List of Marine Mammal Species and Subspecies

The Ad-Hoc Committee on Taxonomy, chaired by Bill Perrin, has produced the first official SMM list of marine mammal species and subspecies. Consensus on some issues was not possible; this is reflected in the footnotes.

This list is revisited and possibly revised every few months reflecting the continuing flux in marine mammal taxonomy. This version was updated on 6 September 2011.

This list can be cited as follows: “Committee on Taxonomy. 2011. List of marine mammal species and subspecies. Society for Marine Mammalogy, www.marinemammalscience.org, consulted on [date].”

This list includes living and recently extinct species and subspecies. It is meant to reflect prevailing usage and recent revisions published in the peer-reviewed literature. Author(s) and year of description of the species follow the Latin species name; when these are enclosed in parentheses, the species was originally described in a different genus. Classification and scientific names follow Rice (1998), with adjustments reflecting more recent literature. Common names are arbitrary and change with time and place; one or two currently frequently used in English and/or a range language are given here. Additional English common names and common names in French, Spanish, Russian and other languages are available at www.marinespecies.org/cetacea/.

Based on molecular and morphological data, the cetaceans genetically and morphologically fall firmly within the artiodactyl clade (Geisler and Uhen, 2005), and therefore we include them in the order Cetartiodactyla, with Cetacea, Mysticeti and Odontoceti as unranked taxa (recognizing that the classification within Cetartiodactyla remains partially unresolved -- e.g., see Spaulding et al., 2009, Price et al., 2005; Agnarsson and May-Collado, 2008). Below the rank of order, we list only families, species and subspecies, omitting superfamilies, subfamilies and taxa of other ranks.

For pinnipeds we follow Berta and Churchill (in press). To avoid issues of paraphyly, these authors proposed that based on data from genetics and morphology the genus Arctocephalus be limited to Arctocephalus pusillus, the type species of the genus Arctocephalus and transferred the remaining 'Arctocephalus' species (i.e. A. australis, A. galapagoensis, A. gazelle, A. philippii and A. tropicalis) to Arctophoca Peters, 1866. Although as many as four subspecies of Arctophoca australis may be valid pending study of larger samples, only three subspecies are recognized at present: A. a. australis, A. a. forsteri and A. a. gracilis. Two subspecies of Arctophoca philippii are valid: A. p. philippii and A. p. townsendi, although small sample sizes and a small number of genes sampled are concerns. Two subspecies of Eumetopias are supported largely on genetic data, which is also the case for recognition of California, Japanese and Galapagos sea lions as separate species. Brunner (2004) advised use of Otaria byronia (Blainville, 1820) over O. flavescens (Shaw, 1800). Lindqvist et al. (2009) concluded that a purported third subspecies of walrus Odobenus rosmarus laptevi is not valid. Recent genetic analyses indicate that Phoca vitulina concolor is paraphyletic and this along with lack of morphological differentiation suggests that the western Atlantic subspecies is not valid; P. v. vitulina is considered here to apply to all Atlantic harbor seals. Within the North Pacific, until the subspecies limits of various populations are assessed only a single subspecies is recognized, Phoca vitulina richardi. Placement of the ringed seal, Caspian seal and Baikal seal has alternated between the genera Phoca and Pusa. We accept Rice's (1998) use of Pusa as the correct classification. "The use of Lontra rather than Lutra for the marine otter follows Larivière (1998) in recognizing the otters of North and South America as a monophyletic taxon distinct from the otters of Eurasia.

In the mysticete cetaceans, recent genetic evidence strongly supports the recognition of three separate phylogenetic species of right whales (Rosenbaum et al., 2000; Gaines et al., 2005). In addition, the genus Eubalaena (rather than Balaena as in Rice, 1998) is retained for the right whales as recommended by the Scientific Committee of the International Whaling Commission (IWC, 2002). All Bryde's whales are provisionally considered to comprise a single species, Balaenoptera edeni, following the usage of the IWC.
In the odontocetes, *Mesoplodon traversii* (spade-toothed whale) has been recognized as the senior synonym for *M. bahamondi* (Bahamonde's beaked whale) (van Helden et al., 2002). *Mesoplodon perrini* is a newly described species (Dalebout et al., 2002). Robineau et al. (2007) described the subspecies *Cephalorhynchus commersonii kerguelenensis*, and A. Baker *et al.* described *C. hectori maui*. We follow the IWC in listing only two species of *Sousa*; the taxonomy of this group is in flux (Parra and Ross, 2009). The tucuxi has been split into the freshwater *Sotalia fluvatilis* (retaining the common name tucuxi) and the marine Guiana dolphin *S. guianensis* (Caballero *et al.* 2007). Recognition of the Black Sea bottlenose dolphin is now well-supported by genetic data (Viaud-Martinez *et al.*, 2008), as is the Black Sea common dolphin (Natoli *et al.*, 2008). *Delphinus tropicalis* is now considered a subspecies of *D. capensis* (Jefferson and Van Waerebeek, 2002). *Lagenorhynchus* is widely considered an unnatural (polyphyletic) taxon containing morphologically convergent species (Cipriano 1997, LeDuc et al. 1999, McGowen 2011), and application of the genera *Sagmatias* (for *L. obscurus, obliquidens, australis* and *cruciger*) and *Leucopleurus* (for *L. acutus*) have been suggested as appropriate and used by some workers. However, there is continuing disagreement about whether *australis* and *cruciger* should be included in *Cephalorhynchus* (which would necessitate a new genus for *obliquidens* and *obscurs*, as *australis* is the type species for the genus *Sagmatias*) and about whether *albirostris* and *acutus* are sister species (which would obviate the need for *Leucopleurus*). We therefore provisionally retain all the species in *Lagenorhynchus*. Harlin-Cognato (2010) recognized *L. o. posidonia* (Peru/Chile). She also recognized *L. o. superciliosus* (Lesson and Garnot, 1826) for the New Zealand subspecies, but the species identity of the figure in Lesson and Garnot is in question, and we retain use of "un-named New Zealand subspecies." Perrin *et al.* (1999) established the subspecies *Stenella longirostris roseiventris*. The Irrawaddy dolphin was recently split into *O. brevirostris* and *O. heinsohni*, the Australian snubfin dolphin (Beasley *et al.*, 2005). Krahn *et al.* (2004) recognized two un-named species of killer whales, the resident and transient forms. Wang *et al.* (2008) and Jefferson and Wang (2011) established *Neophocaena asiacoorientalis* as a full species, with two subspecies. Viaud-Martinez *et al.* (2007) concluded based on morphological and genetic evidence that *Phocoea phocoena relicta* is a valid subspecies.

In the Sirenia, subspecies of the dugong are not currently recognized (Domning, 1996). However, no in-depth study has been undertaken to address the issue of subspecies.

For review of species concepts, see Reeves *et al.* (2004), Orr and Coyne (2004), de Queiroz (2007) and Perrin (2009). Perrin *et al.* (2009) reviewed the cetacean subspecies, but that review has not yet appeared in the peer-reviewed literature and is therefore not considered here; the subspecies (including for the Carnivora and Sirenia) are as recognized by Rice (1998), with the above-noted changes.

Corrections and comments should be directed to the Ad Hoc Committee on Taxonomy (william.perrin@noaa.gov). Divergent opinions by members of the Committee on particular taxonomic questions are given in the footnotes.

**Order Carnivora**

**Family Otariidae** (eared seals and sea lions; 14 species, of which 1 extinct)
Arctocephalus pusillus (Schreber, 1775) Cape fur seal

A. p. pusillus (Schreber, 1775). Cape fur seal

A. p. doriferus Wood Jones, 1925. Australian fur seal

Arctophoca gazella (Peters, 1875). Antarctic fur seal

Arctophoca tropicalis (Gray, 1872). Subantarctic fur seal

Arctophoca australis (Zimmerman, 1783)

A. a. australis (Zimmermann, 1783). Falkland Islands fur seal

A. a. forsteri (Lesson, 1828). New Zealand fur seal

A. a. gracilis Nehring, 1887. South American fur seal

A. galapagoensis Heller, 1904. Galapagos fur seal

Arctophoca philippi (Peters, 1866)

A. p. philippi Peters, 1866. Juan Fernandez fur seal

A. p. townsendi (Merriam, 1897). Guadalupe fur seal

Callorhinus ursinus (Linnaeus, 1758). Northern fur seal

Zalophus japonicus (Peters, 1866). Japanese sea lion (extinct)

Zalophus californianus (Lesson, 1828). California sea lion

Zalophus wollebaeki Sivertsen, 1953. Galapagos sea lion

Eumetopias jubatus (Schreber, 1776). Steller sea lion, northern sea lion

E. j. jubatus (Schreber, 1776). Western Steller sea lion

E. j. monteriensis (Gray, 1859). Loughlin's northern sea lion

Neophoca cinerea (Peron, 1816). Australian sea lion

Phocarctos hookeri (Gray, 1844). New Zealand sea lion

Otaria byronia (Blainville, 1820). South American sea lion

**Family Odobenidae**

Odobenus rosmarus (Linnaeus, 1758). Walrus
*O. r. rosmarus* (Linnaeus, 1758). Atlantic walrus

*O. r. divergens* (Illiger, 1815). Pacific walrus

**Family Phocidae (earless seals; 19 species, of which 1 extinct)**

*Erignathus barbatus* (Erxleben, 1777). Bearded seal

*E. b. barbatus* (Erxleben, 1777). Atlantic bearded seal

*E. b. nauticus* (Pallas, 1881). Pacific bearded seal

*Phoca vitulina* (Linnaeus, 1758). Harbor seal, common seal

*P. v. vitulina* (Linnaeus, 1758). Eastern Atlantic harbor seal

*P. v. mellonae* Doutt, 1942. Hudson Bay harbor seal

*P. v. stejnegeri* Allen, 1902. Western Pacific harbor seal

*P. v. richardi* (Gray, 1864). Pacific harbor seal

*Phoca largha* (Pallas, 1811. Spotted seal, largha seal

*Pusa hispida* (Schreber, 1775). Ringed seal

*P. h. hispida* (Schreber, 1775). Arctic Ringed seal

*P. h. botnica* (Gmelin, 1788). Baltic ringed seal

*P. h. ochotensis* (Nordquist, 1889) Okhotsk ringed seal

*P. h. ladogensis* (Nordquist, 1889). Lake Ladoga seal

*P. h. saimensis* (Nordquist, 1889). Saima seal

*Pusa caspica* (Gmelin, 1788). Caspian seal

*Pusa sibirica* (Gmelin, 1788. Baikal seal

*Halichoerus grypus* (Fabricius, 1791). Gray seal

*H. g. grypus* (Fabricius, 1791). Western Atlantic gray seal

*H. g. macrorhynchos* Hornschuh and Schilling, 1851. Eastern Atlantic gray seal

*Histriophoca fasciata* (Zimmerman, 1783). Ribbon seal

*Pagophilus groenlandicus* (Erxleben, 1777). Harp seal
Cystophora cristata (Erxleben, 1777). Hooded seal

Monachus tropicalis (Gray, 1850). Caribbean monk seal (extinct)

Monachus monachus (Hermann, 1779). Mediterranean monk seal

Monachus schauinslandi Matschie, 1905. Hawaiian monk seal

Mirounga leonina (Linnaeus, 1758). Southern elephant seal

Mirounga angustirostris (Gill, 1866). Northern elephant seal

Leptonychotes weddellii (Lesson, 1826). Weddell seal

Ommatophoca rossii Gray, 1844. Ross seal

Lobodon carcinophaga (Hombron and Jacquinot, 1842). Crabeater seal

Hydrurga leptonyx (Blainville, 1820). Leopard seal

**Family Ursidae**

Ursus maritimus Phipps, 1774. Polar bear

U. m. maritimus Phipps, 1774. Atlantic polar bear

U. m. marinus Pallas, 1776. Pacific polar bear

**Family Mustelidae**

Enhydra lutris (Linnaeus, 1758). Sea otter

E. l. lutris (Linnaeus, 1758). Western sea otter

E. l. kenyoni Wilson, 1991. Eastern sea otter

E. l. nereis (Merriam, 1904). Southern sea otter

Lontra felina (Molina, 1782). Marine otter

Neovision macrodon (Prentis, 1903). Sea mink (extinct)

**Order Cetartiodactyla (artiodactyls and cetaceans)**

**CETACEA** (cetaceans; 87 species, of which 1 extinct)
MYSTICETI (baleen whales, 14 species)

Family Balaenidae (right whales, 4 species)

*Eubalaena glacialis* (Müller, 1776). North Atlantic right whale

*Eubalaena japonica* (Lacépède, 1818). North Pacific right whale

*Eubalaena australis* (Desmoulins, 1822). Southern right whale

*Balaena mysticetus* Linnaeus, 1758. Bowhead whale, Greenland whale

Family Neobalaenidae

*Caperea marginata* (Gray, 1846). Pygmy right whale

Family Eschrichtiidae

*Eschrichtius robustus* (Lilljeborg, 1861). Gray whale

Family Balaenopteridae (rorquals, 8 species)

*Megaptera novaeangliae* (Borowski, 1781). Humpback whale

*Balaenoptera acutorostrata* Lacépède, 1804. Common minke whale

*B. a. acutorostrata* Lacépède, 1804. North Atlantic minke whale


*B. a. un-named subsp.* Dwarf minke whale

*Balaenoptera bonaerensis* Burmeister, 1867. Antarctic minke whale

*Balaenoptera edeni* Anderson, 1879. Bryde's whale

*Balaenoptera omurai* Wada, Oishi and Yamada, 2003. Omura's whale

*Balaenoptera borealis* Lesson, 1828. Sei whale

*B. b. borealis* Lesson, 1828. Northern sei whale

*B. b. schlegelli* Flower, 1865. Southern sei whale

*Balaenoptera physalus* (Linnaeus, 1758). Fin whale

*B. p. physalus* (Linnaeus, 1758). Northern fin whale
B. p. quoyi Fischer, 1829. Southern fin whale

B. p. patachonica Burmeister, 1865. Pygmy fin whale

Balaenoptera musculus (Linnaeus, 1758). Blue whale

B. m. musculus (Linnaeus, 1758). Northern blue whale

B. m. intermedia Burmeister, 1871. Southern blue whale

B. m. indica Blyth, 1859. Indian Ocean blue whale

B. m. brevicauda Ichihara, 1966. Pygmy blue whale

ODONTOCETI (toothed whales, dolphins and porpoises; 73 species, of which 1 extinct)

Family Physeteridae

Physeter macrocephalus Linnaeus, 1758. Sperm whale, cachalot

Family Kogiidae

Kogia breviceps (Blainville, 1838). Pygmy sperm whale

Kogia sima (Owen, 1866). Dwarf sperm whale

Family Ziphiidae (beaked whales, 21 species)

Ziphius cavirostris G. Cuvier, 1823. Cuvier's beaked whale, goose-beaked whale

Berardius arnuxii Duvernoy, 1851. Arnoux's beaked whale

Berardius bairdii Stejneger, 1883. Baird's beaked whale

Tasmacetus shepherdi Oliver, 1937. Shepherd's beaked whale, Tasman beaked whale

Indopacetus pacificus (Longman, 1926). Longman's beaked whale, tropical bottlenose whale

Hyperoodon ampullatus (Forster, 1770). Northern bottlenose whale

Hyperoodon planifrons Flower, 1882. Southern bottlenose whale

Mesoplodon hectori (Gray, 1871). Hector's beaked whale
Mesoplodon mirus True, 1913. True's beaked whale

Mesoplodon europaeus (Gervais, 1855). Gervais' beaked whale

Mesoplodon bidens (Sowerby, 1804). Sowerby's beaked whale

Mesoplodon grayi von Haast, 1876. Gray's beaked whale


Mesoplodon peruvianus Reyes, Mead and Van Waerebeek, 1991. Pygmy beaked whale

Mesoplodon bowdoini Andrews, 1908. Andrew's beaked whale

Mesoplodon traversii (Gray, 1874). Spade-toothed whale

Mesoplodon carlhubbsi Moore, 1963. Hubbs' beaked whale

Mesoplodon ginkgodens Nishiwaki and Kamiya, 1958. Ginkgo-toothed beaked whale

Mesoplodon stejnegeri True, 1885. Stejneger's beaked whale

Mesoplodon layardii (Gray, 1865). Strap-toothed beaked whale

Mesoplodon densirostris (Blainville, 1817. Blainville's beaked whale

Family Platanistidae

Platanista gangetica (Lebeck, 1801). South Asian river dolphin, Indian River dolphin

P. g. gangetica (Lebeck, 1801). Susu, Ganges river dolphin

P. g. minor Owen, 1853. Bhulan, Indus river dolphin

Family Iniidae

Inia geoffrensis (Blainville, 1817). Amazon river dolphin

I. g. geoffrensis(Blainville, 1817). Boto

I. g. humboldtiana Pilleri and Gihr, 1977. Orinoco bufeo

I. g. boliviensis d'Orbigny, 1834. Bolivian bufeo

Family Lipotidae

Lipotes vexillifer (Miller, 1918). Baiji, Yangtze river dolphin - extinct
Family Pontoporiidae

*Pontoporia blainvillei* (Gervais and d'Orbigny, 1821). Franciscana, La Plata dolphin

Family Monodontidae

*Monodon monoceros* Linnaeus, 1758. Narwhal

*Delphinapterus leucas* (Pallas, 1776). Beluga, white whale

Family Delphinidae (36 species)

*Cephalorhynchus commersonii* (Lacépède, 1804). Commerson's dolphin

*C. c. commersonii* (Lacépède, 1804). Commerson's dolphin


*Cephalorhynchus eutropia* (Gray, 1846). Chilean dolphin

*Cephalorhynchus heavisidii* (Gray, 1828). Heaviside's dolphin, Haviside's dolphin

*Cephalorhynchus hectori* (Van Beneden, 1881). Hector's dolphin

*C. h. hectori* (Van Beneden, 1881). Hector's dolphin

*C. h. maui* A. Baker, Smith and Pichler, 2002. Maui's dolphin

*Steno bredanensis* (G. Cuvier in Lesson, 1828). Rough-toothed dolphin

*Sousa teuszii* (Kükenthal, 1892). Atlantic humpback dolphin

*Sousa chinensis* (Osbeck, 1765). Indo-Pacific humpback dolphin

*Sotalia fluviatilis* (Gervais and Deville, 1853). Tucuxi, marine tucuxi

*Sotalia guianensis* (Van Bénéden, 1864). Guiana dolphin, costero

*Tursiops truncatus* (Montagu, 1821). Common bottlenose dolphin

*T. t. truncatus* (Montagu, 1821). Common bottlenose dolphin

*T. t. ponticus* Barabash-Nikiforov, 1940. Black Sea bottlenose dolphin

*Tursiops aduncus* (Ehrenberg, 1833). Indo-Pacific bottlenose dolphin
Stenella attenuata (Gray, 1846). Pantropical spotted dolphin

S. a. attenuata (Gray, 1846). Offshore pantropical spotted dolphin

S. a. graffmani (Lönnberg, 1934). Coastal pantropical spotted dolphin

Stenella frontalis (G. Cuvier, 1829). Atlantic spotted dolphin

Stenella longirostris (Gray, 1828). Spinner dolphin

S. l. longirostris (Gray, 1828). Gray's spinner dolphin

S. l. orientalis Perrin, 1990. Eastern spinner dolphin

S. l. centroamericana Perrin, 1990. Central American spinner dolphin

S. l. roseiventris (Wagner, 1846). Dwarf spinner dolphin

Stenella clymene (Gray, 1850). Clymene dolphin

Stenella coeruleoalba (Meyen, 1853). Striped dolphin

Delphinus delphis Linnaeus, 1758. Short-beaked common dolphin, saddleback dolphin

D. d. delphis Linnaeus, 1758. Short-beaked common dolphin

D. d. ponticus Barabash, 1935. Black Sea common dolphin

Delphinus capensis Gray, 1828. Long-beaked common dolphin

D. c. capensis Gray, 1828. Long-beaked common dolphin

D. c. tropicalis van Bree, 1971. Indo-Pacific common dolphin

Lagenodelphis hosei Fraser, 1956. Fraser's dolphin

Lagenorhynchus albirostris (Gray, 1846). White-beaked dolphin

Lagenorhynchus acutus (Gray, 1828). Atlantic white-sided dolphin

Lagenorhynchus obliquidens Gill, 1865. Pacific white-sided dolphin

Lagenorhynchus obscurus (Gray, 1828). Dusky dolphin

L. o. obscurus (Gray, 1828). African dusky dolphin

L. o. fitzroyi (Waterhouse, 1838). South American dusky dolphin

L. o. posidonia (Philippi, 1893). Peruvian/Chilean dusky dolphin
L. o. un-named subsp. New Zealand dusky dolphin

*Lagenorhynchus australis* (Peale, 1848). Peale's dolphin

*Lagenorhynchus cruciger* (Quoy and Gaimard, 1824). Hourglass dolphin

*Lissodelphis borealis* Peale, 1848. Northern right-whale dolphin

*Lissodelphis peronii* (Lacépède, 1804). Southern right-whale dolphin

*Grampus griseus* (G. Cuvier, 1812). Risso's dolphin, gray grampus

*Peponocephala electra* (Gray, 1846). Melon-headed whale, Electra dolphin

*Feresa attenuata* Gray, 1874. Pygmy killer whale

*Pseudorca crassidens* (Owen, 1846). False killer whale

*Orcinus orca* (Linnaeus, 1758). Killer whale, orca

*O. o.* un-named subsp. Resident killer whale

*O. o.* un-named subsp. Transient killer whale

*Globicephala melas* (Traill, 1809). Long-finned pilot whale

*G. m. melas* (Traill, 1809). North Atlantic long-finned pilot whale

*G. m. edwardii* (A. Smith, 1834). Southern long-finned pilot whale

*G. m.* un-named subsp. North Pacific long-finned pilot whale

*Globicephala macrorhynchus* Gray, 1846. Short-finned pilot whale

*Orcaella breviostris* (Owen in Gray, 1866). Irrawaddy dolphin, pesut

*Orcaella heinsohni* Beasley, Robertson and Arnold, 2005. Australian snubfin dolphin

**Family Phocoenidae (porpoises, 7 species)**

*Neophocaena phocaenoides* (G. Cuvier, 1829). Indo-Pacific finless porpoise

*Neophocaena asiaeorientalis* Pilleri and Gihr, 1972. Narrow-ridged finless porpoise

*N. a. asiaeorientalis* Pilleri and Gihr, 1972. Yangtze finless porpoise

*N. a. sunameri* Pilleri and Gihr, 1975. East Asian finless porpoise, sunameri

*Phocoena phocoena* (Linnaeus, 1758). Harbor porpoise, common porpoise
P. p. phocoena (Linnaeus, 1758). Atlantic harbor porpoise

P. p. vomerina (Gill, 1865). Eastern Pacific harbor porpoise

P. p. relictas Abel, 1905. Black Sea harbor porpoise

P. p. un-named subsp. Western Pacific harbor porpoise

Phocoena sinus Norris and McFarland, 1958. Vaquita, Gulf of California harbor porpoise

Phocoena spinipinnis Burmeister, 1865. Burmeister's porpoise

Phocoenoides dalli (True, 1885). Dall's porpoise, Dall porpoise

P. d. dalli (True, 1885). Dalli-type Dall's porpoise

P. d. truei Andrews, 1911. Truei-type Dall's porpoise

ORDER SIRENIA (sirenians, 5 species – 1 extinct)

Family Trichechidae

Trichechus manatus Linnaeus, 1758. West Indian manatee

T. m. manatus Linnaeus, 1758. Antillean manatee

T. m. latirostris (Harlan, 1824). Florida manatee

Trichechus senegalensis Link, 1795. West African manatee

Trichechus inunguis (Natterer, 1883). Amazonian manatee

Family Dugongidae

Dugong dugon (Müller, 1776). Dugong

Hydrodamalis gigas (Zimmerman, 1780). Steller's sea cow - extinct

Footnotes

¹Use of Order Cetartiodactyla is favored by most evolutionary mammalogists working with molecular data. Some others, including many marine mammalogists and paleontologists, favor retention of Order Cetacea in the interest of taxonomic stability.

²(from D. Rice) Baker et al. (2003) hold that there is no evidence that would support the classification of
the right whales as more than a single biological species. [The three species are here recognized as phylogenetic species.]

References


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Last updated 6 September 2011 by members of the Ad Hoc Committee on Taxonomy:

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