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Catalogue of marine mammals of the Mammalogical collection of the Museo de La Plata, Argentina

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ABSTRACT. This catalogue lists the materials of marine mammals housed in the Mammalogical collection of Museo de La Plata. This contribution is an update of the unpublished catalogue made by R. Bastida, J.B. Desojo, and L.H. Soibelzon in 1997. It includes all the specimens deposited in this collection, belonging to the superorder Cetartilodactyla, order Cetacea, suborders Mysticeti and Odontoceti, the order Carnivora, suborder Caniformia, and the order Sirenia. The Mammalogical collection of the División Zoología Vertebrados of Museo de la Plata holds 185 specimens of 37 species of marine mammals.

Key words: *Cetacea*, *Carnivora*, *Sirenia*

RESUMEN. Catálogo de mamíferos marinos de la Colección Mastozoológica del Museo de La Plata, Argentina. El presente catálogo lista los materiales de mamíferos marinos depositados en la colección de Mastozoología del Museo de La Plata. Esta contribución es una actualización del catálogo inédito realizado por R. Bastida, J.B. Desojo y L.H. Soibelzon en 1997. Se incluyen todos los materiales del superorden Cetartilodactyla, orden Cetacea, subórdenes Mysticeti y Odontoceti, orden Carnivora, suborden Caniformia y orden Sirenia. La colección de Mastozoología de la División Zoología Vertebrados del Museo de La Plata cuenta con 185 especímenes referidos a 37 especies de mamíferos marinos.

Palabras clave: *Cetacea*, *Carnivora*, *Sirenia*

Introduction

The marine habitat has been colonized by species belonging to different mammalian orders, Cetacea (whales, dolphins and porpoises), Carnivora (true seals, sea lions, fur seals, walruses, sea otters, marine otters and polar bears) and Sirenia (manatees and dugongs) (e.g. Bastida & Rodríguez, 2009; Perrin *et al.* 2009). The more than 80 living species currently recognized in the order Cetacea are classified into two suborders, Mysticeti (baleen whales) and Odontoceti (toothed whales). The Mysticeti include four families, one of which — Balaenopteridae — comprises the largest animal ever to live, the blue whale, up to more than 33 m in length and nearly 150,000 kg (e.g. Nowak, 1999; Wilson & Mittermeier, 2014; Marx *et al.* 2016). The Odontoceti comprise ten families characterized by homodont dentition, and include small to medium-sized cetaceans (with the exception of the sperm whale males that can reach lengths of at least 18 m) (Jefferson *et al.* 2008).

Marine Carnivora are grouped into five families — traditionally divided into pinnipeds (Otariidae, Phocidae & Odobenidae) and fissipeds (Ursidae, Mustelidae) — although these names are currently under discussion due to major changes in the classification of the order (Bastida & Rodríguez, 2009). Finally, there are four living species of sirenians, and a fifth species that became extinct by over-hunting in the 18th century (Jefferson *et al.* 2008).

Since the Museo de La Plata opened its doors to the public in 1888, several Cetacea specimens were incorporated into the Mammalogical collection and studied during the early phase of the museum. Francisco P. Moreno, its founder and first Director, described *Lagenorhynchus floweri* (junior synonym of *Cephalorhynchus commersonii*, Delphinidae) in 1892 based on a specimen collected in 1884 and deposited in this collection. Later, Moreno (1895) described three complete skeletons of *Hyperoodon* (Ziphiidae), now exhibited at the Museum halls. Another valuable specimen housed in this collection was studied by Fernando Lahille, who described a complete skeleton of “*Balaenoptera miramaris*” Lahille, 1898 (junior synonym of *B. musculus*, Balaenopteridae); the skull of this specimen is exhibited at the Museum and is part of this collection. The Mammalogical collection also holds one specimen of the recently extinct *Monachus tropicalis* Gray, 1850 (Otariidae). These specimens are part of the original core on which this Mammalogical collection was based.

This catalogue is an updated version of the unpublished contribution by Bastida *et al.* (1997). In the present work, we list all the specimens housed in this collection (including those exhibited in the Museum halls) and provide all information available for each specimen.

Materials and methods

The catalogue is organized following the systematics proposed by Mead & Brownell (2005), Shoshani (2005), and Wozencraft (2005). Given that the marine mammal taxonomy is somewhat debated, here we consider Cetartiodactyla as a Superorder and maintain the classical taxonomy for lower categories, i.e. order Cetacea and suborders Mysticeti and Odontoceti (e.g. Milinkovitch *et al.* 1993, 1998; Montgelard *et al.* 1997; Shimamura *et al.* 1997, 1999; Shedlock *et al.* 2000; Price *et al.* 2005; Agnarsson & May-Collado, 2008; Vislobokova, 2013). Catalogue information is detailed as follows: catalogue number, material type (location in the Halls, if exhibited), locality information and any other data associated to the specimen. Information about sex of the specimen was added, if it was possible to determine from the respective skull morphology. The age of some specimens of *Otaria flavescens*, *Arctocephalus australis*, *Hydrurga leptonyx*, *Leptonychotes weddellii*, *Lobodon carcinophaga* and *Mirounga leonina* was assessed following the technique summarized in Loza (2016) and Loza *et al.* (2016). The holotypes are denoted both in bold and with an asterisk. Locality

information is exactly as that recorded in the registry books. Photographs of some specimens are included.

Results

The Mammalogical collection of Museo de La Plata houses 189 specimens of marine mammals and includes:

Superorder Cetartilodactyla Montgelard et al., 1997

Order Cetacea Brisson, 1762

Suborder Mysticeti Flower, 1864

-Family Balaenopteridae Gray, 1864

Balaenoptera acutorostrata subsp. (un-named)

Balaenoptera borealis Lesson, 1828

Balaenoptera physalus (Linnaeus, 1758)

Balaenoptera musculus (Linnaeus, 1758)

Megaptera novaeangliae (Borowski, 1781)

-Family Balaenidae Gray, 1821

Eubalaena australis (Desmoulins, 1822)

Suborder Odontoceti Flower, 1869

-Family Delphinidae Gray, 1821

Delphinus delphis Linnaeus, 1758

Globicephala melas (Traill, 1809)

Lagenorhynchus obscurus (Gray, 1828)

Cephalorhynchus commersonii (Lacépède, 1804)

Orcinus orca (Linnaeus, 1758)

Pseudorca crassidens Owen, 1846

Tursiops truncatus (Montagu, 1821)

-Family Monodontidae Gray, 1821

Delphinapterus leucas (Pallas, 1776)

-Family Phocoenidae Gray, 1825

Phocoena dioptrica Lahille, 1912

-Family Physeteridae Gray 1821

Physeter macrocephalus Linnaeus, 1758

-Family Pontoporiidae Gray, 1870

Pontoporia blainvillei (Gervais and d'Orbigny, 1844)

-Family Ziphiidae Gray, 1850

Ziphius cavirostris Cuvier, 1823

Hyperoodon planifrons Flower, 1882

Hyperoodon ampullatus (Foster, 1770)

Order Carnivora Bowdich, 1821

Suborder Caniformia Kretzoi, 1938

-Family Otariidae Gray, 1825

Otaria flavescens (Shaw, 1800)

Arctocephalus australis (Zimmermann, 1783)

Arctocephalus gazella (Peters, 1875)

-Family Phocidae Gray, 1821*Cystophora cristata* (Erxleben, 1777)*Erignathus barbatus* (Erxleben, 1777)*Hydrurga leptonyx* (Blainville, 1820)*Leptonychotes weddellii* (Lesson, 1826)*Lobodon carcinophaga* (Hombron and Jacquinot, 1842)*Mirounga leonina* (Linnaeus, 1758)†*Monachus tropicalis* (Gray, 1850)*Pagophilus groenlandicus* (Erxleben, 1777)**-Family Odobenidae** Allen, 1880*Odobenus rosmarus* (Linnaeus, 1758)**-Family Ursidae** Fischer de Waldheim, 1817*Ursus maritimus* Phipps, 1774**-Family Mustelidae** Fischer, 1817*Lontra felina* Molina, 1782**Order Sirenia** Illiger, 1811**-Family Dugongidae** Gray, 1821*Dugong dugon* (Müller, 1776)**-Family Trichechidae** Gill, 1872*Trichechus manatus* Linnaeus, 1758**Order Cetacea** Brisson, 1762**Suborder Mysticeti** Flower, 1864 (Baleen Whales)**-Family Balaenopteridae** Gray, 1864 (Rorquals)*Balaenoptera acutorostrata* subsp. (un-named; Dwarf Minke Whale)

MLP 1110, complete skeleton exhibited in XVI Hall (Figs. 1, 2A). Locality unknown.

MLP 1207, complete skeleton of a juvenile specimen and reconstruction in plaster, exhibit in a showcase of XVII Hall (Fig. 1). Álvarez Jonte, Punta Indio, Buenos Aires Province, Argentina.

Balaenoptera borealis Lesson, 1828 (Sei Whale)

-MLP 1112, complete skeleton exhibited in XVI Hall (Figs. 1, 2B). Atlantic Ocean, Mar del Plata, General Pueyrredón, Buenos Aires Province, Argentina.

-MLP 1114, complete skeleton exhibited in XV Hall (Fig. 1). Atlantic Ocean, Tres Arroyos, Buenos Aires Province, Argentina. Donated by Ruiz I.

Balaenoptera physalus (Linnaeus, 1758) (Fin Whale)

-MLP 1109, complete skeleton exhibited in XVI Hall (Fig. 1). La Plata river, San Fernando, Buenos Aires Province, Argentina. Total length 22.5 m. (Moreno, 1895).

-MLP 1113, complete skeleton exhibited in XV Hall (Figs. 1, 2C). La Plata river, Quilmes, Buenos Aires Province, Argentina.

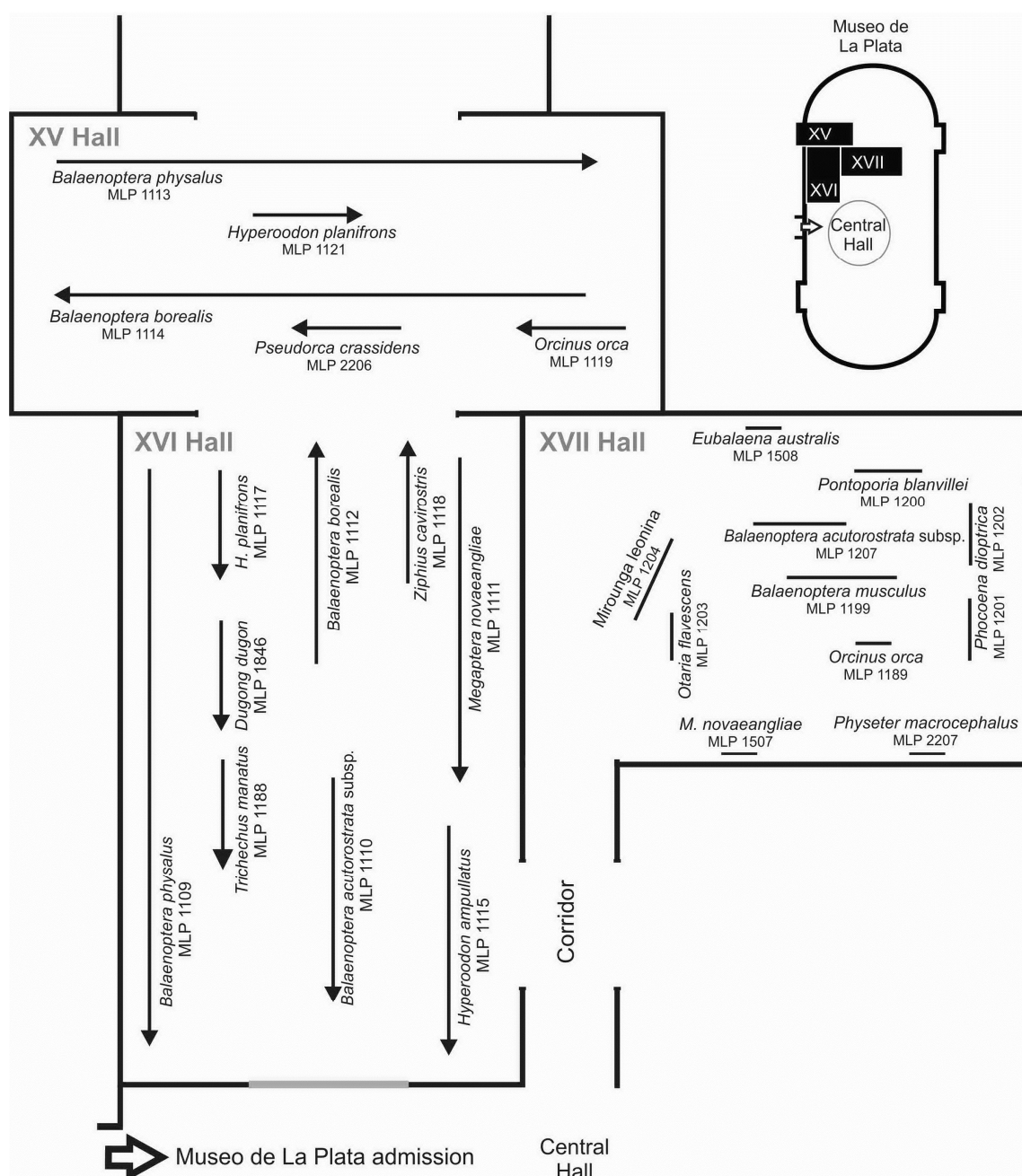


Figura 1. Distribution scheme of the materials exhibited in the Halls of the Museo de La Plata. Arrow indicates materials hanging from the ceiling of the XV and XVI Halls.

Balaenoptera musculus (Linnaeus, 1758) (Blue Whale)

-***MLP 1199 Holotype** of *Balaenoptera miramaris* Lahille, 1898. Skull and mandible exhibited in XVII Hall (Figs. 1, 3). Atlantic Ocean, Miramar, General Alvarado, Buenos Aires Province, Argentina. Female, total length 28 m.

Megaptera novaeangliae (Borowski, 1781) (Humpback Whale)

-MLP 1111, complete skeleton exhibited in XVI Hall (Figs. 1, 4A). La Plata river, Magdalena, Buenos Aires Province, Argentina.

-MLP 1507, skull exhibited in XVII Hall. Atlantic Ocean, Bahía Blanca, Buenos Aires Province, Argentina.

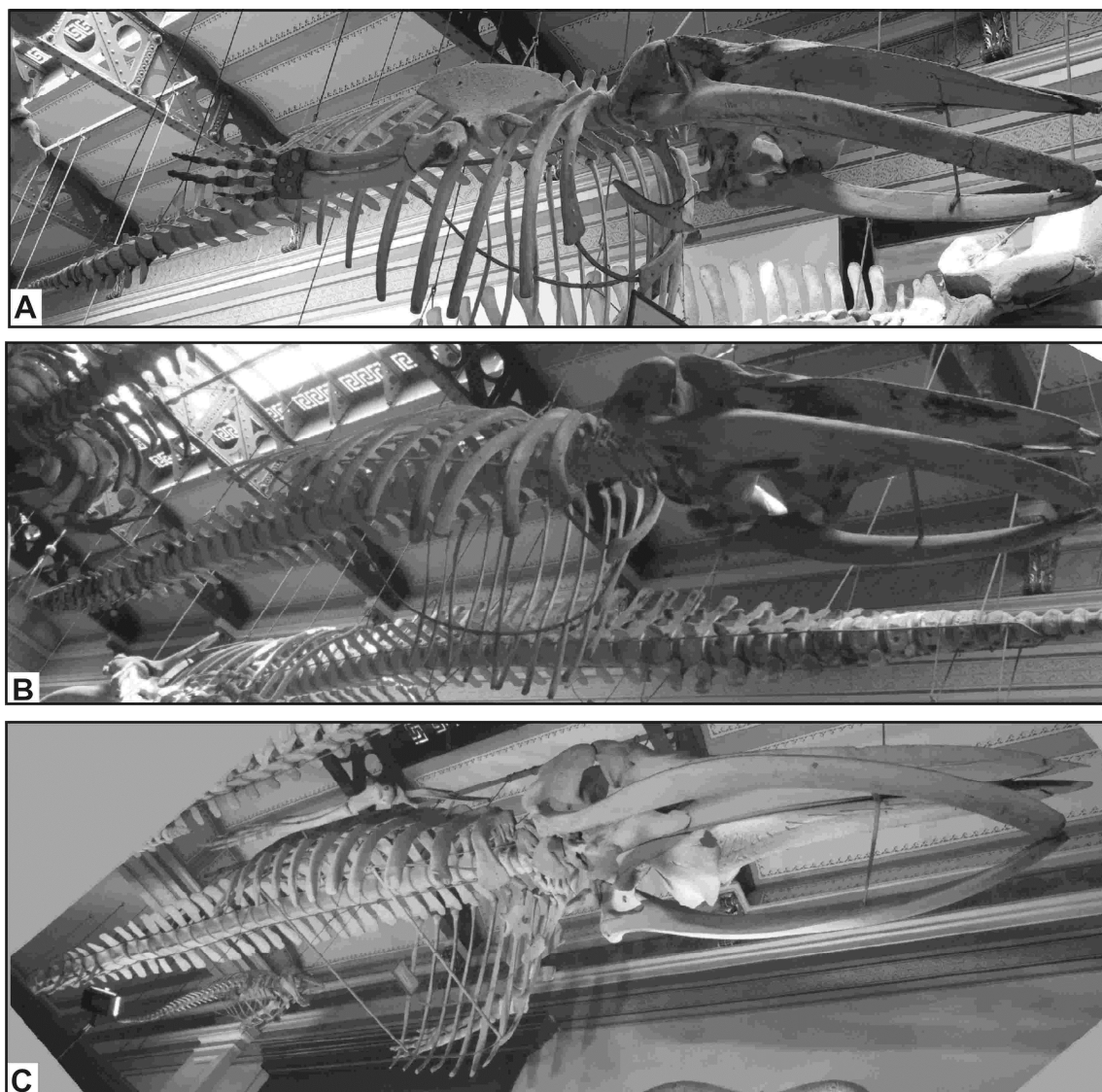


Figura 2. A. *Balaenoptera acutorostrata* subsp. MLP 1110, B. *B. borealis* MLP 1112, C. *B. physalus* MLP 1113. Without scale.

-Family Balaenidae Gray, 1821 (Right Whales)

Eubalaena australis (Desmoulins, 1822) (Southern Right Whale)

-MLP 1508, skull and mandible exhibited in XVII Hall. Pacific Ocean (Figs. 1, 4B).

Suborder Odontoceti Flower, 1869 (Toothed Whales)

-Family Delphinidae Gray, 1821 (Ocean Dolphins)

Delphinus delphis Linnaeus, 1758 (Short-beaked Common Dolphin)

-MLP 467, skull and mandible. Locality unknown.

-MLP 1559, skull and mandible. Locality unknown (Fig. 5).

-MLP 1184, complete skeleton exhibited in XVI Hall. Atlantic Ocean.

Globicephala melas (Traill, 1809) (Long-finned Pilot Whale)

-MLP 1116, skull and mandible. Atlantic Ocean.

-MLP 3.X.00.28, skull and mandible. Atlantic Ocean (Fig. 6).

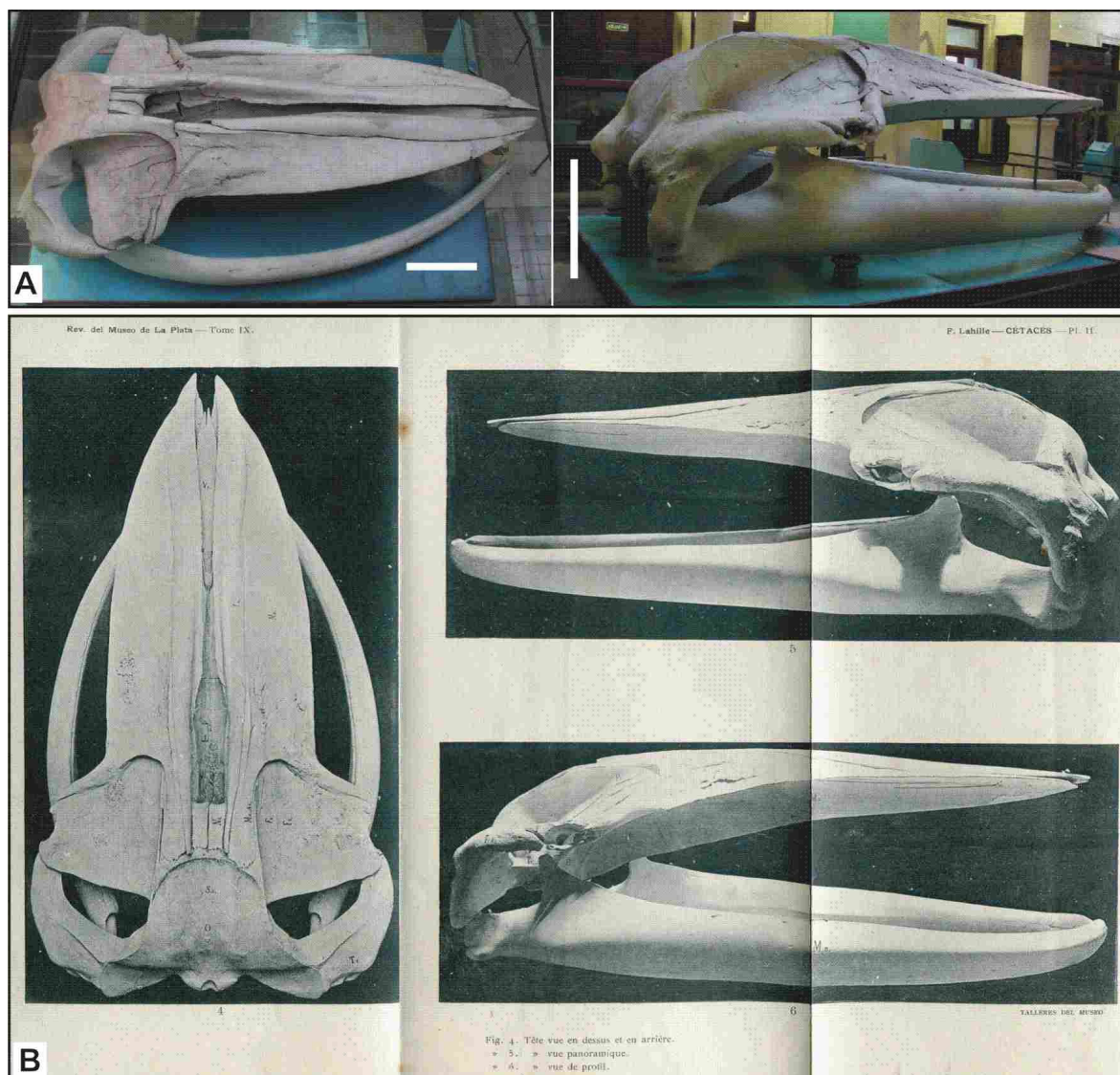


Figura 3. A. Dorsal and lateral view of skull of *Balaenoptera musculus* MLP 1199, B. original plate II of Lahille (1898). Scale 1 m (for A).

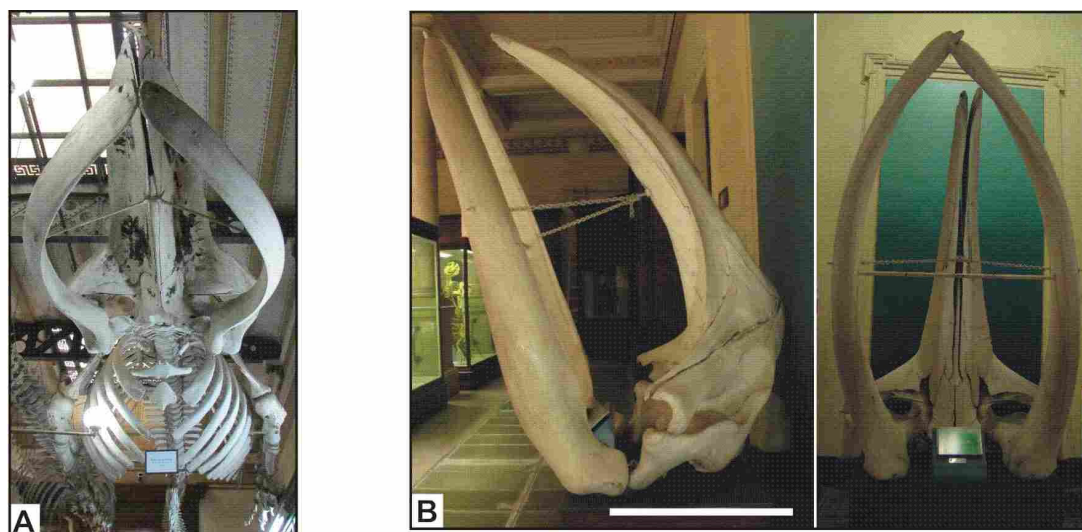


Figura 4. A. Antero-ventral view of *Megaptera novaeangliae* MLP 1111. B. Lateral and ventral view of skull of *Eubalaena australis* MLP 1508. Scale 1 m (for B).



Figura 5. Dorsal and ventral of skull, and lateral view of skull and mandible of *Delphinus delphis* MLP 1559. Scale 10 cm.



Figura 6. Dorsal and ventral of skull, and lateral view of skull and mandible of *Globicephala melas* MLP 3.X.00.28. Scale 10 cm.

Lagenorhynchus obscurus (Gray, 1828) (Dusky Dolphin)

- MLP 1186, complete skeleton. Atlantic Ocean, Argentina.
- MLP 1333, skull and mandible. Locality unknown.
- MLP 1478, skull and mandible. Atlantic Ocean. Identified by Brownell and Praderi in November 28, 1972.
- MLP 1479, skull and mandible. Atlantic Ocean. Identified by Brownell and Praderi in November 28, 1972.
- MLP 1486, skull and mandible (Fig. 7). Atlantic Ocean, Bahía San Antonio, San Antonio, Río Negro Province, Argentina.
- MLP 1487, skull and mandible. Atlantic Ocean, Patagonia, Argentina. Identified by Brownell and Praderi in November 28, 1972.
- MLP 1560, skull. Locality unknown.

Cephalorhynchus commersonii (Lacépède, 1804) (Commerson's Dolphin)

- MLP 633, skull and mandible. Locality unknown. Adult. Identified by Bownell and Praderi in November 28, 1972.
- ***MLP 1480 Holotype** of *Lagenorhynchus floweri* Moreno, 1892. Skull and mandible (Fig. 8). Atlantic Ocean, Tierra del Fuego Province, Argentina. Collected by Tonini del Furia and purchased in 1884. Identified by Brownell and Praderi, November 28, 1972. Male.

-MLP 1535, skull, left hemimandible, tympanic bulla and periotic. Atlantic Ocean, Tierra del Fuego Province, Argentina. Donated by Lynch F. G. Identified by Goodall and Cameron in September 19, 1978.

-MLP 24.IV.98.2, skull and, tympanic bulla and periotic. Irigoyen river, Tierra del Fuego Province, Argentina. Collected by Merino M., 1985.

-MLP 2205, left hemimandible. Locality unknown.

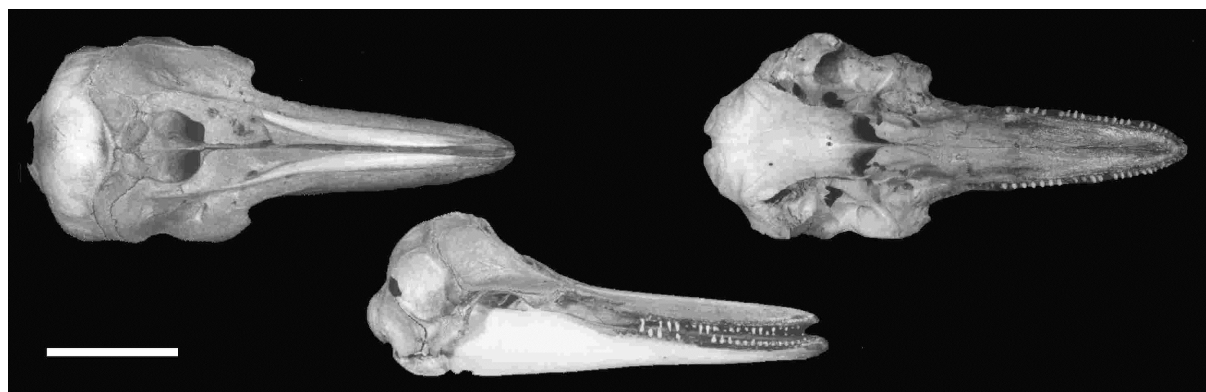


Figura 7. Dorsal and ventral of skull, and lateral view of skull and mandible of *Lagenorhynchus* sp. MLP 1486. Scale 10 cm.

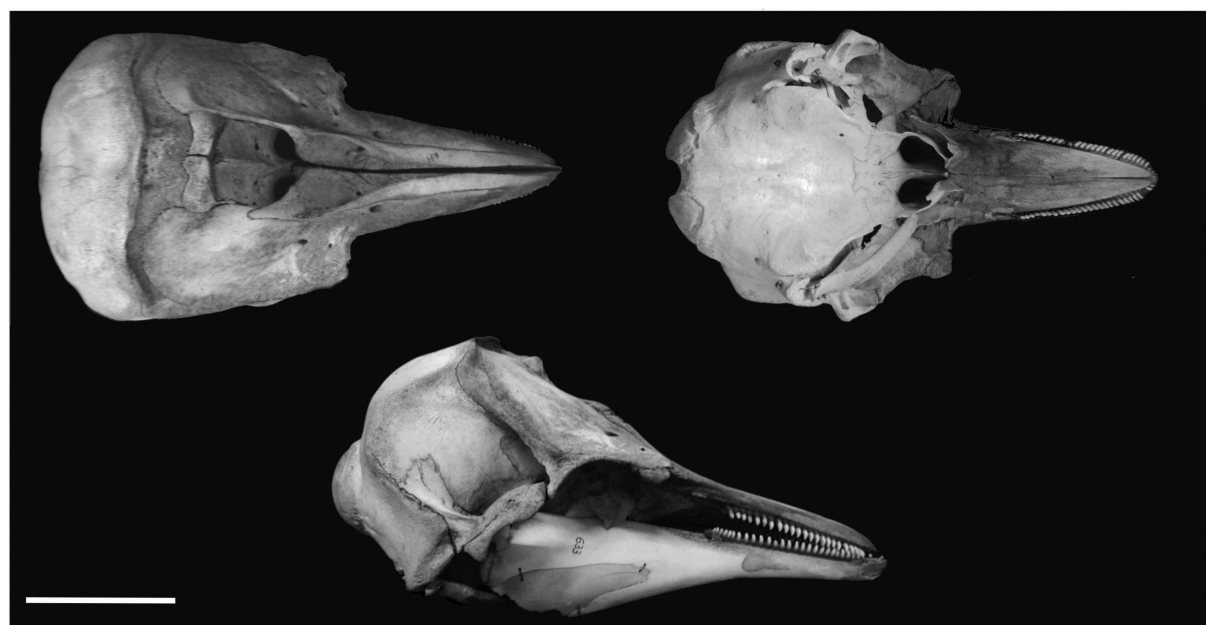


Figura 8. Dorsal and ventral of skull, and lateral view of skull and mandible of *Cephalorhynchus commersonii* MLP 1486. Scale 10 cm.

Orcinus orca (Linnaeus, 1758) (Killer Whale)

-MLP 1119, complete skeleton exhibited in XV Hall (Figs. 1, 9). Atlantic Ocean.

-MLP 1189, skull and mandible exhibited in central showcase in XVII Hall. Atlantic Ocean.

-MLP 11.VIII.99.48, skull. Locality unknown.

-MLP 11.VIII.99.49, skull. Locality unknown.

-MLP 11.VIII.99.50, skull. Locality unknown.

-MLP 11.VIII.99.51, skull and mandible. Locality unknown.

Pseudorca crassidens (Owen, 1846) (False Killer Whale)

- MLP 1488, skull and mandible. Atlantic Ocean.
- MLP 2206, complete skeleton exhibited in XV Hall (Figs. 1, 10). Locality unknown.
- MLP 24.IV.98.3, skull and mandible. Locality unknown.
- MLP 24.IV.98.4, skull and mandible. Locality unknown.



Figura 9. Complete skeleton of *Orcinus orca* MLP 1119. Without scale.

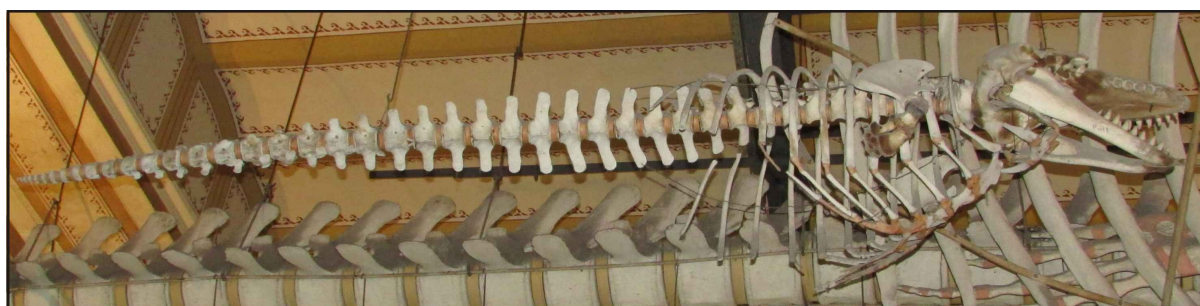


Figura 10. Complete skeleton of *Pseudorca crassidens* MLP 2206. Without scale.

Tursiops truncatus (Montagu, 1821) (Bottlenose Dolphin)

- MLP 118, skull. Locality unknown.
- MLP 1185, complete skeleton exhibited in XVI Hall, lateral showcase, number 13. Atlantic Ocean, Mar del Plata, General Pueyrredón, Buenos Aires Province, Argentina.
- MLP 1187, complete skeleton. Atlantic Ocean, Mar del Plata, Buenos Aires Province, Argentina.
- MLP 1489, skull and mandible (Fig. 11). Locality unknown.
- MLP 1505, skull. Locality unknown.
- MLP 1561, skull. Locality unknown.
- MLP 1562, skull. Locality unknown.
- MLP 1564, skull. Locality unknown.
- MLP 1566, skull. Locality unknown.
- MLP 1567, skull. Locality unknown.
- MLP 1568, skull. Locality unknown.
- MLP 1817, skull and mandible. La Plata river, Los Talas, Berisso, Buenos Aires Province, Argentina. Collected on October, 1943.

Comments: The species name of the bottlenose dolphin from the south-western Atlantic Ocean is controversial. Some authors consider that the valid species name is *Tursiops gephyreus* Lahille, 1908. In this catalogue, we maintain the use of *Tursiops truncatus* until this is clarified. Furthermore, only three of the twelve specimens have locality data, and no morphological differences were observed among them.

-Family Monodontidae Gray, 1821 (Beluga, Narwhal)

Delphinapterus leucas (Pallas, 1776) (Beluga, White Whale)

-MLP 1482, skull and mandible (Fig. 12). North Atlantic Ocean.

-MLP 1484, skull and mandible. North Atlantic Ocean.



Figura 11. Dorsal and ventral of skull, and lateral view of skull and mandible of *Tursiops truncatus* MLP 1489. Scale 10 cm.



Figura 12. Dorsal and ventral of skull, and lateral view of skull and mandible of *Delphinapterus leucas* MLP 1482. Scale 10 cm.

-Family Phocoenidae Gray, 1825 (Porpoise)

Phocoena dioptrica Lahille, 1912 (Spectacled Porpoise)

-MLP 1200, complete skeleton exhibited in XVII Hall. La Plata river, Ensenada, Buenos Aires Province, Argentina.

-MLP 1201, complete skeleton exhibited in XVII Hall. La Plata river, Río Santiago, Ensenada, Buenos Aires Province, Argentina.

-MLP 1202, complete skeleton exhibited in XVII Hall. La Plata river, Río Santiago, Ensenada, Buenos Aires Province, Argentina.

-MLP 1481, skull and mandible (Fig. 13). Locality unknown.

-Family Physeteridae Gray, 1868 (Sperm Whale)

Physeter macrocephalus Linnaeus, 1758 (Sperm Whale)

-MLP 2207, mandible exhibited in XVII Hall (Figs. 1, 14). Locality unknown.

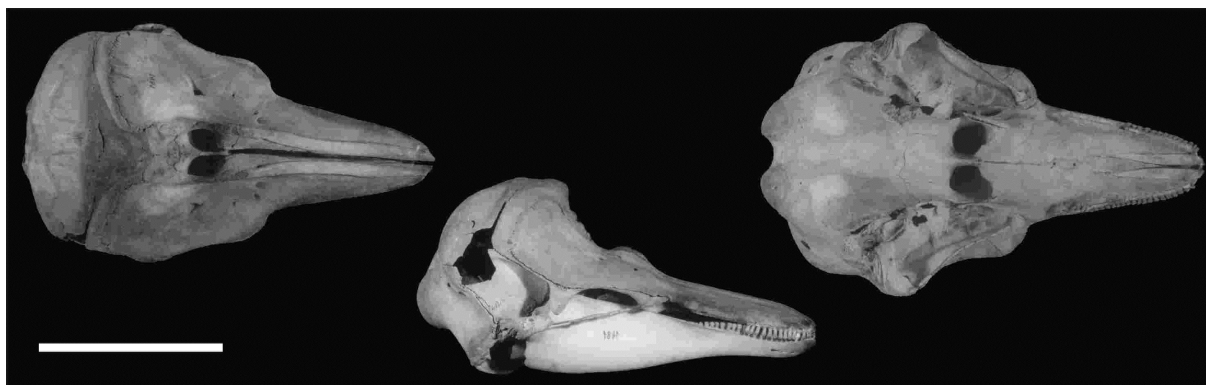


Figura 13. Dorsal and ventral of skull, and lateral view of skull and mandible of *Phocoena dioptrica* MLP 1481. Scale 10 cm.

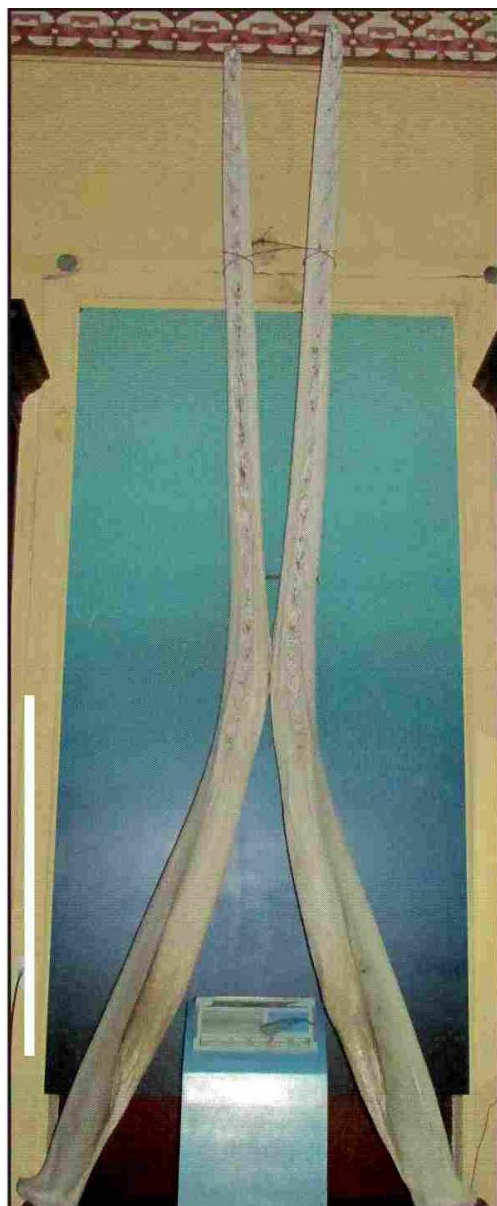


Figura 14. Dorsal view of the mandible of *Physeter macrocephalus* MLP 2207. Scale 1 m.

-Family Pontoporiidae Gray, 1870 (Baiji, Franciscana)*Pontoporia blainvillei* (Gervais and d'Orbigny, 1844) (Franciscana, La Plata Dolphin)

- MLP 169, complete skeleton. Locality unknown.
- MLP 170, skull and mandible. Locality unknown.
- MLP 175, skull and mandible. Locality unknown.
- MLP 180, mandible. Locality unknown.
- MLP 195, skull and mandible. Locality unknown.
- MLP 305, complete skeleton. Locality unknown.
- MLP 306, skull and mandible. Locality unknown.
- MLP 353, skull and mandible. Locality unknown.
- MLP 432, skull and mandible. Locality unknown.
- MLP 556, skull and mandible (Fig. 15). Locality unknown.
- MLP 1178, complete skeleton exhibited in XVI Hall, lateral showcase, number 13. La Plata river, Río Santiago, Ensenada, Buenos Aires Province, Argentina.
- MLP 1335, skull and mandible. Locality unknown.
- MLP 1557, skull and mandible. Locality unknown.
- MLP 1661, damaged skull. La Plata river, General Lavalle, Buenos Aires Province, Argentina.
- MLP 27.X.97.8, skull. Parque Nacional Campos del Tuyú, La Plata river, General Lavalle, Buenos Aires Province, Argentina.
- MLP 31.VIII.98.7, complete skeleton. Atlantic Ocean, San Clemente del Tuyú, General Lavalle, Buenos Aires Province, Argentina.
- MLP 18.XI.99.1, damaged skull. Atlantic Ocean, Monte Hermoso, Buenos Aires Province, Argentina.
- MLP 5.I.01.1, skull and mandible. Atlantic Ocean, Santa Victoria do Palmar, Barra do Chui, Rio Grande do Sul, Brazil.
- MLP 1200, complete skeleton exhibited in XVII Hall (Fig. 1). Locality unknown.

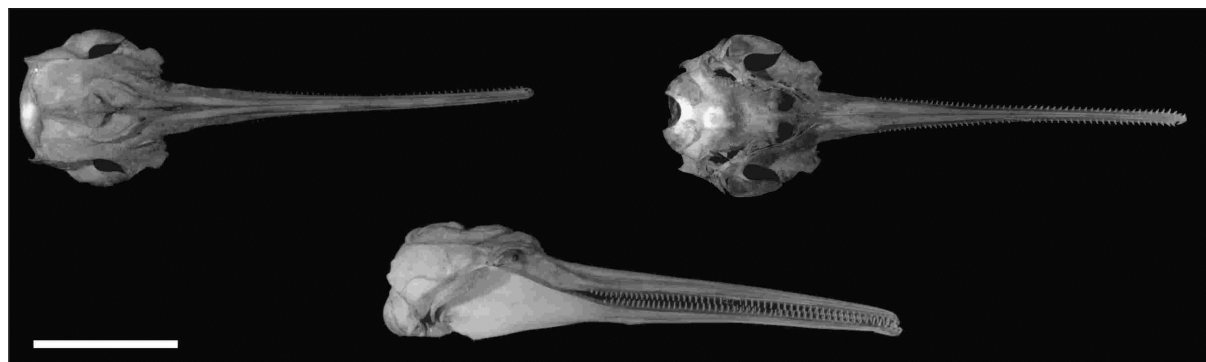


Figura 15. Dorsal and ventral of skull, and lateral view of skull and mandible of *Pontoporia blainvillei* MLP 556. Scale 10 cm.

-Family Ziphiidae Gray, 1850 (Beaked Whales)*Ziphius cavirostris* Cuvier, 1823 (Cuvier's Beaked Whale)

- MLP 1118, complete skeleton exhibited in XVI Hall (Figs. 1, 16). Atlantic Ocean, Necochea, Buenos Aires Province, Argentina.
- MLP 2208, damaged skull. Locality unknown. Adult male. Identified by Tadasu Yamada in November 13, 2012.

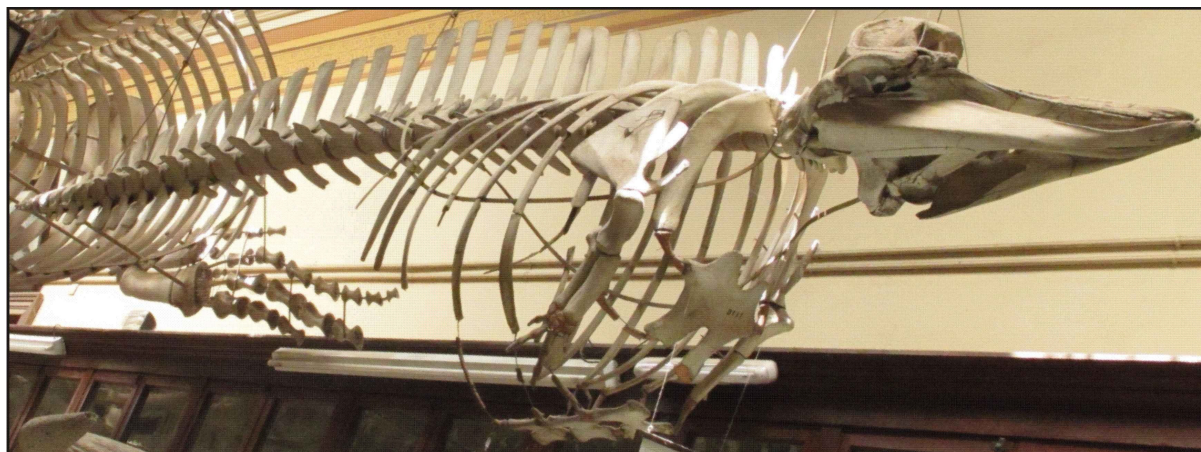


Figura 16. Complete skeleton of *Ziphius cavirostris* MLP 1118. Without scale.

Hyperoodon planifrons Flower, 1882 (Southern Bottlenose Whale)

-MLP 1117, complete skeleton exhibited in XVI Hall (Figs. 1, 17). It corresponds to complete skeleton number 3 of Moreno (1895: plates I, II). Atlantic Ocean, beach near to mouth of Arroyo Sauce Grande, Buenos Aires Province, Argentina. Adult (Moreno, 1895).

-MLP 1121 complete skeleton exhibited in XV Hall (Fig. 1). It corresponds to the complete skeleton number 6 of Moreno (1895: plates I, III, and plate II, figs. 4, 4a). Pacific Ocean. Juvenile, probably female; total body length 4.50 m; last cervical vertebrae still unfused (Moreno, 1895).

Hyperoodon ampullatus (Foster, 1770) (Northern Bottlenose Whale)

-MLP 1115, complete skeleton exhibited in XVI Hall (Fig. 1). It corresponds to complete skeleton number 1 of Moreno (1895: plate I). North Atlantic Ocean. Adult Male. Total length 7.45 m (Moreno, 1895).



Figura 17. Complete skeleton of *Hyperoodon planifrons* MLP 1117. Without scale.

Order Carnivora Bowdich, 1821

Suborder Caniformia Kretzoi, 1938

-Family Otariidae Gray, 1825 (Eared Seal)

Otaria flavescens (Shaw, 1800) (South American Sea Lion)

- MLP 41, complete skeleton. Donated by Jardín Zoológico de La Plata, Buenos Aires, Argentina. 1926. Female. Age: 5 years old.
- MLP 49, skull without mandible and damaged complete postcranial skeleton. Puerto La Plata, Río Santiago, La Plata, Buenos Aires Province, Argentina. Male. Age: 8 years old.
- MLP 82, complete skeleton. Locality unknown. Male. Age: 6 years old.
- MLP 404, skull and mandible. Locality unknown. Male. Age: 13 years old.
- MLP 453, skull and mandible. Atlantic Ocean, Chubut Province, Argentina. With dental anomaly (i.e. absence of left postcanine). Female. Age: 10 years old.
- MLP 465, skull without mandible. Locality unknown. Female. Age: 13 years old.
- MLP 475, skull and mandible. Locality unknown. Female. Age: 13 years old.
- MLP 628, skull, mandible and complete postcranial skeleton. Donated by Jardín Zoológico de La Plata, La Plata, Buenos Aires Province, Argentina. July 18, 1918. Female. Age: 3 years old.
- MLP 1328, skull without mandible. Locality unknown. Male. Age: 11 years old.
- MLP 1330, skull and mandible. Atlantic Ocean, Chubut Province. Male. Age: 10 years old.
- MLP 1331, skull without mandible. Atlantic Ocean, Chubut Province, Argentina. Male.
- MLP 1332, skull and mandible. Atlantic Ocean, Chubut Province. Male. Age: 9 years old.
- MLP 1493, skull and mandible. Locality unknown. Male.
- MLP 1526, complete skeleton. Atlantic Ocean, Península Valdés, Puerto Madryn, Chubut Province, Argentina. Donated by Jardín Zoológico de La Plata. June, 1937. Male. Age: 10 years old.
- MLP 1531, skull and mandible. Donated by Jardín Zoológico de La Plata, La Plata, Buenos Aires Province, Argentina. Female. Age: 6 years old.
- MLP 1532, skull and mandible. Atlantic Ocean, Chubut province. Donated by Jardín Zoológico de La Plata, La Plata, Buenos Aires Province, Argentina. Male. Age: 7 years old.
- MLP 1060, skull and mandible. Female. Age: 7 years old.
- MLP 1886, skull and mandible. Donated by Jardín Zoológico de La Plata, La Plata, Buenos Aires Province, Argentina. Female. Age: 12 years old.
- MLP 1968, skull and mandible. Atlantic Ocean, Punta Bermejo, Río Negro Province (41°09'S, 63°05'W), Argentina. Collected by Daneri G.A. and Montiel R.A. May 1, 2007. Female. Age: 9 years old.
- MLP 1203, complete skeleton and armed skin exhibited in showcase of XVII Hall (Fig. 1). Río Santiago, Buenos Aires Province, Argentina.
- MLP 2195, skull and mandible. Atlantic Ocean, Monte Hermoso, Buenos Aires Province, Argentina. Male.
- MLP 2196, skull and mandible. Atlantic Ocean, Monte Hermoso, Buenos Aires Province, Argentina. Male.
- MLP 14.IV.48.9, skull and mandible (Fig. 18). Locality unknown. Collected by Lahille. Male. Age: 7 years old.
- MLP 7.VII.50.1, skull and mandible. Locality unknown. Female. Age: 4 years old.
- MLP 4.X.94.4, skull and right hemimandible. Atlantic Ocean, Faro El Rincón, Península Verde, Villarino, Buenos Aires Province, Argentina. Collected by Merino M., 1988. Male. Age: 15 years old.
- MLP 27.X.97.14, skull and left hemimandible. Atlantic Ocean, Tierra del Fuego Province, Ushuaia, Bahía Policarpo, Playa Donato. Collected by Merino M. February, 1986. Female. Age: 16 years old.
- MLP 26.IV.00.1, skull and mandible. Locality unknown. Male. Age: 12 years old.
- MLP 26.IV.00.2, skull without mandible. Locality unknown. Male. Age: 8 years old.
- MLP 26.IV.00.3, skull without mandible. Locality unknown. Male. Age: 12 years old.
- MLP 26.IV.00.4, skull and mandible. Locality unknown. Male. Age: 13 years old.
- MLP 26.IV.00.5, skull and right hemimandible. Locality unknown. Female. Age: 3 years old.

- MLP 26.IV.00.6, skull and mandible. Locality unknown. Male. Age: 7 years old.
- MLP 26.IV.00.7, skull and mandible. Locality unknown. Female. Age: 7 years old.
- MLP 26.IV.00.8, skull and mandible. Locality unknown. Male. Age: 10 years old.
- MLP 26.IV.00.9, skull and mandible. Locality unknown. Female. Age: 2 years old.
- MLP 26.IV.00.10, skull and mandible. Locality unknown. Male. Age: 11 years old.
- MLP 26.IV.00.11, skull without mandible. Locality unknown. Male. Age: 8 years old.
- MLP 8.X.01.8, complete skeleton. Locality unknown. Male. Age: 4 years old.
- MLP 26.XII.02.34, skull without mandible. Locality unknown. Male. Age: 10 years old.
- MLP 26.XII.02.35, skull and mandible. Locality unknown. Male.
- MLP 26.XII.02.36, skull and mandible. Locality unknown. Male. Age: 12 years old.



Figura 18. Dorsal and ventral of skull, and lateral view of skull and mandible of *Otaria flavescens* MLP 14.IV.48.9. Scale 10 cm.

Comments of IO, RB, ACR, JBD, and HL: The controversial validity of the specific name for the Southern sea lion is disputed between *Otaria flavescens* (type *Phoca flavescens* Shaw, 1800) and *Otaria byronia* (type *Phoca byronia* de Blainville, 1820), but under the International Code of Zoological Nomenclature (ICZN) the *Otaria flavescens* is prioritary because is the earliest available name applied to this taxon (Art.23).

The holotype general characteristics and type location (Strait of Magellan) correspond only to that of a Southern sea lion pup and no reports are available supporting that the combination of these characters are found in *Arctocephalus australis* pups (Cabrera, 1940; Rodríguez & Bastida, 1993; Vaz Ferreira, 1984).

Recent argumentations (i.e. Brunner, 2004; Berta & Churchill, 2012; Society for Marine Mammalogy) that *Phoca flavescens* would be accepted only after ruling out several non South American otariid pups has no biogeographical justification and is against the stability principle of the ICZN. *Otaria flavescens* (Shaw, 1800) is fully compatible with a Southern sea lion pup, is the oldest available name, has no nomenclatural act rejecting it and meets the requirements to be considered the valid name under the ICZN (Art.23).

Arctocephalus australis (Zimmermann, 1783) (South American Fur Seal)

- MLP 1058, skull and mandible. Puerto of La Plata, Buenos Aires Province, Argentina.
- MLP 1061, skull and mandible (Fig. 19). Atlantic Ocean, Mar del Plata, General Pueyrredón. Buenos Aires Province, Argentina. Male. Age: 8 years old.
- MLP 1193, skull and mandible. Atlantic Ocean, Mar del Plata, General Pueyrredón. Buenos Aires Province, Argentina. Female.
- MLP 1198, complete skeleton. Atlantic Ocean, Argentina. Male.
- MLP 1231, complete skeleton exhibited in XVI Hall, lateral showcase, number 12. Atlantic Ocean, Mar del Plata, General Pueyrredón. Buenos Aires Province, Argentina. Female.
- MLP 1325, skull. Atlantic Ocean, Mar del Plata, General Pueyrredón. Buenos Aires Province, Argentina. Male. Age: 6 years old.
- MLP 1326, skull. Atlantic Ocean, Mar del Plata, General Pueyrredón. Buenos Aires Province, Argentina. Male.
- MLP 14.IV.48.10, skull and mandible. Locality unknown. Collected by Lahille. Male. Age: 3 years old.
- MLP 14.IV.48.14, skull and mandible. Locality unknown. Male. Age: 7 years old.
- MLP 12.XI.02.13, complete skeleton. Atlantic Ocean, Municipio de la Costa, Mar del Tuyú, Buenos Aires Province, Argentina. Collected by Prevosti, F. Male. Age: 2 years old.



Figura 19. Dorsal and ventral of skull, and lateral view of skull and mandible of *Arctocephalus australis* MLP 1061. Scale 10 cm.

Arctocephalus gazella (Peters, 1875) (Antarctic Fur Seal)

- MLP 1911, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. 2004-2005. Male, adult.
- MLP 1912, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. 2004-2005. Male, adult.

-MLP 25.IV.02.08, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. June, 1987. Male.

-MLP 25.IV.02.09, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. 1985. Male.

-MLP 25.IV.02.10, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. Collected by Regidor and Lucchelli. March, 1986. Male.

-MLP 25.IV.02.11, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina Collected by Regidor and Lucchelli. March, 1986. Male.

-MLP 25.IV.02.12, skull and mandible (Fig. 20). Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. February, 1984. Male.

-MLP 25.IV.02.13, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. January, 1987. Male.

-MLP 25.IV.02.14, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. Collected by Regidor and Lucchelli. March, 1986. Male.

-MLP 25.IV.02.15, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. 1985. Male.

-MLP 25.IV.02.16, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. 1983. Male.

-MLP 25.IV.02.17, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. February, 1987. Male.



Figura 20. Dorsal and ventral of skull, and lateral view of skull and mandible of *Arctocephalus gazella* MLP 25.VI.02.12. Scale 10 cm.

-MLP 25.IV.02.18, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. 1984. Male.

-MLP 25.IV.02.19, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. June, 1905. Male.

-MLP 25.IV.02.20, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. April, 1987. Male.

-MLP 25.IV.02.21, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. 1983. Male.

-MLP 25.IV.02.22, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. Collected by Daneri G. and García Esponda. November, 1993. Male.

-MLP 25.IV.02.23, skull and mandible. Atlantic Southern Ocean, Laurie Island, South Orkney Islands, Argentina. February, 1987. Male.

-MLP 25.IV.02.24, skull, mandible and complete postcranial skeleton. Atlantic Southern Ocean, Half Moon Island, South Shetland Islands, Argentina. Collected by García Esponda. 1995. Male.

-Family Phocidae Gray, 1821 (Earless Seal, True Seal)

Cystophora cristata (Erxleben, 1777) (Hooded Seal)

-MLP 1054, skull and mandible. Arctic Ocean. Trade with Uppsala University, Sweden.

Erignathus barbatus (Erxleben, 1777) (Bearded Seal)

-MLP 1055, skull and mandible. Locality unknown. Trade with Uppsala University, Sweden.

Hydrurga leptonyx (Blainville, 1820) (Leopard Seal)

-MLP 691, skull and mandible. Atlantic Ocean, Lobería Punta Norte, Península Valdés, Chubut Province, Argentina. Collected by J. Frenguelli. Age: 12 years old.

-MLP 1059, skull and mandible (Fig. 21). Atlantic Ocean, Isla de los Estados, Tierra del Fuego Province, Argentina. Age: 16 years old.

-MLP 1327, damaged skull without mandible. Atlantic Ocean, Isla de los Estados, Tierra del Fuego Province, Argentina. Age: 6 years old.

-MLP 14.IV.48.11, skull and mandible. Locality unknown. Age: 8 years old.

-MLP 24.IX.01.20, complete skeleton. Locality unknown.

-MLP 30.XII.02.10, skull and mandible. Locality unknown. Age: 4 years old.

-MLP 26.IV.00.14, skull and mandible. Locality unknown. Age: 5 years old.

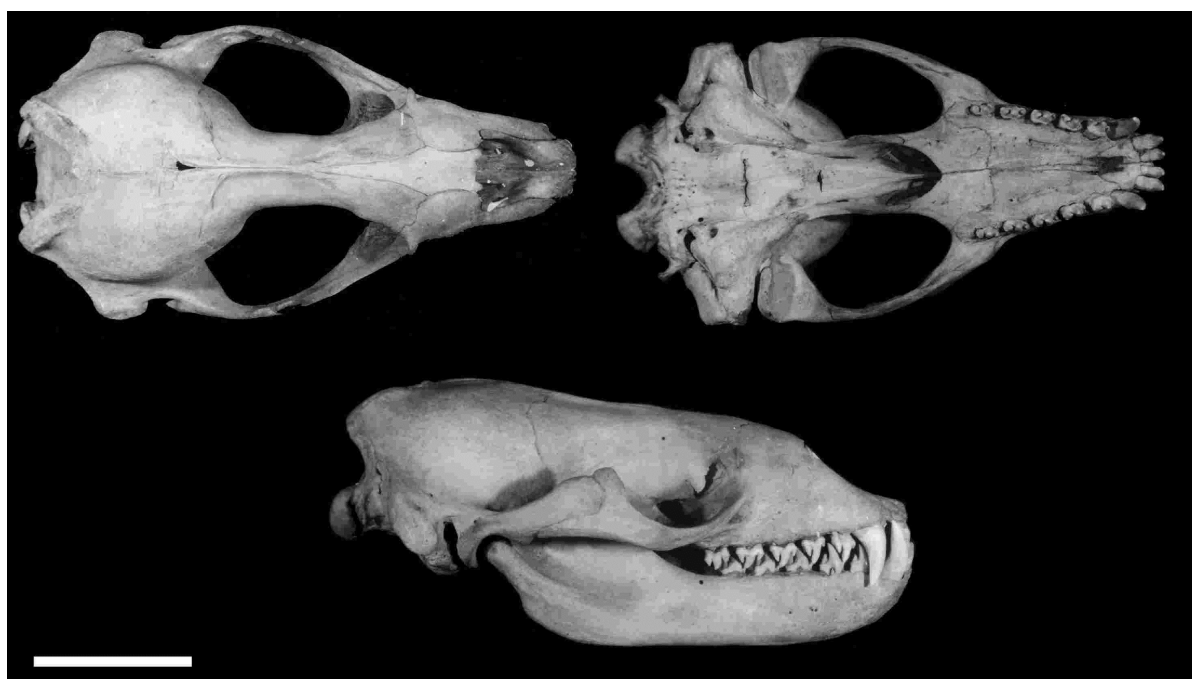


Figura 21. Dorsal and ventral of skull, and lateral view of skull and mandible of *Hydrurga leptonyx* MLP 1059. Scale 10 cm.

Leptonychotes weddellii (Lesson, 1826) (Weddell Seal)

-MLP 14.X.48.12, skull and mandible (Fig. 22). Locality unknown. Collected by Lahille F. April, 1948. Male. Age: 3 years old.

-MLP 31.XI.02.24, skull without mandible. Locality unknown. Age: 10 years old.

-MLP 1887, right hemimandible. Antarctica, Vicecomodoro Marambio Base, Marambio Island (Seymour Island), Punta Bowman Bay. Collected by Soibelzon L. 2003.

-MLP 1053, complete skeleton exhibited in XVI Hall, lateral showcase, number 12. Antarctica, South Orkney Islands. Collected by Vallete L.



Figura 22. Dorsal and ventral of skull, and lateral view of skull and mandible of *Leptonychotes weddellii* MLP 14.IV.48.12. Scale 10 cm.



Figura 23. Dorsal and ventral of skull, and lateral view of skull and mandible of *Lobodon carcinophaga* MLP 474. Scale 10 cm.

Lobodon carcinophaga (Hombron & Jacquinot, 1842) (Crabeater Seal)

- MLP 474, skull and mandible (Fig. 23). Locality unknown. Age: 10 years old.
- MLP 1052, complete skeleton exhibited in XVI Hall, lateral showcase. Tierra del Fuego Province, Argentina.
- MLP 1194, complete skeleton exhibited in XVI Hall, lateral showcase. Locality unknown.
- MLP 1888, two left hemimandibles. Antarctica, Vicecomodoro Marambio Base, Marambio Island (Seymour Island), Punta Bowman Bay. Collected by Soibelzon L. 2003.
- MLP 30.III.02.11, skull and mandible. Locality unknown. Age: 15 years old.
- MLP 22.III.99.10, skull. Locality unknown. Age: 3 years old.

Mirounga leonina (Linnaeus, 1758) (Southern Elephant Seal)

- MLP 44, complete skeleton. Locality unknown. Male.
- MLP 947, complete skeleton (Fig. 24). Locality unknown. Male.
- MLP 1204, complete skeleton exhibited in XVII Hall (Fig. 1). Atlantic Ocean, Islas de los Estados, Tierra del Fuego Province, Argentina. Male.
- MLP 1504, skull and mandible. Atlantic Ocean, South Georgia Islands, Tierra del Fuego Province, Argentina. Male. Age: 9 years old.
- MLP 1971, complete skeleton. Antarctica, South Shetland Islands, Isla 25 de Mayo (UK: King George Island), Stranger Point, Female.
- MLP 1966, skull without mandible. Antarctica, South Shetland Islands, Isla 25 de Mayo (UK: King George Island), Stranger Point. Female.
- MLP 14.IV.48.13, skull and mandible. Locality unknown. Male.
- MLP 26.IV.00.13, skull and mandible. Locality unknown. Male.



Figura 24. Dorsal and ventral of skull, and lateral view of skull and mandible of *Mirounga leonina* MLP 947. Scale 10 cm.

†*Monachus tropicalis* (Gray, 1850) (Caribbean Monk Seal)

-MLP 1503, skull and mandible (Fig. 25). Locality unknown. Extinct in the twentieth Century.



Figura 25. Dorsal and ventral of skull, and lateral view of skull and mandible of *Monachus tropicalis* MLP 1503. Scale 10 cm.

Pagophilus groenlandicus (Erxleben, 1777) (Harp Seal)

-MLP 1056, skull and mandible (Fig. 26). Arctic Ocean, Greenland.

-MLP 1057, skull and mandible. Arctic Ocean, Greenland.

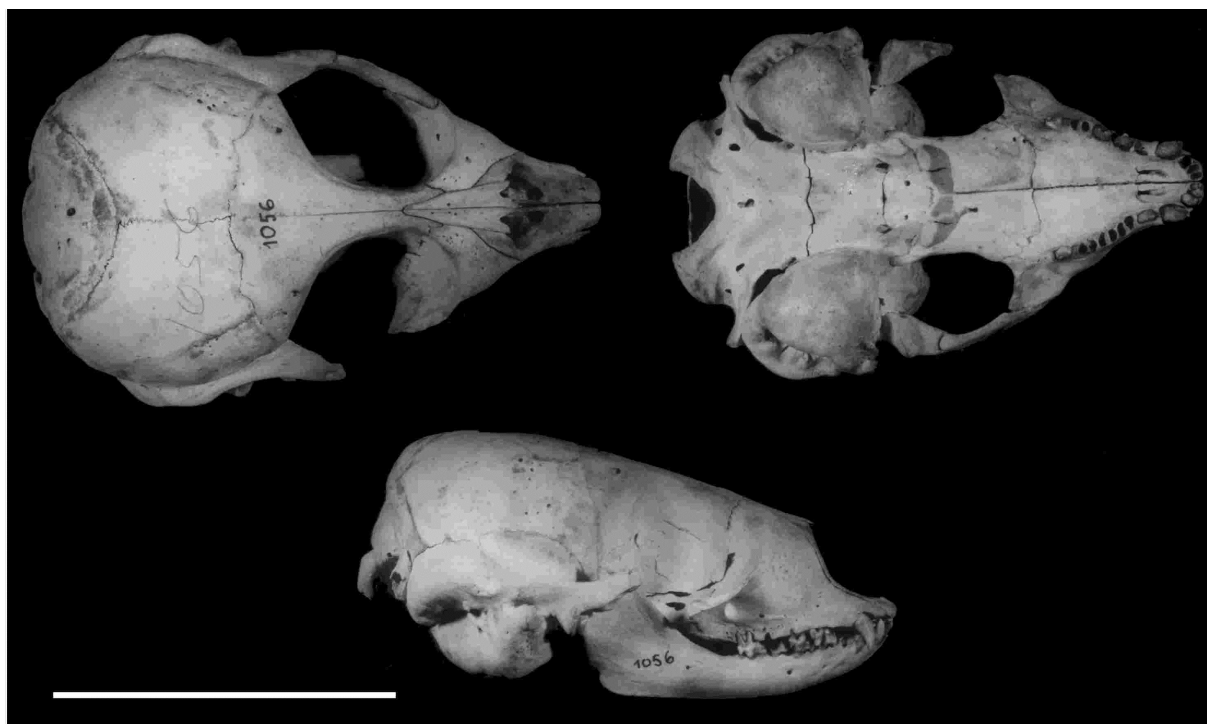


Figura 26. Dorsal and ventral of skull, and lateral view of skull and mandible of *Pagophilus groenlandicus* MLP 1056. Scale 10 cm.

-Family Odobenidae Allen, 1880 (Walrus)*Odobenus rosmarus* (Linnaeus, 1758) (Walrus)

-MLP 1501, skull and mandible (Fig. 27). Arctic Ocean.

-MLP 1502, skull and mandible. Arctic Ocean.

-Family Ursidae Fischer de Waldheim, 1817 (Bear)*Ursus maritimus* Phipps, 1774 (Polar Bear)

-MLP 23, skull and mandible. Donated by Jardín Zoológico de La Plata. 1919. Locality unknown. Male.

-MLP 1104, complete skeleton exhibited in XVI Hall, lateral showcase. Locality unknown.

-MLP 1318, skull and mandible. Locality unknown.

-Family Mustelidae Fischer de Waldheim, 1817 (e.g. Otter)*Lontra felina* Molina, 1782 (Marine Otter)

-MLP 1282, skull and right hemimandible. Atlantic Ocean, Tierra del Fuego Province, Argentina.

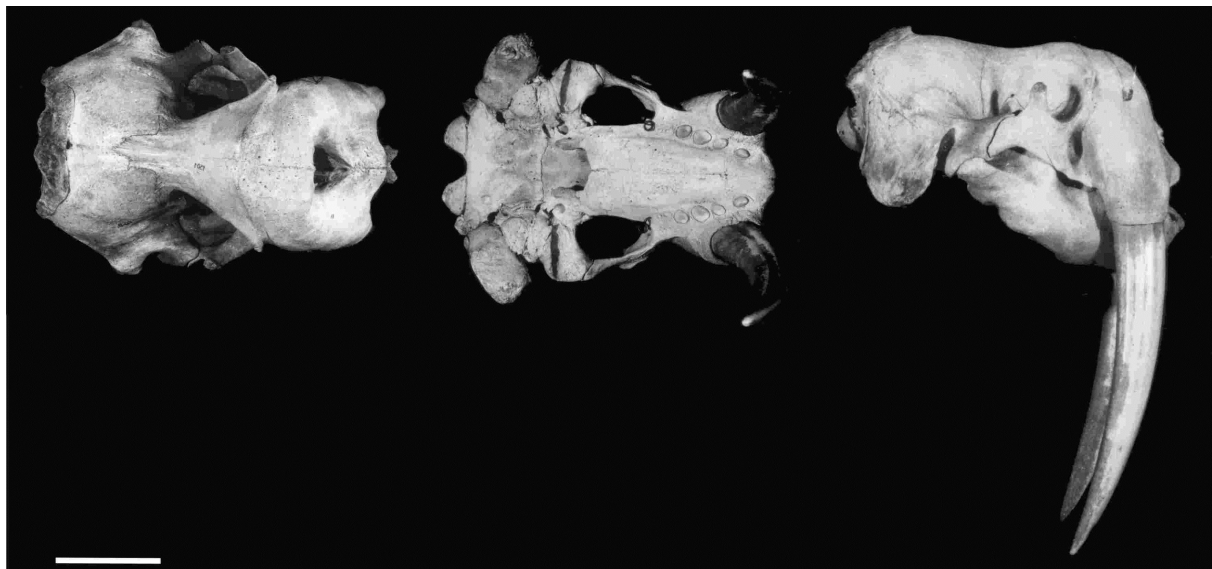


Figura 27. Dorsal and ventral of skull, and lateral view of skull and mandible of *Odobenus rosmarus* MLP 1501. Scale 10 cm.

Order Sirenia Illiger, 1811**-Family Dugongidae** Gray, 1821 (Dugong)*Dugong dugon* (Müller, 1776) (Dugong)

-MLP 1846, complete skeleton exhibited in XVI Hall (Figs. 1, 28). Indian Ocean.

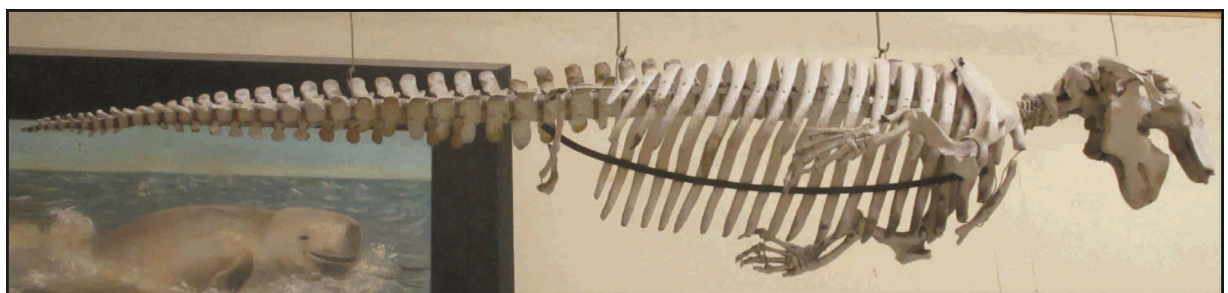


Figura 28. Complete skeleton of *Dugong dugon* MLP 1846. Without scale.

-Family Trichechidae Gill, 1872 (Manatee)

Trichechus manatus Linnaeus, 1758 (West Indian Manatee)

-MLP 1188, complete skeleton exhibited in XVI Hall (Figs. 1, 29). Atlantic Ocean, Amazon River, Brazil.

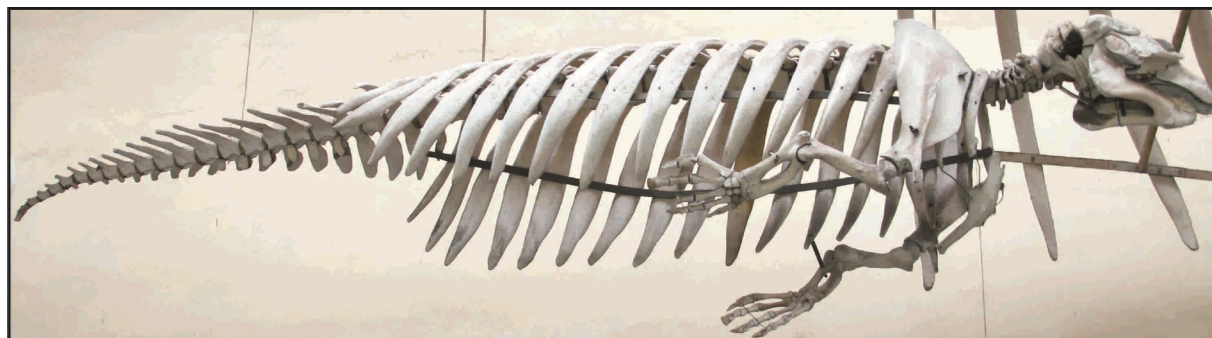


Figura 29. Complete skeleton of *Trichechus manatus* MLP 1188. Without scale.

Conclusion

This collection houses 189 specimens belonging to 37 species of marine and aquatic mammals distributed essentially in the Southern Hemisphere (Bastida et al. 2007; Bastida & Rodríguez, 2006a, b). It includes at least one specimen of two families of suborder Mysticeti (Balaenopteridae and Balaenidae), all families of suborder Odontoceti, except for Platanistidae from Asia (order Cetacea), all families of the order Sirenia, only one marine, and five families of the order Carnivora. Thus, this collection includes samples of half of the genera of cetaceans (16 of 32 genera), half of the genera of pinnipeds (11 of 21 genera), two genera of marine ‘Fissipedia’, and 2 of 3 genera of sirenians.

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