recorded</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>----------------</td>
<td>-----------------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------------------</td>
<td>---------</td>
<td>-----------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>35</td>
<td>El Doradillo</td>
<td>11,000</td>
<td>Protected Landscape</td>
<td>Not reported</td>
<td>Municipality of Puerto Madryn</td>
<td>2001</td>
<td>Municipal Ordinance</td>
<td>4263</td>
<td>Yes (2003)</td>
<td>southern right whale</td>
</tr>
<tr>
<td>36</td>
<td>Punta Loma</td>
<td>1,707</td>
<td>Tourist Nature Reserve</td>
<td>IV</td>
<td>Chubut province</td>
<td>1967/2010</td>
<td>Provincial Laws</td>
<td>697/67</td>
<td>XI N°1</td>
<td>humpback whale, southern right whale, common dolphin, orca, common bottlenose dolphin, dusky dolphin, sperm whale, Burmeister’s porpoise</td>
</tr>
<tr>
<td>37</td>
<td>Punta León</td>
<td>150</td>
<td>Tourist Nature Reserve</td>
<td>Not reported</td>
<td>Chubut province</td>
<td>1985/2010</td>
<td>Provincial Laws</td>
<td>2580/85</td>
<td>XXIII N°14/2010</td>
<td>southern right whale, orca, common bottlenose dolphin, dusky dolphin, Burmeister’s porpoise</td>
</tr>
<tr>
<td>38</td>
<td>Punta Tombo</td>
<td>210</td>
<td>Tourist Nature Reserve</td>
<td>IV</td>
<td>Chubut province</td>
<td>1972</td>
<td>Provincial Law</td>
<td>1222/79</td>
<td>Not reported</td>
<td>southern right whale, common bottlenose dolphin, Peale’s dolphin, dusky dolphin, Burmeister’s porpoise</td>
</tr>
<tr>
<td>40</td>
<td>Rocas Coloradas</td>
<td>101,533</td>
<td>Protected Landscape</td>
<td>V</td>
<td>Chubut province</td>
<td>2020</td>
<td>Provincia Law</td>
<td>102/20</td>
<td>Not reported</td>
<td>dusky dolphin, Peale’s dolphin, orca</td>
</tr>
<tr>
<td>41</td>
<td>Punta Marqués</td>
<td>50</td>
<td>Tourist and Scientific Research Nature Reserve</td>
<td>IV</td>
<td>Chubut province and Municipality of Rada Tilly</td>
<td>1985/2010</td>
<td>Municipal Ordinance; Provincial Law</td>
<td>524/02</td>
<td>2580 XXIII N°14/2010</td>
<td>not reported</td>
</tr>
</tbody>
</table>

Santa Cruz province

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Category</th>
<th>IUCN Category</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Legal instrument</th>
<th>Number</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Caleta Olivia</td>
<td>200</td>
<td>Provincial Reserve</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1992/2008</td>
<td>Provincial Law</td>
<td>3028</td>
<td>Not reported</td>
<td>sei whale, southern right whale, Peale’s dolphin</td>
</tr>
<tr>
<td>43</td>
<td>Barco Hundido</td>
<td>10,370</td>
<td>Provincial Reserve</td>
<td>III</td>
<td>Santa Cruz province</td>
<td>2002</td>
<td>Provincial Law</td>
<td>2605</td>
<td>Not reported</td>
<td>sei whale, Peale’s dolphin</td>
</tr>
<tr>
<td>44</td>
<td>Pingüinos</td>
<td>83,900</td>
<td>Provincial Reserve</td>
<td>Not reported</td>
<td>Santa Cruz province</td>
<td>2020</td>
<td>Provincial Law</td>
<td>3690</td>
<td>Not reported</td>
<td>Commerson’s dolphin, dusky dolphin, beaked whale</td>
</tr>
<tr>
<td>46</td>
<td>Cabo Blanco</td>
<td>7,370</td>
<td>Intangible Nature Reserve</td>
<td>IV</td>
<td>Santa Cruz province</td>
<td>1977</td>
<td>Provincial Decree</td>
<td>1561/77</td>
<td>Not reported</td>
<td>orca, common bottlenose dolphin, Commerson’s dolphin</td>
</tr>
<tr>
<td>47</td>
<td>Ría Deseado</td>
<td>34,400</td>
<td>Intangible Nature Reserve</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1977/2010</td>
<td>Provincial Decree; Provincial Law</td>
<td>1561/77</td>
<td>3128</td>
<td>orca, Commerson’s dolphin, Peale’s dolphin</td>
</tr>
<tr>
<td>48</td>
<td>Isla Pingüinos</td>
<td>9,300</td>
<td>Provincial Reserve</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1992</td>
<td>Provincial Law</td>
<td>2274/92</td>
<td>Not reported</td>
<td>southern right whale, orca, Commerson’s dolphin, Peale’s dolphin, dusky dolphin</td>
</tr>
<tr>
<td>#</td>
<td>Name</td>
<td>Surface (ha)</td>
<td>Category</td>
<td>IUCN Category</td>
<td>Administered by</td>
<td>Designation date</td>
<td>Legal Instrument</td>
<td>Number</td>
<td>Management Plan</td>
<td>Cetacean species recorded</td>
</tr>
<tr>
<td>----</td>
<td>------------------------------------------------</td>
<td>--------------</td>
<td>---------------------------------</td>
<td>---------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>--------</td>
<td>----------------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>49</td>
<td>Bahía Laura</td>
<td>165,700</td>
<td>Intangible Nature Reserve</td>
<td>IV</td>
<td>Santa Cruz province</td>
<td>1977</td>
<td>Provincial Decree</td>
<td>1561/77</td>
<td>Not reported</td>
<td>Commerson’s dolphin, Peale’s dolphin</td>
</tr>
<tr>
<td>50</td>
<td>Península San Julián</td>
<td>117,100</td>
<td>Provincial Reserve</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1986</td>
<td>Provincial Law</td>
<td>1821/86</td>
<td>Not reported</td>
<td>humpback whale, orca, Commerson’s dolphin, Peale’s dolphin</td>
</tr>
<tr>
<td>51</td>
<td>Bahía San Julián</td>
<td>339,700</td>
<td>Limited Use Area Under Special Protection</td>
<td>V</td>
<td>Santa Cruz province</td>
<td>1990</td>
<td>Provision</td>
<td>015/90 016/90</td>
<td>Not reported</td>
<td>Commerson’s dolphin, Peale’s dolphin</td>
</tr>
<tr>
<td>52</td>
<td>Isla Cormorán y Banco Justicia</td>
<td>28,500</td>
<td>Limited Use Area Under Special Protection</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1990</td>
<td>Provision</td>
<td>015/90 016/90</td>
<td>Not reported</td>
<td>Commerson’s dolphin</td>
</tr>
<tr>
<td>53</td>
<td>Isla Leones</td>
<td>11,500</td>
<td>Limited Use Area Under Special Protection</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1990</td>
<td>Resolution</td>
<td>720/91</td>
<td>Not reported</td>
<td>Commerson’s dolphin, Peale’s dolphin</td>
</tr>
<tr>
<td>54</td>
<td>Isla Monte León</td>
<td>400</td>
<td>Provincial Reserve</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1986</td>
<td>Provincial Law</td>
<td>2445/86</td>
<td>Not reported</td>
<td>southern right whale</td>
</tr>
<tr>
<td>55</td>
<td>Isla Deseada</td>
<td>4,900</td>
<td>Scientific Use Area Under Special Protection</td>
<td>VI</td>
<td>Santa Cruz province</td>
<td>1990</td>
<td>Provision</td>
<td>7/90</td>
<td>Not reported</td>
<td>humpback whale, sei whale, southern right whale, Commerson’s dolphin</td>
</tr>
<tr>
<td>56</td>
<td>Aves Migratorias</td>
<td>26,900</td>
<td>Provincial Reserve</td>
<td>IV</td>
<td>Santa Cruz province</td>
<td>2001</td>
<td>Provincial Law</td>
<td>2583/01</td>
<td>Yes (2017)</td>
<td>humpback whale, sei whale, Commerson’s dolphin, beaked whale</td>
</tr>
<tr>
<td>57</td>
<td>Río Gallegos</td>
<td>1,890</td>
<td>Urban Coastal Reserve</td>
<td>Not reported</td>
<td>Municipality of Río Gallegos</td>
<td>2004</td>
<td>Provision</td>
<td>5356</td>
<td>Yes (2011)</td>
<td>humpback whale, sei whale, southern right whale, Commerson’s dolphin</td>
</tr>
<tr>
<td>58</td>
<td>Cabo Virgenes</td>
<td>12,300</td>
<td>Provincial Reserve</td>
<td>IV</td>
<td>Santa Cruz province</td>
<td>1986</td>
<td>Provincial Decree</td>
<td>1806/86</td>
<td>Yes (2001)</td>
<td>southern right whale, orca, common bottlenose dolphin, Commerson’s dolphin, Peale’s dolphin, beaked whale</td>
</tr>
<tr>
<td>59</td>
<td>Costa Norte de Santa Cruz</td>
<td>8,800,800</td>
<td>Provincial Reserve</td>
<td>Not reported</td>
<td>Santa Cruz province</td>
<td>2010</td>
<td>Provincial Law</td>
<td>3183</td>
<td>Not reported</td>
<td>humpback whale, sei whale, southern right whale, sperm whale, orca, common bottlenose dolphin, Commerson’s dolphin, Peale’s dolphin</td>
</tr>
</tbody>
</table>

Tierra del Fuego province

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Category</th>
<th>IUCN Category</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Legal Instrument</th>
<th>Number</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Punta Popper</td>
<td>12</td>
<td>Urban Nature Reserve</td>
<td>Not reported</td>
<td>Municipality of Río Grande</td>
<td>2012</td>
<td>Provision</td>
<td>3042</td>
<td>Yes (2016)</td>
<td>Burmeister’s porpoise, Commerson’s dolphin, common bottlenose dolphin, orca, southern right whale</td>
</tr>
<tr>
<td>61</td>
<td>Costa Atlántica de Tierra del Fuego</td>
<td>28,600</td>
<td>Wetland of International Importance / Ramsar Site</td>
<td>IV</td>
<td>Tierra del Fuego province</td>
<td>1992</td>
<td>Provincial Decree; Provincial Law</td>
<td>2202/92 415/98</td>
<td>Yes (2011)</td>
<td>sei whale, orca, common bottlenose dolphin, Commerson’s dolphin, Peale’s dolphin, dusky dolphin, sperm whale, Burmeister’s porpoise, beaked whale</td>
</tr>
<tr>
<td>#</td>
<td>Name</td>
<td>Surface (ha)</td>
<td>Administered by</td>
<td>Designation date</td>
<td>Management Plan</td>
<td>Cetacean species recorded</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------</td>
<td>--------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>----------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Isla de los Estados y Archipiélago de Año</td>
<td>5,273,600</td>
<td>VI</td>
<td>Tierra del Fuego province</td>
<td>1991</td>
<td>Provincial Constitution — Not reported</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilderness Nature Reserve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sei whale, southern right whale, orca, Peale’s dolphin, sperm whale, beaked whale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Playa Larga</td>
<td>24</td>
<td>Nature and Cultural Reserve</td>
<td>Tierra del Fuego province</td>
<td>1997</td>
<td>Provincial Law — 348/97 Not reported</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>humpback whale, orca, dusky dolphin, Burmeister’s porpoise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**UNESCO-MAB BIOSPHERE RESERVE**

**Buenos Aires province**

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>Parque Atlántico Mar Chiquita</td>
<td>26,488</td>
<td>Buenos Aires province</td>
<td>1990</td>
<td>Not reported</td>
<td>southern right whale, common dolphin, dusky dolphin, franciscana, Burmeister’s porpoise</td>
</tr>
</tbody>
</table>

**Chubut province**

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Surface (ha)</th>
<th>Administered by</th>
<th>Designation date</th>
<th>Management Plan</th>
<th>Cetacean species recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>Valdés</td>
<td>2,137,908</td>
<td>Chubut province</td>
<td>2014</td>
<td>Not reported</td>
<td>humpback whale, sei whale, southern right whale, sperm whale, orca, common dolphin, Commerson’s dolphin, dusky dolphin, franciscana, Burmeister’s porpoise</td>
</tr>
<tr>
<td>66</td>
<td>Patagonia Azul</td>
<td>3,102,000</td>
<td>Chubut province</td>
<td>2015</td>
<td>Not reported</td>
<td>humpback whale, sei whale, southern right whale, sperm whale, orca, common bottlenose dolphin, Commerson’s dolphin, Peale’s dolphin, dusky dolphin, Burmeister’s porpoise</td>
</tr>
</tbody>
</table>

Table 3: Cetacean national and provincial natural monuments of Argentina and corresponding legislation instrument

<table>
<thead>
<tr>
<th>Species</th>
<th>Jurisdiction</th>
<th>Year</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern right whale</td>
<td>National</td>
<td>1984</td>
<td>23,094</td>
</tr>
<tr>
<td></td>
<td>Río Negro province</td>
<td>2006</td>
<td>4,066</td>
</tr>
<tr>
<td></td>
<td>Santa Cruz province</td>
<td>2003</td>
<td>2,643</td>
</tr>
<tr>
<td>Commerson’s dolphins</td>
<td>Santa Cruz province</td>
<td>2001</td>
<td>2,582</td>
</tr>
<tr>
<td>Peale’s dolphins</td>
<td>Santa Cruz province</td>
<td>2009</td>
<td>3,083</td>
</tr>
<tr>
<td>Franciscana</td>
<td>Buenos Aires province</td>
<td>2017</td>
<td>14,922</td>
</tr>
<tr>
<td>English Common name</td>
<td>Spanish Common name</td>
<td>Latin name</td>
<td>Presence in MPA *</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------</td>
<td>--------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>humpback whale</td>
<td>ballena jorobada</td>
<td>Megaptera novaeangliae</td>
<td>4, 7, 14, 12, 227,30,33,34,36, 50, 56, 63,65, 66</td>
</tr>
<tr>
<td>sei whale</td>
<td>ballena sei</td>
<td>Balaenoptera borealis</td>
<td>2, 3, 4, 6, 9, 10, 28, 30, 33, 34, 42, 43, 56, 61, 62, 65, 66</td>
</tr>
<tr>
<td>southern right whale</td>
<td>ballena franca austral</td>
<td>Eubalaena australis</td>
<td>1, 2, 5, 6, 7, 9,18, 19, 20, 21, 22, 23, 25, 27,28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 41, 42, 48, 54, 56,62, 64, 65, 66</td>
</tr>
<tr>
<td>sperm whale</td>
<td>cachalote</td>
<td>Physeter macrocephalus</td>
<td>2, 4, 6, 9, 22, 23, 25, 28, 30,33, 36, 41, 61, 62, 65, 66</td>
</tr>
<tr>
<td>orca</td>
<td>orca</td>
<td>Orcinus orca</td>
<td>1, 4, 5, 6, 7, 9,14,15, 20, 21, 28, 30,33, 34, 36, 37, 39, 41,45, 46, 47, 48, 50, 58,61, 62, 63, 65, 66</td>
</tr>
<tr>
<td>common dolphin</td>
<td>delfín común</td>
<td>Delphinus delphis</td>
<td>18, 19, 20, 21, 29, 30, 31, 32, 337, 34, 36, 64, 65</td>
</tr>
<tr>
<td>common bottlenose dolphin</td>
<td>delfín nariz de botella**</td>
<td>Tursiops truncatus</td>
<td>1, 6, 14, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 41, 46, 58,61, 65, 66</td>
</tr>
<tr>
<td>Lahille's bottlenose dolphin</td>
<td>delfín mular**</td>
<td>Tursiops truncatus gephyreus</td>
<td>5, 6, 7, 8, 28, 33, 39, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 58, 61, 65, 66</td>
</tr>
<tr>
<td>Commerson's dolphin</td>
<td>tonina overa</td>
<td>Cephalorhynchus commersonii</td>
<td>5, 6, 7, 8, 28, 33, 39, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 58, 61, 65, 66 (in addition according to SAyDS-SAREM the species can be found in most coastal protected areas and national parks) but less likely to be found in Provincial Reserves in Río Negro and Buenos Aires.</td>
</tr>
</tbody>
</table>

Table 4. Presence in protected areas of Argentina, conservation status and inclusion into categories of international bodies of the cetacean species analysed in this report. (DD: Data Deficient; LC: Least Concern; NT: Near Threatened; VU: Vulnerable; EN: Endangered)

* According to data obtained in this analysis and SAyDS-SAREM (2019)

** In some areas of Argentina, common name used by locals is either tonina or delfín nariz de botella
<table>
<thead>
<tr>
<th>English Common name</th>
<th>Spanish Common name</th>
<th>Latin name</th>
<th>Presence in MPA *</th>
<th>SAyDS-SAREM</th>
<th>IUCN</th>
<th>CMS</th>
<th>CITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peale's dolphin</td>
<td>delfín austral</td>
<td>Lagenorhynchus australis</td>
<td>2, 3, 4, 5, 6, 7, 9, 38, 39, 41, 42, 43, 47, 48, 49, 50, 51, 53, 58, 61, 62, 66</td>
<td>LC</td>
<td>LC</td>
<td>Appendix II</td>
<td>Appendix II</td>
</tr>
<tr>
<td>dusky dolphin</td>
<td>delfín oscuro</td>
<td>Lagenorhynchus obscurus</td>
<td>5, 6, 18, 19, 20, 21, 22, 25, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 41, 45, 48, 61, 63, 64, 65, 66 (in addition according to SAyDS-SAREM the species can be found in most coastal protected areas and national parks)</td>
<td>LC</td>
<td>LC</td>
<td>Appendix II</td>
<td>Appendix II</td>
</tr>
<tr>
<td>franciscana</td>
<td>franciscana</td>
<td>Pontoporia blainvillei</td>
<td>1, 14, 15, 18, 19, 20, 21, 23, 25, 26, 27, 28, 29, 64, 65</td>
<td>VU</td>
<td>VU</td>
<td>Appendix I/II</td>
<td>Appendix II</td>
</tr>
<tr>
<td>Burmeister’s porpoise</td>
<td>marsopa espinosa</td>
<td>Phocoena spinipinnis</td>
<td>1, 10, 14, 18, 19, 28, 33, 34, 36, 37, 38, 61, 63, 64, 65, 66 (in addition according to SAyDS-SAREM the species can be found in most coastal protected areas and national parks)</td>
<td>DD</td>
<td>NT</td>
<td>Appendix II</td>
<td>Appendix II</td>
</tr>
<tr>
<td>Arnoux’s beaked whale</td>
<td>zifio de Arnoux</td>
<td>Berardius arnuxii</td>
<td></td>
<td>DD</td>
<td>LC</td>
<td>Appendix I</td>
<td></td>
</tr>
<tr>
<td>southern bottlenose whale</td>
<td>zifio nariz de botella austral</td>
<td>Hyperoodon planifrons</td>
<td></td>
<td>DD</td>
<td>LC</td>
<td>Appendix I</td>
<td></td>
</tr>
<tr>
<td>Andrew’s beaked whale</td>
<td>zifio de Andrew</td>
<td>Mesoplodon bowdoini</td>
<td></td>
<td>DD</td>
<td>DD</td>
<td>Appendix II</td>
<td></td>
</tr>
<tr>
<td>Gray’s beaked whale</td>
<td>zifio de Gray</td>
<td>Mesoplodon grayi</td>
<td></td>
<td>DD</td>
<td>DD</td>
<td>Appendix II</td>
<td></td>
</tr>
<tr>
<td>Hector’s beaked whale</td>
<td>zifio de Héctor</td>
<td>Mesoplodon hectori</td>
<td></td>
<td>DD</td>
<td>LC</td>
<td>Appendix II</td>
<td></td>
</tr>
<tr>
<td>strap-toothed beaked whale</td>
<td>zifio de Layard</td>
<td>Mesoplodon layardi</td>
<td></td>
<td>DD</td>
<td>DD</td>
<td>Appendix II</td>
<td></td>
</tr>
<tr>
<td>Shepherd’s beaked whale</td>
<td>zifio de Shepherd</td>
<td>Tasmacetus shepherdi</td>
<td></td>
<td>DD</td>
<td>DD</td>
<td>Appendix II</td>
<td></td>
</tr>
<tr>
<td>Cuvier’s beaked whale</td>
<td>zifio de Cuvier</td>
<td>Ziphius cavirostris</td>
<td></td>
<td>DD</td>
<td>LC</td>
<td>Appendix I</td>
<td>Appendix II</td>
</tr>
</tbody>
</table>
To receive further information about this report, or OceanCare’s work, please contact:

Fabienne McLellan
Managing Director
fmclellan@oceancare.org

Nicolas Entrup
Director International Relations
nentrup@oceancare.org

OceanCare
Gerberstrasse 6
P.O.Box 372
CH-8820 Wädenswil
Switzerland
T. + 41 (0) 44 780 66 88
F. + 41 (0) 44 780 68 08
OceanCare
MarineConservationPolicy
oceancare.international
www.oceancare.org

Fundación Cethus
FundacionCethus
fundacion_cethus
info@cethus.org
www.cethus.org