Introduction

The Committee on Taxonomy produced the first official Society for Marine Mammalogy list of marine mammal species and subspecies in 2010 and is updated at least annually. The Committee is currently chaired by Ana Costa and its Terms of Reference provide information on the Committee's process.

The current version was updated in June 2024. This list can be cited as follows: "Committee on Taxonomy. 2024. List of marine mammal species and subspecies. Society for Marine Mammalogy, www.marinemammalscience.org, consulted on [date]."

This list includes living and recently extinct (within historical times) species and subspecies. It is meant to reflect prevailing usage and recent revisions published in the peer-reviewed literature. Classification and scientific names follow Rice (1998), with adjustments reflecting more recent literature. Author(s) and year of description of each taxon follow the Latin (scientific) species name; when these are enclosed in parentheses, the taxon was originally described in a different genus.

The Committee considers and evaluates new, peer-reviewed literature that proposes taxonomic changes. The Committee's focus is on alpha taxonomy (describing and naming taxa) and beta taxonomy primarily at lower levels of the hierarchy (subspecies, species and genera), although it may evaluate issues at higher levels if deemed necessary. Proposals for new, taxonomically distinct taxa require a formal, peer-reviewed study and should provide robust evidence that some subspecies or species criterion was met. For review of species concepts, see Reeves et al. (2004), Orr and Coyne (2004), de Queiroz (2007), Perrin (2009) and Taylor et al. (2017 a,b). Nomenclatural papers that propose new names are to be registered with ZooBank and publications should include required information including designation of holotype or syntype specimen(s), identification of the repository of the specimen(s), and explicit identification of the taxon as new by inclusion of a term such as "ssp. nov.", "new species", etc. See the Committee's Taxonomic Guide for Authors for more information. The Committee also recommends authors acquaint themselves with the International Code of Zoological Nomenclature (ICZN 1999) and supply the information required under the Code when proposing new species or subspecies. Some examples of recent species or subspecies descriptions and redescriptions providing the necessary information can be seen at: Yamada et al. (2019), Rosel et al. (2021), Costa et al. (2023).

The Committee omits some described species and subspecies because of concern about their biological distinctness; reservations are given in the narrative below. In addition, published proposals for taxonomically distinct units that do not provide names and instead refer simply to 'un-named subspecies' or 'un-named species' are not included in the official list but are provided here. Authors are encouraged to provide formal descriptions following ICZN rules based on robust data showing an appropriate subspecies or species criterion is met.

The Committee does not arbitrate common names. Common names are arbitrary and change with time and place. In general, we aim to maintain established names currently in use whenever possible, use names suggested by the authors of new species or subspecies descriptions if present, and recognize multiple common names when multiple names are commonly used. One, or two, frequently used names 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/. Species are listed in alphabetical order within families.

Corrections and comments should be directed to the Committee on Taxonomy (taxonomy@marinemammalscience.org). Consensus on some issues has not been possible and divergent opinions by members of the Committee on particular taxonomic questions are given in the footnotes.

List of Marine Mammal Species and Subspecies

Order Carnivora

Family Ursidae

Ursus maritimus Linnaeus, 1758. Polar bear

Family Mustelidae

Enhydra lutris (Linnaeus, 1758). Sea otter

- E. l. kenyoni Wilson, 1991. Eastern sea otter
- E. l. lutris (Linnaeus, 1758). Western sea otter
- E. l. nereis (Merriam, 1904). Southern sea otter

Lontra felina (Molina, 1782). Chungungo, marine otter

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

PINNIPEDIA (eared seals, sea lions, walrus, earless seals; 36 species, of which 2 extinct)

Family Otariidae (eared seals and sea lions; 16 species, of which 1 extinct)

Arctocephalus australis (Zimmermann, 1783). South American fur seal

Arctocephalus forsteri (Lesson, 1828). Long-nosed fur seal, New Zealand fur seal

Arctocephalus galapagoensis Heller, 1904. Galapagos fur seal

Arctocephalus gazella (Peters, 1875). Antarctic fur seal

Arctocephalus philippii (Peters, 1866). Juan Fernandez fur seal

Arctocephalus pusillus (Schreber, 1775). Cape fur seal

- A. p. doriferus Wood Jones, 1925. Australian fur seal
- A. p. pusillus (Schreber, 1775). Cape fur seal

Arctocephalus townsendi (Merriam, 1897). Guadalupe fur seal

Arctocephalus tropicalis (Gray, 1872). Subantarctic fur seal

Callorhinus ursinus (Linnaeus, 1758). Northern fur seal

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 Steller sea lion

Neophoca cinerea (Peron, 1816). Australian sea lion

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

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

Zalophus californianus (Lesson, 1828). California sea lion

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

Zalophus wollebaeki Sivertsen, 1953. Galapagos sea lion

Family Odobenidae

Odobenus rosmarus (Linnaeus, 1758). Walrus

- O. r. divergens (Illiger, 1815). Pacific walrus
- O. r. rosmarus (Linnaeus, 1758). Atlantic walrus

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

Cystophora cristata (Erxleben, 1777). Hooded seal Erignathus barbatus (Erxleben, 1777). Bearded seal

- E. b. barbatus (Erxleben, 1777). Atlantic bearded seal
- E. b. nauticus (Pallas, 1881). Pacific bearded seal Halichoerus grypus (Fabricius, 1791). Gray seal
 - H. g. atlantica. Nehring, 1866. Atlantic gray seal
 - H. g. grypus (Fabricius, 1791). Baltic gray seal

Histriophoca fasciata (Zimmerman, 1783). Ribbon seal
Hydrurga leptonyx (Blainville, 1820). Leopard seal
Leptonychotes weddellii (Lesson, 1826). Weddell seal
Lobodon carcinophaga (Hombron and Jacquinot, 1842). Crabeater seal
Mirounga angustirostris (Gill, 1866). Northern elephant seal
Mirounga leonina (Linnaeus, 1758). Southern elephant seal
Monachus monachus (Hermann, 1779). Mediterranean monk seal
Neomonachus schauinslandi (Matschie, 1905). Hawaiian monk seal

Neomonachus tropicalis (Gray, 1850). Caribbean monk seal, West Indian monk seal (extinct)

Ommatophoca rossii Gray, 1844. Ross seal

Pagophilus groenlandicus (Erxleben, 1777). Harp seal

Phoca largha Pallas, 1811. Spotted seal, largha seal

Phoca vitulina Linnaeus, 1758. Harbor seal, common seal

- P. v. mellonge Doutt, 1942. Ungava harbor seal
- P. v. richardii (Gray, 1864). Pacific harbor seal
- P. v. vitulina Linnaeus, 1758. Atlantic harbor seal

Pusa caspica (Gmelin, 1788). Caspian seal

Pusa hispida (Schreber, 1775). Ringed seal

- P. h. botnica (Gmelin, 1788). Baltic ringed seal
- P. h. hispida (Schreber, 1775). Arctic Ringed seal
- P. h. ladogensis (Nordquist, 1889). Lake Ladoga seal
- P. h. ochotensis (Pallas, 1811). Okhotsk ringed seal
- P. h. saimensis (Nordquist, 1889). Saima seal

Pusa sibirica (Gmelin, 1788). Baikal seal

Order ARTIODACTYLA (artiodactyls and cetaceans)

Infraorder CETACEA (cetaceans; 94 species, of which 1 possibly extinct)

MYSTICETI (baleen whales, 15 species)

Family Balaenidae (right whales, 4 species)²

Balaena mysticetus Linnaeus, 1758. Bowhead whale, Greenland whale

Eubalaena australis (Desmoulins, 1822). Southern right whale

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

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

Family Neobalaenidae

Caperea marginata (Gray, 1846). Pygmy right whale

Family Eschrichtiidae

Eschrichtius robustus (Lilljeborg, 1861). Gray whale

Family Balaenopteridae (rorquals, 9 species)

Balaenoptera acutorostrata Lacépède, 1804. Common minke whale

- B. a. acutorostrata Lacépède, 1804. North Atlantic minke whale
- B. a. scammoni Deméré, 1986. North Pacific minke whale

 Balaenoptera bonaerensis Burmeister, 1867. Antarctic minke whale

 Balaenoptera borealis Lesson, 1828. Sei whale
 - B. b. borealis Lesson, 1828. Northern sei whale
- B. b. schlegelii (Flower, 1865). Southern sei whale Balaenoptera edeni Anderson, 1879. Bryde's whale
 - B. e. brydei Olsen, 1913. Bryde's whale
 - B. e. edeni Anderson, 1879. Eden's whale

Balaenoptera musculus (Linnaeus, 1758). Blue whale

- B. m. brevicauda Ichihara, 1966. Pygmy blue whale
- B. m. indica Blyth, 1859. Northern Indian Ocean blue whale
- B. m. intermedia Burmeister, 1871. Antarctic blue whale
- B. m. musculus (Linnaeus, 1758). Northern blue whale
 Balaenoptera omurai Wada, Oishi and Yamada, 2003. Omura's whale
 Balaenoptera physalus (Linnaeus, 1758). Fin whale
 - B. p. physalus (Linnaeus, 1758). North Atlantic fin whale
 - B. p. quoyi (Fischer, 1829). Southern fin whale

- B. p. velifera Cope in Scammon, 1869. North Pacific fin whale Balaenoptera ricei Rosel, Wilcox, Yamada and Mullin, 2021. Rice's whale Megaptera novaeangliae (Borowski, 1781). Humpback whale
 - M. n. australis (Lesson, 1828). Southern humpback whale
 - M. n. kuzira (Gray, 1850). North Pacific humpback whale
 - M. n. novaeangliae (Borowski, 1781). North Atlantic humpback whale

ODONTOCETI (toothed whales, dolphins and porpoises: 79 species, of which one possibly 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, 24 species)

Berardius arnuxii Duvernoy, 1851. Arnoux's beaked whale

Berardius bairdii Stejneger, 1883. Baird's beaked whale

Berardius minimus Yamada, Kitamura and Matsuishi, 2019. Sato's beaked whale

Hyperoodon ampullatus (Forster in Kalm, 1770). Northern bottlenose whale

Hyperoodon planifrons Flower, 1882. Southern bottlenose whale

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

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

Mesoplodon bowdoini Andrews, 1908. Andrews' beaked whale

Mesoplodon carlhubbsi Moore, 1963. Hubbs' beaked whale

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

Mesoplodon eueu Carroll et al. 2021¹. Ramari's beaked whale

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

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

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

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

Mesoplodon hotaula Deraniyagala, 1963. Deraniyagala's beaked whale

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

Mesoplodon mirus True, 1913. True's beaked whale

Mesoplodon perrini Dalebout, Mead, Baker, Baker and van Helden, 2002. Perrin's beaked whale

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

Mesoplodon stejnegeri True, 1885. Stejneger's beaked whale

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

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

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

Family Platanistidae

Platanista gangetica (Lebeck, 1801). Ganges river dolphin, susu

Platanista minor Owen, 1853. Indus river dolphin, bhulan

Family Iniidae

Inia geoffrensis (Blainville, 1817). Amazon river dolphin

- I. g. boliviensis (d'Orbigny, 1834). Bolivian bufeo
- I. g. geoffrensis (Blainville, 1817). Common boto

Family Lipotidae

Lipotes vexillifer Miller, 1918. Baiji, Yangtze river dolphin (possibly extinct)

Family Pontoporiidae

Pontoporia blainvillei (Gervais and d'Orbigny, 1844). Franciscana, toninha

Family Monodontidae

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

Monodon monoceros Linnaeus, 1758. Narwhal

Family Delphinidae (38 species)

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

- C. c. commersonii (Lacépède, 1804). Commerson's dolphin
- C. c. kerguelenensis Robineau, Goodall, Pichler and C. S. Baker, 2007. Kerguelen dolphin

Cephalorhynchus eutropia (Gray, 1846). Chilean dolphin

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

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

- C. h. hectori (Van Beneden, 1881). South Island Hector's dolphin
- C. h. maui A. Baker, Smith and Pichler, 2002. Māui dolphin, North Island Hector's dolphin

Delphinus delphis Linnaeus, 1758. Common dolphin

- D. d. bairdii Dall, 1873. Eastern Pacific long-beaked common dolphin³
- D. d. delphis Linnaeus, 1758. Common dolphin
- D. d. ponticus Barabash, 1935. Black Sea common dolphin
- D. d. tropicalis van Bree, 1971. Indo-Pacific common dolphin

Feresa attenuata Gray, 1874. Pygmy killer whale

Globicephala macrorhynchus Gray, 1846. Short-finned pilot whale

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

- G. m. edwardii (A. Smith, 1834). Southern long-finned pilot whale
- G. m. melas (Traill, 1809). North Atlantic long-finned pilot whale

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

Lagenodelphis hosei Fraser, 1956. Fraser's dolphin

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

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

Lagenorhynchus australis (Peale, 1849). Peale's dolphin

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

Lagenorhynchus obliquidens Gill, 1865. Pacific white-sided dolphin

Lagenorhynchus obscurus (Gray, 1828). Dusky dolphin

- L. o. fitzroyi (Waterhouse, 1838). Fitzroy's dolphin
- L. o. obscurus (Gray, 1828). African dusky dolphin
- L. o. posidonia (Philippi, 1893). Peruvian/Chilean dusky dolphin

Lissodelphis borealis (Peale, 1849). Northern right-whale dolphin
Lissodelphis peronii (Lacépède, 1804). Southern right-whale dolphin
Orcaella brevirostris (Owen in Gray, 1866). Irrawaddy dolphin, pesut
Orcaella heinsohni Beasley, Robertson and Arnold, 2005. Australian snubfin dolphin
Orcinus orca (Linnaeus, 1758). Killer whale, orca

- O. o. ater (Cope in Scammon, 1869). Resident killer whale
- O. o. orca (Linnaeus, 1758). Common killer whale
- O. o. rectipinnus (Cope in Scammon, 1869). Bigg's killer whale

Peponocephala electra (Gray, 1846). Melon-headed whale
Pseudorca crassidens (Owen, 1846). False killer whale
Sousa teuszii (Kükenthal, 1892). Atlantic humpback dolphin
Sousa chinensis (Osbeck, 1765). Indo-Pacific humpback dolphin

- S. c. chinensis (Osbeck, 1765). Chinese humpback dolphin
- S. c. taiwanensis Wang, Yang and Hung, 2015. Taiwanese humpback dolphin, Taiwanese white dolphin

Sousa plumbea (G. Cuvier, 1829). Indian Ocean humpback dolphin
Sousa sahulensis Jefferson and Rosenbaum, 2014. Australian humpback dolphin

Sotalia fluviatilis (Gervais and Deville in Gervais, 1853). Tucuxi Sotalia guianensis (P.J. Van Beneden, 1864). Guiana dolphin, costero 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 clymene (Gray, 1850). Clymene dolphin

 Stenella coeruleoalba (Meyen, 1833). Striped dolphin

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

 Stenella longirostris (Gray, 1828). Spinner dolphin
 - S. I. centroamericana Perrin, 1990. Central American spinner dolphin
 - S. I. longirostris (Gray, 1828). Gray's spinner dolphin
 - S. I. orientalis Perrin, 1990. Eastern spinner dolphin
- S. I. roseiventris (Wagner, 1846). Dwarf spinner dolphin

 Steno bredanensis (Lesson, 1828). Rough-toothed dolphin

 Tursiops aduncus (Ehrenberg, 1832). Indo-Pacific bottlenose dolphin

 Tursiops erebennus (Cope, 1865). Tamanend's bottlenose dolphin

 Tursiops truncatus (Montagu, 1821). Common bottlenose dolphin
 - T. t. gephyreus Lahille, 1908. Lahille's bottlenose dolphin
 - T. t. nuuanu Andrews, 1911. Eastern Tropical Pacific bottlenose dolphin
 - T. t. ponticus Barabash-Nikiforov, 1940. Black Sea bottlenose dolphin
 - T. t. truncatus (Montagu, 1821). Common bottlenose dolphin

Family Phocoenidae (porpoises, 7 species)

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
 Neophocaena phocaenoides (G. Cuvier, 1829). Indo-Pacific finless porpoise
 Phocoena dioptrica Lahille, 1912. Spectacled porpoise
 Phocoena phocoena (Linnaeus, 1758). Harbor porpoise
 - P. p. phocoena (Linnaeus, 1758). Atlantic harbor porpoise
 - P. p. relicta Abel, 1905. Black Sea harbor porpoise
 - P. p. vomerina (Gill, 1865). Pacific harbor porpoise

Phocoena sinus Norris and McFarland, 1958. Vaquita

Phocoena spinipinnis Burmeister, 1865. Burmeister's porpoise

Phocoenoides dalli (True, 1885). Dall's 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, of which 1 extinct)

Family Trichechidae

Trichechus inunguis (Natterer, 1883). Amazonian manatee
Trichechus manatus Linnaeus, 1758. West Indian manatee

- T. m. latirostris (Harlan, 1824). Florida manatee
- T. m. manatus Linnaeus, 1758. Antillean manatee

Trichechus senegalensis Link, 1795. African manatee

Family Dugongidae

Dugong dugon (Müller, 1776). Dugong

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

Narrative on Taxonomy

Based on molecular and morphological data, the cetaceans fall firmly within the artiodactyl clade with hippopotamuses being the sister taxon to cetaceans (e.g., Geisler and Uhen, 2005, Spaulding et al. 2009) and Montgelard et al. (1997) proposed the taxon Cetartiodactyla, pooling even-toed terrestrial mammals and all cetaceans into a single Order. The Taxonomy Committee followed this convention, with some reservation, when it created the first list of marine mammal species and subspecies in 2009, and the term Cetartiodactyla has been widely used. Recently, Prothero et al. (2022) make a strong argument that the term Cetartiodactyla misrepresents taxonomic relationships as it implies cetaceans and artiodactyls are of equal rank, when, in fact, cetaceans are clearly nested within the Artiodactyla. We agree with Prothero et al. (2022) and revert to the use of Order Artiodactyla to include all cetacean taxa (living and extinct), and provisionally rank Cetacea as an Infraorder. While this change will likely cause some initial confusion, it more accurately reflects the placement of cetaceans in the taxonomic hierarchy. We continue to maintain Mysticeti and Odontoceti provisionally 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)).²

Below the rank of order, we list only families, genera, species and subspecies, omitting superfamilies, subfamilies and taxa of other ranks. We include the un-ranked taxon Pinnipedia. Morphological (Wyss and Flynn, 1993; Berta and Wyss, 1994) and molecular (Higdon et al. 2007; Fulton and Strobeck, 2010, Nyakatura and Bininda-Emonds 2012) analyses provide strong support for pinniped monophyly and hence inclusion of Pinnipedia as an un-ranked taxonomic unit. However, there is continued debate on this subject as Koretsky et al. (2016) argued the case for a diphyletic origin for pinnipeds.

Polar Bears and Otters

Derocher and Stirling (1998) argued convincingly that patterns of variation in the polar bear do not support recognition of subspecies.

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.

Based on the review provided by Patterson et al. (2021), the genus of the sea mink (extinct) is now recognized as *Neogale* Gray, 1865.

Pinnipeds

For pinnipeds, we previously followed Berta and Churchill (2012). To avoid issues of paraphyly, these authors proposed that, based on molecular and morphological data, 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. gazella*, *A. philippii* and *A. tropicalis*) to *Arctophoca* Peters, 1866. However, Nyakatura and Bininda-Emonds (2012) compiled a new supertree of the Carnivora and concluded that this usage of *Arctophoca* may be premature because of remaining uncertainty about phylogenetic relationships, and we return provisionally to use of *Arctocephalus* for all the southern fur seals. More recently, evidence presented in Lopes et al. (2021), based on genomic data and different phylogenetic approaches, support the monophyly of the genus *Arctocephalus*.

Three subspecies of *A. australis* were proposed by Berta and Churchill (2012) and formerly listed here: *A. a. australis*, *A. a. forsteri* and *A. a. gracilis*. However, Oliveira and Brownell (2014) synonymized *A. a. gracilis* with *A. a. australis*. The super-tree analysis by Nyakatura and Bininda-Emonds (2012) accords with the phylogenetic analysis of Higdon et al. (2007), suggesting that the New Zealand fur seal should be recognized as a full species, *A. forsteri*. Previously, two subspecies of *A. philippii* (*A. p. philippii* and *A. p. townsendi*) were recognized, although they were thought to be biologically distinct, small sample sizes and a small number of genes sampled were at the time concerns. Recently, Lopes et al. (2021) used high-coverage genome-wide sequencing for 14 taxa in the Otariidae to elucidate the phylogeny of the family. A divergence time of ~0.6 Ma was estimated between *townsendi* and *philippii*, which is similar to or older than the divergence time of ~0.5 Ma estimated between two well-recognized species, *A. australis* and *A. galapaqoensis*. The phylogenomic findings together with their geographic isolation led the authors to

suggest that Juan Fernandez fur seal and Guadalupe fur seal be recognized as full species, a suggestion followed here.

Berta and Churchill (2012) suggested fur seals in Peru be recognized as a distinct subspecies based on results from Oliveira et al. (2008). Lopes et al. (2023) expanded genetic analysis on fur seals in South America and concluded that fur seals in Peru are of hybrid origin and deserve species-level recognition. However, further information on the degree of ongoing gene flow between fur seals in Peru and the two neighboring species would be helpful for a robust examination of the taxonomic status of these seals. Further, and importantly, a formal taxonomic description is absent from both publications. They therefore remain on the List of Proposed Un-named Species and Subspecies.

Two subspecies of *Eumetopias* are supported largely on molecular genetic data, which is also the case for recognition of California, Japanese and Galapagos sea lions as separate species.

Following a proposal by Gardner and Robbins (1999), the International Code of Zoological Nomenclature (ICZN) placed the name *O. byronia* on its Official List of Specific Names in Zoology. Brunner (2004) also advised use of *Otaria byronia* (Blainville, 1820) over *O. flavescens* (Shaw, 1800) and Webber (2014) provides a summary of why *O. flavescens* is a *nomen dubium* and should not be used under the provisions of the International Code of Zoological Nomenclature (ICZN 1999). However, many South American scientists continue to use *O. flavescens*.

Lindqvist et al. (2009) concluded that a purported third subspecies of the walrus *Odobenus rosmarus laptevi* is not warranted.

The long-lost holotype skull of the gray seal *Halichoerus grypus* has been rediscovered and shown by DNA analysis to hail from the Baltic rather than from Greenland as previously thought (Olsen et al. 2016). Consequently, the nominate subspecies *H. g. grypus* is the Baltic gray seal, *H. g. macrorhynchus* falls into synonymy, and the authors have resurrected *H. g. atlantica* to apply to the Atlantic subspecies.

Recent molecular 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 supportable; *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 richardii*. 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. Scheel et al. (2014) found the Caribbean and Hawaiian monk seals to be more closely related molecularly and morphologically to each other than either is to the Mediterranean monk seal and created the new genus *Neomonachus* for the two species.

Baleen Whales

In the mysticete cetaceans, molecular 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, 2001).³

New fossil evidence suggests that *Caperea marginata* may be a member of the family Cetotheriidae (Fordyce and Marx 2012; Marx and Fordyce 2015; Marx and Fordyce 2016). Neobalaenidae is retained here provisionally.

Jackson et al. (2014) have recognized three subspecies of the humpback whale based on mitochondrial and nuclear DNA relationships and distribution: *Megaptera novaeangliae kuzira* (North Pacific), *M. n. novaeangliae* (North Atlantic) and *M. n. australis* (Southern Hemisphere).

There have been a variety of studies (McDonald et al. 2006, Branch et al. 2007, LeDuc et al. 2007, 2017, Torres-Florez et al. 2014, Buchan et al. 2018, Leslie et al. 2021) that have provided evidence suggesting

blue whales in the eastern South Pacific differ from blue whales elsewhere and may represent a separate subspecies but none have provided a formal subspecies description supplying the information required under the International Code of Zoological Nomenclature for proposing new species or subspecies. Khalif (2020) summarizes information available on the population in the eastern South Pacific, designates an identifiable specimen and type location, and provides a subspecies name. However, the subspecies description is incomplete and, importantly, is diagnosed by bibliographic references alone. This is minimally sufficient to make the name available (see Code, Art. 13.1.2), but no attempt seems to have been made to collect morphological or genetic evidence, despite the ready availability of a skull and nearly complete skeleton. This is poor practice and contrary to Recommendation 13A. We therefore regard the name B. musculus chilensis a nomen dubium and do not recognize it until these faults are remedied. Khalif (2021) also describes a new blue whale subspecies B. musculus arabica from the Arabian Sea. This work fails to acknowledge that more than one type of blue whale exists in northern Indian Ocean making it impossible to link the new blue whale song described by Cerchio et al. (2020) from this region to the blue whale skeleton from Kuwait. The subspecies is diagnosed only by bibliographic references to characterizations of its song and acoustics alone does not constitute sufficient evidence for taxonomic separation. We therefore regard the name B. musculus arabica a nomen dubium and do not recognize it.

The Bryde's-like whales in the Gulf of Mexico have now been described as a new species of medium-sized balaenopterid, *Balaenoptera ricei*, by Rosel et al. (2021), with the common name Rice's whale. The remaining Bryde's whales are provisionally considered to comprise a single species, *Balaenoptera edeni*, following the usage of Kato and Perrin (2009) and Kershaw et al. (2013). However, Luksenburg et al. (2015) and Wada et al. (2003) accepted two species. Some workers recognize *B. edeni* as including only the small-form coastal Bryde's whales of the western Pacific and Indian Oceans, using *B. brydei* for the globally distributed and larger, more oceanic form (Sasaki et al. 2006). Kato and Perrin (2009) and Kershaw et al. (2013) considered these more likely to be distinct at the subspecific level (although arguably at the species level), and they are included here provisionally as such. *Balaenoptera omurai* was described by Wada et al. (2003). It was previously confounded with the Bryde's whale and has been confirmed as having a separate and ancient lineage (Sasaki et al. 2006).

To further resolve the taxonomy and systematics of all the medium-sized baleen whales (*B. ricei*, *B. edeni edeni*, *B. e. brydei*, and including *B. borealis*) it is critical that a neotype be designated for *B. brydei* and that genetic data be obtained from that designated neotype. In addition, genetic data should also be obtained from the holotype of *B. edeni* to validate the identity of museum specimens as well as samples collected from stranded and biopsied individuals. Finally, a comprehensive phylogenetic analysis using nuclear markers of all taxa in this complex with sufficient samples and range-wide geographic coverage is also needed.

Clarke (2004) proposed recognition of a pygmy form of the fin whale as a subspecies, based on distribution, size and coloration. He resurrected the synonym *patachonica* Burmeister, 1865 to apply to the subspecies: *B. physalus patachonica*. However, Pérez-Alvarez et al. (2021) conducted a phylogenetic analysis of fin whales and found no support for differentiation among Southern Hemisphere fin whales, recommending that the name *patachonica* Burmeister, 1865 be synonymized with *B. physalus quoyi* and the latter refer to all Southern Hemisphere fin whales. Archer et al. (2019) provided genetic evidence at both mitochondrial and nuclear genetic markers that fin whales in the North Pacific are significantly differentiated from those in the North Atlantic and the Southern Hemisphere. They proposed recognition of the North Pacific fin whale as a separate subspecies, *B. physalus velifera*.

Toothed Whales

In the odontocetes, *Mesoplodon traversii* (spade-toothed whale) was recognized as the senior synonym for *M. bahamondi* (Bahamonde's beaked whale) (van Helden et al. 2002). The first complete specimen was recently described from a stranding on the North Island of New Zealand (Thompson et al. 2012). *Mesoplodon perrini* was described by Dalebout et al. (2002). Dalebout et al. (2014) resurrected *Mesoplodon hotaula* Deraniyagala, 1963, a species closely similar to *M. ginkgodens*. Using morphological and genomic evidence, Carrol et al. (2021) split *M. mirus*, identifying those in the Southern Hemisphere as *M. eueu*.

Yamada et al. (2019) provided morphological evidence, supported by genetic data (Morin et al. 2018, Kitamura et al. 2013), recognizing a new species of *Berardius* in the North Pacific, *Berardius minimus*.

The South Asian river dolphins (genus *Platanista*) have a long history of taxonomic revision, oscillating between being recognized as two species, *Platanista gangetica* (Lebeck, 1801) and *P. minor* Owen, 1853, and two subspecies of *Platanista gangetica*. The Taxonomy Committee, when it first created the taxonomy list, followed Rice's (1998) treatment of *Platanista* and recognized a single species with two subspecies, P. q. qangetica and P. q. minor. Recently, Braulik et al. (2014, 2021) have performed a morphological analysis of the two taxa, coupled with an analysis of mitochondrial DNA and recommended species-level status for the two subspecies. Individually, the support provided from these two lines of evidence was relatively weak: a single, but significant, diagnostic difference in the frontal bones of the skull, and five fixed differences and no shared mtDNA haplotypes, but a level of genetic divergence that does not exceed the species threshold identified by Taylor et al. (2017a). The combined evidence for diagnosability in the morphological and genetic lines of evidence, the significant difference in growth curves between the two taxa, and their estimated divergence time of ~0.55 million years, led the majority of committee members to accept the proposed elevation to species. However, the unavailability of samples from the upper reaches of the rivers where the two taxa may have last been in contact impedes a complete understanding of the evolutionary history of the two taxa and this posed some concern for a few members when evaluating the proposal to elevate the subspecies to species.

We recognize one species of *Inia* with two subspecies: *I. geoffrensis geoffrensis* (Blainville, 1817) and *I. g.* boliviensis (d' Orbigny, 1834). I. q. boliviensis is found in the Bolivian Amazon basin and overlaps with other Inia in all morphological characters (da Silva, 1994; Ruiz-García et al. 2006). However, molecular genetic evidence from mitochondrial DNA (mtDNA) and nuclear introns (Banguera-Hinestroza et al. 2002; Ruiz-García et al. 2008) suggested these two subspecies are on separate evolutionary trajectories and deserve recognition as phylogenetic species. Hollatz et al. (2011) estimated that I. q. boliviensis has been reproductively isolated for 3.2 million years. However, these studies used geographically disparate samples, with a significant gap in sampling of *Inia* habitat between the Teotonio Rapids, hypothesized to be the barrier to gene flow for I. q. boliviensis, and the samples used to represent I. q. qeoffrensis. Gravena et al. (2014), with much better sampling of the Madeira River system, including samples from immediately above and below the Teotonio Rapids, found that in fact these rapids did not appear to obstruct gene flow on an evolutionary scale. Thus, the conclusion that the Bolivian *Inia* above the Teotonio Rapids possessed unique mtDNA (a major line of evidence for recognizing species-level distinctness of I. boliviensis) was not supported by more extensive sampling (i.e., the initial appearance of separation was an artifact of poor sampling). Therefore, only the subspecies *Inia geoffrensis boliviensis* is retained, although given the newer evidence for a lack of isolation of the dolphins above the Teotonio Rapids (Gravena et al. 2014) and the lack of robust sampling, the strength for subspecies status is weakened. Another new species, Inia araquaiaensis, was described by Hrbek et al. (2014) from the Araguaia River, which is not connected to the Amazon and Siciliano et al. (2016) extended the known range of I. araquaiaensis further north to Marajó Bay, Brazil, through mtDNA analysis of three stranded specimens. Hrbek et al. (2014) only examined samples from two extremes of the distribution of *Inia*, so it is unclear if the molecular differences observed represented real species-level separation or were due to sampling from two locations separated by a large distance. Diagnostic osteological differences were also reported (Hrbek et al. 2014). However, because this study was based on the examination of very few specimens (only 2 for the new species and only 9 for I. geoffrensis) and did not account for effects of sexual dimorphism within the species, the authors' conclusions are not convincing. In light of these arguments, the species here remains unlisted provisionally. Hrbek et al. (2014) did not recognize I. q. humboldtiana, Melo et al. (2021) examined acoustic evidence and found some suggestion of vocal differences, but vocalizations are known to be plastic in odontocetes. In addition, there was significant overlap in many of the measured parameters and classification based on the acoustic data exhibited an error rate near 30%, which is quite high for taxonomic decisions. Most recently, Cañizales (2020) and Emin-Lima et al. (2022) provide valuable new morphological data to evaluate aspects of the taxonomy within the genus *Inia*. Cañizales (2020) examined 20 skulls from Venezuela identified as representing *I*. a. humboldtiana and provided some evidence for differences between these samples and those of I. q. qeoffrensis, but differences were slight, with overlap in several analyses. Emin-Lima et al. (2022) also focused on skull morphology and examined 46 skulls from distant locales within the Amazon basin

and identified three morphological groups that largely corresponded with *I. g. geoffrensis*, *I. g. humboldtiana*, and *I. g. boliviensis*. They found no differences between *I. g. geoffrensis* and *I. araguaiaensis*. Resolution of the taxonomic status of all *Inia* forms requires an integrated approach using multiple lines of evidence, improved sampling throughout the distribution, and a thorough review of all the evidence (morphological, genetic, ecological, etc.). In addition, proposed changes to taxonomy will require a detailed taxonomic treatment, must provide diagnoses, and review relevant nomenclature. Some examples of recent species or subspecies descriptions and redescriptions providing the necessary taxonomic treatment can be seen at: Yamada et al. (2019), Braulik et al. (2021), Rosel et al. (2021), Costa et al. (2023).

We list the baiji *Lipotes vexillifer* as "possibly extinct" in conformance with the IUCN Red List, although extinction seems a certainty.

Previous editions of this list recognized two globally distributed species of common dolphins: the shortbeaked common dolphin D. delphis and the long-beaked common dolphin D. capensis as proposed by Heyning and Perrin (1994). However, evidence that D. capensis thus considered is a polyphyletic taxon has been accumulating for some time. The long-beaked condition is apparently a convergent character state induced by regional ecology. In some regions, long-beaked common dolphins are genetically more closely related to short-beaked common dolphins than to long-beaked common dolphins in other regions (e.g., see Natoli et al. 2006). Cunha et al. (2015) summarized the relevant data and analyses, along with additional molecular data and analysis, and recommended that Delphinus capensis not be further used as proposed by Heyning and Perrin (1994). That recommendation is followed here. Cunha et al. (2015) noted that because the sympatric/parapatric long-beaked and short-beaked common dolphins off California in the eastern North Pacific (ENP) appear not to interbreed, perhaps the ENP long-beaked common dolphins might be recognized as a separate species D. bairdii Dall,1873 (as advocated by Banks and Brownell (1969) based on the long-beaked condition). However, the molecular analysis for the ENP (Rosel et al. 1994) did not include common dolphins from the contiguous regions to the south in the eastern tropical and eastern South Pacific. Jefferson et al. (2024) reviewed the taxonomic status of the longbeaked and short-beaked common dolphin forms in the eastern Pacific using genetic data based on mtDNA (fragments of the control region and cytochrome b) and cranial morphometrics. Samples (classified a priori whenever possible to short- or long-beaked based on photographic records or geographic location) were collected from eastern North Pacific, Gulf of California, eastern tropical Pacific and eastern South Pacific. Additional information on external morphology, color pattern and life history were also obtained through a literature review. Diagnosability based on skull morphometrics was obtained for both forms in the eastern Pacific, whereas mtDNA data separated both forms with high level of differentiation but there was evidence for shared mitochondrial haplotypes. Based on all the evidence presented, the authors suggested full species status for both forms in the eastern Pacific, with D. bairdii found along the eastern Pacific, but with a distributional gap in the eastern tropical Pacific. While a majority of committee members believe there are evident distinctions between both long-beaked and short-beaked forms in the eastern North Pacific as highlighted by Jefferson et al. (2024), a 2/3 majority of voting members was not reached to elevate them to full species. Primary concerns to the changes focused on the lack of reciprocal monophyly in mitochondrial DNA data, and a lack of nuclear DNA evidence for separation. It was noted that what nuclear data are available (Kingston et al. 2009) did not separate the two forms. Nuclear DNA evidence is essential to better understand male-mediated gene flow, especially when considering the convergent character of the long-beaked in *Delphinus*. Further study focusing on nuclear DNA is needed to better solve remaining uncertainties in some relationships among short- and long-beaked common dolphins within the Pacific Ocean and on a more global scale. Therefore, pending a more complete global review and revision of the common dolphins, the long-beaked ENP form is still considered here provisionally as a subspecies D. delphis bairdii following the usage of Hershkovitz (1966)⁴. Delphinus capensis Gray, 1828 from South Africa remains in the synonymy of Delphinus delphis Linnaeus, 1758. The long-beaked common dolphin of the Indian Ocean is retained as a subspecies D. delphis tropicalis. Recognition of the Black Sea common dolphin, D. d. ponticus Barabash, 1935, is well-recognized by molecular genetic data (Natoli et al. 2008).

The genus *Lagenorhynchus* is widely considered a polyphyletic taxon containing morphologically convergent species (Cipriano 1997, LeDuc et al. 1999, McGowen 2011, Banguera-Hinestroza et al. 2014,

Vollmer et al. 2019). Vollmer et al. (2019) provided a detailed review of the relationships among members of the genus Lagenorhynchus and their relationship to Cephalorhynchus and Lissodelphis. Results continue to support the polyphyletic nature of the genus *Lagenorhynchus* and multiple morphological and genetic analyses indicate that L. albirostris and L. acutus are evolutionarily distinct from the other members of all three genera. Vollmer et al. (2019) recommended revision of the genus sensu Leduc et al. (1999), placing L. obscurus, L. obliquidens, L. australis and L. cruciger into the genus Sagmatias, L. acutus into the genus Leucopleurus and leaving L. albirostris in a monotypic genus Lagenorhynchus. While a majority of committee members supported the changes proposed by Vollmer et al. (2019), a 2/3 majority of voting members was not reached. Primary objection to the changes focused on remaining uncertainties in some relationships and the potential confusion that may be created if the proposed changes require further revision in the near future. At issue are 1) the conflicting support among data sets for a sister-taxa relationship between L. albirostris and L. acutus (which would obviate the need for Leucopleurus), and 2) evidence that australis and cruciger should be included in Cephalorhynchus (which would necessitate a new genus for obliquidens and obscurus, as australis is the type species for the genus Sagmatias). Therefore, the taxonomy list retains all species in Lagenorhynchus, recognizing that the current taxonomy does not reflect the evolutionary distinctiveness of L. albirostris and L. acutus. Next steps in unraveling the taxonomy of these dolphins will need to involve robust datasets that include all Lagenorhynchus and Cephalorhynchus species. Harlin-Cognato (2010) recognized L. obscurus posidonia (Peru/Chile).

The Irrawaddy dolphin was split into *O. brevirostris* and *O. heinsohni*, the Australian snubfin dolphin (Beasley et al. 2005).

Based on genetic, morphological and ecological data, Morin et al. (2024) provided a taxonomic revision for two ecotypes of Orcinus orca in the eastern North Pacific: Bigg's killer whale (also known as transient ecotype) and the resident killer whale. The level of differentiation observed led the authors to recommend their recognition as distinct species: O. rectipinnus (Bigg's killer whale) and O. ater (resident killer whale). Although the majority of the voting members recognize the high level of differentiation between the two ecotypes in all the evidence presented in Morin et al. (2024), there was uncertainty whether this diagnosability represented species- or subspecies-level designation. Some points argued against species designation at the time included: 1) the nesting of both clades within the wider O. orca clade in the mitogenome phylogeny; 2) presence of episodic gene flow among the ecotypes, which needs further investigation; and 3) the need to conduct a more comprehensive analysis on a global context to better understand how distinct these two ecotypes are from other Orcinus orca clades, including those found at latitudes below ~34° N off the coasts of California and Mexico and the more northerly Bigg's and offshore ecotypes, which were not evaluated in the paper. Previously, the Committee followed the recognition in Krahn et al. (2004) of two un-named subspecies of killer whales for the eastern North Pacific, which were listed in previous version of the List of Proposed Un-named Species and Subspecies. These two un-named subspecies correspond to the resident and Bigg's/transient ecotypes, respectively. Therefore, pending a more complete global review and revision of the killer whales, the two ecotypes are considered here provisionally as distinct subspecies of Orcinus orca and named following Morin et al. (2024): O. orca ater (resident killer whale) and O. orca rectipinnus (Bigg's killer whale), with O. orca orca (common killer whale) as the nominate subspecies.5

Based on a combined analysis of molecular genetic and morphological data, Mendez et al. (2013) proposed recognizing four species of *Sousa* (the humpback dolphins): the previously here-listed *S. teuszii* and *S. chinensis* plus *S. plumbea* and a new un-named species from the waters of northern Australia that was originally proposed by Frère et al. (2008, 2011) based on molecular data. A drawback of the phylogenetic analyses by Mendez et al. (2013) is that there was only one sample from the area of supposed sympatry of *S. plumbea* and *S. chinensis* and very low coverage of the Indo-Malay region (n=5). The two species are listed here provisionally, pending the outcome of further analysis including more samples from those areas. The new species from Australia has been given the name *Sousa sahulensis* (Jefferson and Rosenbaum 2014). The new subspecies *Sousa chinensis taiwanensis* was described by Wang et al. (2015).

It has been noted repeatedly, most recently by Perrin et al. (2013), that the delphinine genera *Stenella* and *Tursiops* are paraphyletic and that at present there is no molecular or morphological basis for satisfactory resolution of phylogenetic relationships in the subfamily. A possible solution would be to return all the species in *Tursiops*, *Sousa*, and *Stenella* to *Delphinus*, the genus in which they were first described, and place *Lagenodelphis hosei* there as well. However, considering that this would obscure the clear close relationship of the present *Sousa* and *Tursiops* species, the status quo is maintained here provisionally, pending the outcome of more definitive morphological and molecular studies. Eventually a more natural classification will emerge.

Perrin et al. (1999) established the subspecies Stenella longirostris roseiventris.

The Burrunan dolphin *Tursiops australis*, described by Charlton-Robb et al. (2011), is not included here; its basis is questionable because of several potential problems: 1) the specimens were compared morphologically only with bottlenose dolphins from Australia; 2) despite the small sample sizes, the series overlapped in all metric characters and separation was possible only with multivariate analysis (which commonly resolves geographical forms within a species, e.g., see Perrin et al. (1999) and Perrin et al. (2011) for *Stenella longirostris* and *Tursiops truncatus*, respectively); 3) comparisons of external morphology and non-metric characters were made only with *T. truncatus*, to the exclusion of *T. aduncus*; and 4) support for important nodes in molecular trees suggesting phylogenetic separation was low. A rigorous re-evaluation of the relevant data and arguments is needed. Recently, Jedensjö et al. (2020) conducted a broader morphological comparison of *Tursiops* skulls from around Australia, including skulls of both *T. truncatus* and *T. aduncus* and their respective holotypes, and did not find support for the Burrunan bottlenose dolphin, *T. australis*, proposed by Charlton-Robb et al. (2011). Skulls previously classified as *T. australis* all fell well within the *T. truncatus* group. In contrast, Moura et al. (2020) placed *T. australis* within a *T. aduncus* clade based on a nuclear genetic phylogeny.

Based on morphological and genetic analyses, Costa et al. (2022) described a new species of *Tursiops* from the western North Atlantic, separating the long-recognized coastal and offshore morphotypes from the western North Atlantic into two species. The offshore morphotype remains *Tursiops truncatus*, while the coastal morphotype found in nearshore coastal waters as well as the bays and estuaries along the U.S. east coast was split out as the new species *T. erebennus* (Cope, 1865). Additional work is needed to identify the full geographic distribution of *T. erebennus* in the Gulf of Mexico and Caribbean.

Costa et al. (2023) evaluated morphological variation among three distinct morphotypes of *T. truncatus* in the eastern Pacific, the southern California/Mexico coastal form, the northern temperate offshore form, and an eastern tropical Pacific (ETP) offshore form. Cranial morphology and body size separate the eastern tropical Pacific (ETP) offshore form from other Pacific *Tursiops*. The authors resurrected the name *T. t. nuuanu* Andrews, 1911 for this subspecies. Another subspecies is recognized for the Black Sea, the Black Sea bottlenose dolphin, *T. t. ponticus* Barabash-Nikiforov, 1940, which is now well-supported by molecular genetic data (Viaud-Martinez et al. 2008).

Costa et al. (2016), Wickert et al. (2016), and Hohl et al. (2020) have examined morphological characteristics of *Tursiops* specimens from the western South Atlantic. Costa et. al. (2016) recommended subspecies status for the larger coastal form found between southern Brazil and northern Argentina, while both Wickert et al. (2016) and Hohl et al. (2020) have recommended species status. Costa et al. (2021) paired morphological and genetic data from samples collected from both forms in southern Brazil and found strong congruence between morphological and mitochondrial and nuclear divergence; genetic differentiation was also observed in Oliveira et al. (2019). In both genetic studies, however, evidence for shared mitochondrial haplotypes and possibly shared nuclear ancestry was found. We provisionally recognize the subspecies *T. t. gephyreus* Lahille 1908 (Lahille's bottlenose dolphin) for this larger coastal form. Improved geographic sampling and improved objectivity in hypothesis testing is needed to fully resolve the taxonomy of *Tursiops* in this region. In particular, further work is needed to better identify the distribution of the *gephyreus* form and determine its phylogenetic relationship to coastal and offshore *Tursiops* in the western North Atlantic and throughout Caribbean waters. Wang et al. (2021)

showed *gephyreus* to be the correct trivial name for this taxon (as long as it continues to be recognized as a subspecies or species).

Kinze (2018) proposed that the scientific name for *Tursiops truncatus* should be *Tursiops tursio* as *tursio* has priority over *truncatus*. The committee noted that resurrecting the name *T. tursio* for the bottlenose dolphin would upset long-standing usage and would cause considerable confusion in national and international treaties, agreements, etc. Therefore, the name *T. truncatus* should continue to be used for the common bottlenose dolphin to maintain stability.

Wang et al. (2008) and Jefferson and Wang (2011) established *Neophocaena asiaeorientalis* as a full species distinct from the *N. phocaenoides*, with two subspecies. Zhou et al. (2018) examined genomic DNA sequence data and concluded that there was significant genetic differentiation between the two subspecies of *N. asiaeorientalis*, including evidence for genetic adaptation to the freshwater environment of the Yangtze River. The authors proposed the two subspecies of *N. asiaeorientalis* be elevated to species-level, the Yangtze finless porpoise, *N. asiaeorientalis* Pilleri and Gihr 1927, and the East Asian finless porpoise, *N. sunameri* Pilleri and Gihr 1972. However, there were no samples in this study from near the mouth of the Yangtze River where the marine and river subspecies could possibly be sympatric and where genetic interchange could occur. While the results of the study are consistent with recently diverged taxa, the lack of samples in the potential area of sympatry make it difficult to rule out an isolation by distance effect.

Viaud-Martinez et al. (2007) concluded based on morphological and molecular genetic evidence that *Phocoena phocoena relicta* is a distinct subspecies.

Manatees and Dugongs

In the Sirenia, subspecies of the dugong are not currently recognized (Domning, 1996; see http://sirendom.org/biblio for update to 1996 publication). However, no in-depth study has been undertaken to address the issue of subspecies.

Footnotes (dissenting opinions):

- 1 The full authority is: Carroll, McGowen, McCarthy, Marx, Aguilar, Dalebout, Dreyer, Gaggiotti, Hansen, van Helden, Onoufriou, Baird, Baker, Berrow, Cholewiak, Claridge, Constantine, Davison, Eira, Fordyce, Gatesy, Greg Hofmeyr, Martín, Mead, Mignucci-Giannoni, Morin, Reyes, Rogan, Rosso, Silva, Springer, Steel and Tange Olsen, 2021.
- 2 Use of Order Cetartiodactyla (artiodactyls and cetaceans) 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, despite rendering the retained Order Artiodactyla paraphyletic.
- 3 (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.]
- 4 (from T. Jefferson) The List should retain the eastern North Pacific (ENP) long-beaked common dolphin as a separate species of *Delphinus*, *D. bairdii* (as in Banks and Brownell 1969). The evidence for species status is published and is considerable, especially the molecular differences. Notwithstanding issues related to poor sampling from areas of potential sympatry further south, the balance of the evidence seems to support a lack of interbreeding throughout a very large region of overlap, along with clear ecological differences (see Jefferson et al. 2024). In this view, the error by Heyning and Perrin (1994) was not in splitting out the ENP long-beaked common dolphins as a distinct species, but in

assuming that the name *D. capensis* applied there and that all long-beaked populations of *Delphinus* belonged to *D. capensis*.

5 One member (RLB) does not agree with the practice of the Committee to make subspecies out of newly described species if they are not accepted by 2/3 of the group. These species were properly described should stand as new species until they are reviewed by the next reviser of the species or species within these genera (*Orcinus* and *Delphinus*). The Committee has no official capacity to create new taxa as they have done now with *Orcinus* and *Delphinus*.

References

Agnarsson, I. and L. J. May-Collado. 2008. The phylogeny of Cetartiodactyla: The importance of dense taxon sampling, missing data, and the remarkable promise of cytochrome *b* to provide reliable species-level phylogenies. Molecular Phylogenetics and Evolution 48:964—985.

Archer F.I., R. L. Brownell Jr, B. L. Hancock-Hanser, P. A. Morin, K. M. Robertson, K. K. Sherman, J. Calambokidis, J. Urbán, P. E. Rosel, S. A. Mizroch, S. Panigada, B. L. Taylor. 2019. Subspecies of fin whales (*Balaenoptera physalus* Linnaeus, 1758): Taxonomic implications of genetics. Journal of Mammalogy 100:1653–1670.

Baker, R. J., L. C. Bradley, R. D. Bradley, J. W. Dragoo, M. D., R. S. Hoffman, C. A Jones, F. Reid, D. W. Rice and C. Jones. 2003. Revised checklist of North American mammals north of Mexico, 2003. Museum of Texas Tech University Occasional Papers 229:1—24.

Banguera-Hinestroza, E., M. Cárdenas, M. Ruiz-García, M. Marmontel, E. Gaitán, R. Vázquez and F. García-Vallejo. 2002. Molecular identification of evolutionarily significant units in the Amazon river dolphin *Inia* sp. (Cetacea: Iniidae). Journal of Heredity 93:312—322.

Banguera-Hinestroza, E., A. Hayano, E. Crespo and A. R. Hoelzel. 2014. Delphinid systematics and biogeography with a focus on the current genus *Lagenorhynchus*: multiple pathways for antitropical and trans-oceanic radiation. Molecular Phylogenetics and Evolution, 80:217—230.

Banks, R. C. and R. L. Brownell. 1969. Taxonomy of the common dolphins of the eastern Pacific Ocean. Journal of Mammalogy 50:262—271.

Beasley, I., K. M. Robertson and P. Arnold. 2005. Description of a new dolphin, the Australian snubfin dolphin *Orcaella heinsohni* sp. n. (Cetacea: Delphinidae). Marine Mammal Science 21:365—400.

Berta, A. 1994. New specimens of the pinnipediform *Pteronarctos* from the Miocene of Oregon. Smithsonian Contributions to Paleobiology no. 78:1-33.

Berta, A. and M. Churchill. 2012. Pinniped taxonomy: Review of currently recognized species and subspecies, and evidence used for their description. Mammal Review 42:207—234.

Berta, A. and A. R. Wyss. 1994. Pinniped phylogeny. Pages 33—56 in A. Berta and T. A. Deméré (eds). Contributions in Marine Mammal Paleontology Honoring Frank C. Whitmore, Jr. Proceedings of the San Diego Society of Natural History. San Diego, California, USA.

Branch, T. A., E. M. N. Abubaker S. Mkango S and D. S. Butterworth. 2007. Separating southern blue whale subspecies based on length frequencies of sexually mature females. Marine Mammal Science 23:803–833.

- Braulik, G.T., F.I. Archer, U. Khan, M. Imran, R.K. Sinha, T.A. Jefferson, C. Donovan, C. and J.A. Grave. 2021. Taxonomic revision of the South Asian River dolphins (*Platanista*): Indus and Ganges River dolphins are separate species. Marine Mammal Science 37:1022–1059.
- Braulik, G. T., R. Barnett, V. Odon, V. Islas-Villanueva, A. R. Hoelzel and J. A. Graves. 2014. One species or two? Vicariance, lineage divergence and low mtDNA diversity in geographically isolated populations of South Asia river dolphin. Journal of Mammal Evolution 22:111-120.
- Brunner, S. 2004. Fur seals and sea lions (Otariidae): Identification of species and taxonomic review. Systematics and Biodiversity 1:339—439.
- Buchan, S. J., R. Hucke-Gaete, K. M. Stafford and C. W. Clark. 2018. Occasional acoustic presence of Antarctic blue whales on a feeding ground in southern Chile. Marine Mammal Science 34:220–228.
- Cañizales, I. 2020. Morphology of the skull of *Inia geoffrensis humboldtiana* Pilleri & Gihr, 1977 (Cetacea:Iniidae): A morphometric and taxonomic analysis. Graellsia, 76(2): e115.
- Carroll, E.L., M. R. McGowen, M. L. McCarthy, F. G. Marx, N. Aguilar, M. L. Dalebout, S. Dreyer, O. E. Gaggiotti, S. S. Hansen, A. van Helden, A. B. Onoufriou, R. W. Baird, C. S. Baker, S. Berrow, D. Cholewiak, D. Claridge, R. Constantine, N. J. Davison, C. Eira, R. E. Fordyce, J. Gatesy, G. J. Greg Hofmeyr, V. Martín, J. G. Mead, A. A. Mignucci-Giannoni, P. A. Morin, C. Reyes, E. Rogan, M. Rosso, M. A. Silva, M. S. Springer, D. Steel and M. Tange Olsen. 2021. Speciation in the deep: genomics and morphology reveal a new species of beaked whale *Mesoplodon eueu*. Proceedings of the Royal Society B, 288:20211213.
- Charlton-Robb, K., L. Gershwin, R. Thompson, J. Austin, K. Owen and S. McKechnie. 2011. A new dolphin species, the Burrunan dolphin *Tursiops australis* sp. Nov., endemic to southern Australian waters. PLoS ONE 6(0) e24047. doi:10.1371/journal.pone.0024047.
- Cipriano, F. 1997. Antitropical distributions and speciation in dolphins of the genus *Lagenorhynchus*: A preliminary analysis. Pages 305—316 in A. E. Dizon, S. J. Chivers and W. F. Perrin (eds). Molecular genetics of marine mammals. Society for Marine Mammalogy Special Publication 3.
- Clarke, R. 2004. Pygmy fin whales. Marine Mammal Science 20:329-334.
- Costa, A. P. B., P. E. Rosel, F. G. Daura-Jorge and P. C. Simões-Lopes. 2016. Offshore and coastal common bottlenose dolphins of the western South Atlantic face-to-face: What the skull and the spine can tell us. Marine Mammal Science 32:1433—1457.
- Costa, A. P. B., P. F. Fruet, E. R. Secchi, F. G. Daura-Jorge, P. C. Simões-Lopes, J. C. Di Tullio and P. E. Rosel. 2021. Ecological divergence and speciation in common bottlenose dolphins in the western South Atlantic. *Journal of Evolutionary Biology* 34:16-32.
- Costa, A. P., W. Mcfee, L. A. Wilcox, F. I Archer and P. E. Rosel. 2022. The common bottlenose dolphin (*Tursiops truncatus*) ecotypes of the western North Atlantic revisited: an integrative taxonomic investigation supports the presence of distinct species. Zoological Journal of the Linnean Society, 196(4), 1608-1636.
- Costa, A. P. B., F. I. Archer, P. E. Rosel, and W. F. Perrin. 2023. *Tursiops truncatus nuuanu*, a new subspecies of the common bottlenose dolphin from the eastern tropical Pacific. Journal of Mammalian Evolution 30:213–229.
- Cunha, H. A., R. Loizaga de Castro, E. R. Secchi, E. A. Crespo, J. Lailson-Brito, A. F. Azevedo, C. Lazoski and A. M. Solé-Cava. 2015. Molecular and morphological differentiation of common dolphins (*Delphinus* sp.) in the southwestern Atlantic: Testing the two species hypothesis in sympatry. PLoS ONE 10(11) e0140251.

- Dalebout, M. L., J. G. Mead, C. S. Baker, A. N. Baker and A. L. van Helden. 2002. A new species of beaked whale *Mesoplodon perrini* sp. n. (Cetacea: Ziphiidae) discovered through phylogenetic analyses of mitochondrial DNA sequences. Marine Mammal Science 18:577—608.
- Dalebout, M. L, S. C. Baker, D. Steel, K. Thompson, K. M. Robertson, S. J. Chivers, W. F. Perrin, M. Goonatilake, R. C. Anderson, J. G. Mead, C. W. Potter, L. Thompson, D. Jupiter and T. K. Yamada. 2014. Resurrection of *Mesoplodon hotaula* Deraniyagala 1963: A new species of beaked whale in the tropical Indo-Pacific. Marine Mammal Science 30:1081—1108.
- Derocher, A. E. and I. Stirling. 1998. Geographic variation in growth of polar bears (*Ursus maritimus*). Journal of Zoology 245:65—72.
- Domning, D. 1996. Bibliography and index of the Sirenia and Desmostylia. Smithsonian Contributions to Paleobiology 80:1—611.
- Emin-Lima, R., F. A. Machado, S. Siciliano, W. Gravena, E. Aliaga-Rossel, J. de Sousa e Silva, Jr., E. Hingst-Zaher and L. R. de Oliveira, L. R. 2022. Morphological disparity in the skull of Amazon River dolphins of the genus Inia (Cetacea, Iniidae) is inconsistent with a single taxon. Journal of Mammalogy, 103(6), 1278-1289.
- Fordyce, R. E. and F. G. Marx. 2012. The pygmy right whale *Caperea marginata*: Last of the cetotheres. Proceedings of the Royal Society B 280:20122645.
- Frère, C. H., P. Hale, L. Porter, V. G. Cockcroft and M. L. Dalebout. 2008. Phylogenetic analysis of mtDNA sequences suggests revision of humpback dolphin (*Sousa* spp.) taxonomy is needed. Marine and Freshwater Research 59:259—268.
- Frère, C. H., J. Seddon, C. Palmer, L. Porter and G. J. Parra. 2011. Multiple lines of evidence for an Australasian geographic boundary in the Indo-Pacific humpback dolphin (*Sousa chinensis*): Population or species divergence? Conservation Genetics 12:1633—1638.
- Fulton, T. L. and C. Strobeck. 2010. Multiple fossil calibrations, nuclear loci and mitochondrial genomes provide new insight into biogeography and divergence timing for true seals (Phocidae, Pinnipedia). Journal of Biogeography 37:814—829.
- Gaines, C. A., M. P. Hare, S. E. Beck and H. C. Rosenbaum. 2005. Nuclear markers confirm taxonomic status and relationships among highly endangered and closely related right whale species. Proceedings of the Royal Society B 272:533—542.
- Gardner, A. L. and C. B. Robbins. 1999. Case 3058. *Arctocephalus* F. Cuvier, 1826 and *Callorhinus* Gray, 1859 (Mammalia, Pinnipedia): proposed conservation by the designation of *Phoca pusilla* Schreber,[1775] as the type species of *Arctocephalus*; and *Otaria* Péron, 1816 and *Eumetopias* Gill, 1866: proposed conservation by the designation of *Phoca leonina* Molina, 1782 as the type species of *Otaria*. Bulletin of Zoological Nomenclature 56:136—141.
- Geisler, J. H. and M. D. Uhen. 2005. Phylogenetic relationships of extinct cetartiodactyls: Results of simultaneous analyses of molecular, morphological, and stratigraphic data. Journal of Mammalian Evolution 12:145—160.
- Graur D., and D. G. Higgins. 1994. Molecular evidence for the inclusion of cetaceans within the order Artiodactyla. Molecular Biology and Evolution 11:357-364.
- Gravena, W., I.P. Farias, M.N.F. da Silva, V.M.F. da Silva and T. Hrbek. 2014. Looking into the past and the future: were the Madeira River rapids a geographical barrier to the boto (Cetacea: Iniidae)? Conservation Genetics 15:619—629.

Harlin-Cognato, A. D. 2010. The dusky dolphin's place in the delphinid family tree. Pages 1—20 in B. Würsig and M. Würsig (eds). The dusky dolphin. Master acrobat off different shores. Academic Press, Amsterdam.

van Helden, A. L., A. N. Baker, M. L. Dalebout, J. C. Reyes, K. Van Waerebeek, and C. S. Baker. 2002. Resurrection of *Mesoplodon traversii* (Gray, 1874), senior synonym of *M. bahamondi* Reyes, Van Waerebeek, Cárdenas and Yáñez, 1995 (Cetacea: Ziphiidae). Marine Mammal Science 18:609—621.

Heyning, J. E. and W. F. Perrin. 1994. Evidence for two species of common dolphins (genus *Delphinus*) from the eastern North Pacific. Contributions to Science of the Natural History Museum of Los Angeles City 442:1—35.

Hershkovitz, P. 1966. Catalog of living whales. United States National Museum Bulletin 246, 259pp.

Higdon, J. W., O. R. P. Bininda-Emonds, R. M. Beck and S. H. Ferguson. 2007. Phylogeny and divergence of the pinnipeds (Carnivora, Mammalia) assessed using a multigene dataset. BMC Evolutionary Biology 7:216.

Hohl, L. S., F. L. Sicuro, J. C. Wickert, I. B. Moreno, O. Rocha-Barbosa and A. S. Barreto. 2020. Skull morphology of bottlenose dolphins from different ocean populations with emphasis on South America. Journal of Morphology 281:564–577.

Hollatz, C., S. Torres Vilaça, R. A. F. Redondo, M. Marmontel, C. S. Baker and F. R. Santos. 2011. The Amazon River system as an ecological barrier driving genetic differentiation of the pink dolphin (*Inia geoffrensis*). Biological Journal of the Linnaen Society 102:812—827.

Hrbek, T., V. M. F. da Silva, N. Dutra, W. Gravena, A. R. Martin and I. P. Farias. 2014. A new species of river dolphin from Brazil or: How little do we know our biodiversity. PLoS ONE 9(1) e83623.

International Committee on Zoological Nomenclature [ICZN]. 1999. International Code of Zoological Nomenclature. Fourth Edition. International Trust for Zoological Nomenclature c/o The Natural History Museum – Cromwell Road, London, United Kingdom.

International Whaling Commission. 2001. Report of the Scientific Committee. Journal of Cetacean Research and Management 3, Supplement:1—75.

Jackson, J. A., D. J. Steel, P. Beerli, B. C. Congdon, C. Olavarria, M. S. Leslie, C. Pomilla, H. Rosenbaum and C. S. Baker. 2014. Global diversity and oceanic divergence of humpback whales (*Megaptera novaeangliae*). Proceedings of the Royal Society B 281, 20133222:1—10.

Jedensjö M., C. M. Kemper, M. Milella, E. P. Willems, M. Krützen. 2020. Taxonomy and distribution of bottlenose dolphins in Australian waters: an osteological clarification. Canadian Journal of Zoology 98:461–479

Jefferson, T. A., F. I. Archer and K. M. Robertson. 2024. The long-beaked common dolphin of the eastern Pacific Ocean: Taxonomic status and redescription of *Delphinus bairdii*. Marine Mammal Science e13133.

Jefferson, T.A. and H. C. Rosenbaum. 2014. Taxonomic revision of the humpback dolphins (*Sousa* spp.), and description of a new species from Australia. Marine Mammal Science 30:1494—1541.

Jefferson, T. A. and J. Y. Wang. 2011. Revision of the taxonomy of finless porpoises (genus *Neophocaena*): The existence of two species. Journal of Marine Animals and Their Ecology 4:3—16.

- Kato, H. and W. F. Perrin. 2009. Bryde's whales *Balaenoptera edeni/brydei*. Pages 158—163 in W. F. Perrin, B. Würsig and J. G. M. Thewissen (eds) Encyclopedia of Marine Mammals. Academic Press, Amsterdam.
- Kershaw, F., M. S. Leslie, T. Collins, R. M. Mansur, B. D. Smith, G. Minton, R. Baldwin, R. G. LeDuc, R. C. Anderson, R. L. Brownell Jr and H. C. Rosenbaum. 2013. Population differentiation of 2 forms of Bryde's whales in the Indian and Pacific Oceans. Journal of Heredity 6:755–764.
- Khalif, N. 2020. The Chilean blue whale (*Balaenoptera musculus chilensis* Khalaf, 2020): A new subspecies from Chile. Gazelle: The Palestinian Biological Bulletin 38: 40–46.
- Khalif, N. 2021. The Arabian Sea blue whale (*Balaenoptera musculus arabica* Khalaf, 2021): A new subspecies from the Arabian Sea and western Indian Ocean. Gazelle: The Palestinian Biological Bulletin 39:17–46.
- Kingston, S. E., L. D. Adams, and P. E. Rosel. 2009. Testing mitochondrial sequences and anonymous nuclear markers for phylogeny reconstruction in a rapidly radiating group: molecular systematics of the Delphininae (Cetacea: Odontoceti: Delphinidae). BMC Evolutionary Biology 9:245.
- Kinze, C. C. 2018. A case for Tursiops tursio (Gunnerus, 1768). Lutra 61:189-196
- Kitamura, S., T. Matasuishi, T. K. Yamada, Y. Tajima, H. Ishikawa, S. Tanabe, H. Nakagawa, Y. Uni and S. Abe. 2013. Two genetically distinct stocks in Baird's beaked whale (Cetacea: Ziphiidae). Marine Mammal Science 29:755—766.
- Koretsky, I. A., L. G. Barnes and S. J. Rahmat. 2016. Re-evaluation of morphological characters questions current views of pinniped origins. Vestnik Zoologii 50:327—354.
- Krahn, M., M. J. Ford, W. F. Perrin, P. R. Wade, R. P. Angliss, M. B. Hanson, B. L. Taylor, G. M. Ylitalo, M. E. Dahlheim, J. E. Stein and R. S. Waples. 2004. Status Review of Southern Resident Killer Whales (*Orcinus orca*) under the Endangered Species Act. NOAA Technical Memorandum NMFS-NWFSC-62. 73pp.
- Larivière, S. 1998. Lontra felina. Mammalian Species 575:1-5.
- LeDuc, R. G., W. F. Perrin and A. E. Dizon. 1999. Phylogenetic relationships among the delphinid cetaceans based on full cytochrome b sequences. Marine Mammal Science 15:619—648.
- LeDuc, R. G., F. I. Archer, A. R. Lang, K. K. Martien, B. Hancock-Hanser, J. O. Torres-Florez, R. Hucke-Gaete, H. C. Rosenbaum, K. Van Waerebeek, R. L. Brownell Jr and B. L. Taylor. 2017. Genetic variation in blue whales in the eastern Pacific: implication for taxonomy and use of common wintering grounds. Molecular Ecology 26:740–751.
- LeDuc, R. G., A. E. Dizon, M., Goto, M., L. A. Pastene, H. Kato, S. Nishiwaki and R. L. Brownell 2007. Patterns of genetic variation in southern hemisphere blue whales, and the use of assignment test to detect mixing on the feeding grounds. Journal of Cetacean Research and Management 9:73—80.
- Leslie, M. S., C. M. Perkins-Taylor, J. W. Durban, M. J. Moore, C. A. Miller, P. Chanarat, P. Bahamonde, G. Chiang and A. Apprill. 2020. Body size data collected non-invasively from drone images indicate a morphologically distinct Chilean blue whale (*Balaenoptera musculus*) taxon. Endangered Species Research 43:291–304.
- Lindqvist, C., L. Bachmann, L. W. Andersen, E. W. Born, U. Arnason, K. M. Kovacs, C. Lydersen, A. V. Abramov and Ø. Wiig. 2009. The Laptev Sea walrus *Odobenus rosmarus laptevi*: An enigma revisited. Zoologica Scripta 38:113—127.

- Lopes, F., L. R. Oliveira, Y. Beux, A. Kessler, S. Cárdenas-Alayza, P. Majluf, D. Páez-Rosas, J. Chaves, E. Crespo, R. L. Brownell Jr., A. M. M. Baylis, M. Sepúlveda, V. Franco-Trecu, C. Loch, B. C. Robertson, C. R. Peart, J. B. W. Wolf and S. L. Bonatto. 2023. Genomic evidence for homoploid hybrid speciation in a marine mammal apex predator. Science Advances 9:eadf6601.
- Lopes, F., L. R. Oliveira, A. Kessler, Y. Beux, E. Crespo, S. Cárdenas-Alayza, P. Majluf, M. Sepúlveda, R. L. Brownell Jr., V. Franco-Trecu, D. Páez-Rosas, J. Chaves, C. Loch, B. C. Robertson, K. Acevedo-Whitehouse, F. R. Elorriaga-Verplancken, S. P. Kirkman, C. R. Peart, J. B. W. Wolf and S. L. Bonatto. 2021. Phylogenomic discordance in the eared seals is best explained by incomplete lineage sorting following explosive radiation in the Southern Hemisphere. Systematic Biology 70:786-802.
- Luksenburg, J. A., A. Henriquez and G. Sangster. 2015. Molecular and morphological evidence for the subspecific identity of Bryde's whales in the southern Caribbean. Marine Mammal Science 31:1568-1579.
- Marx, F. G. and R. E. Fordyce. 2015. Baleen whale boom and bust: A synthesis of mysticete phylogeny, diversity and disparity. Royal Society Open Science 2: 140434. doi:10.1098/rsos.140434.
- Marx, F.G. and R. E. Fordyce. 2016. A link no longer missing: New evidence for the cetotheriid affinities of *Caperea*. PLoS ONE 11(10) e0164059.
- McDonald, M. A., S. L. Mesnick and J. A. Hildebrand. 2006. Biogeographic characterization of blue whale song worldwide: using song to identify populations. Journal of Cetacean Research and Management 8:55–65.
- McGowen, M. R. 2011. Toward the resolution of an explosive radiation—A multilocus phylogeny of oceanic dolphins (Delphinidae). Molecular Phylogenetics and Evolution 60:345—357.
- Mendez, M., T. A. Jefferson, S.-O. Kolokotronis, M. Krützen, G. J. Parra, T. Collins, G. Minton, R. Baldwin, P. Berggren, A. Särnblad, O. A. Amir, V. M. Peddemors, L. Karczmarski, A. Guissamulo, B. Smith, D. Sutaria, G. Amato and H. C. Rosenbaum. 2013. Integrating multiple lines of evidence to better understand the evolutionary divergence of humpback dolphins along their entire distribution range: A new dolphin species in Australian waters. Molecular Ecology 22:5936—5948.
- Montgelard C., F. M. Catzeflis and E. Douzery. 1997. Phylogenetic relationships of artiodactyls and cetaceans as deduced from the comparison of cytochrome I and 12S rRNA mitochondrial sequences. Molecular Biology and Evolution 14:550-559.
- Morin, P. A., C. S. Baker, R. S. Brewer, A. M. Burdin, M. L. Dalebout, J. P. Dines, I. Fedutin, O. Filatova, E. Hoyt, J. L. Jung and M. Lauf. 2017. Genetic structure of the beaked whale genus Berardius in the North Pacific, with genetic evidence for a new species. Marine Mammal Science 33:96—111.
- Morin, P. A., M. L. McCarthy, C. W. Fung, J. W. Durban, K. M. Parsons, W. F. Perrin, B. L. Taylor, T. A. Jefferson and F. I. Archer. 2024. Revised taxonomy of eastern North Pacific killer whales (*Orcinus orca*): Bigg's and resident ecotypes deserve species status. Royal Society Open Science 11:231368.
- Moura, A. E., K. Shreves, M. Pilot, K. R. Andrews, D. M. Moore, T. Kishida, L. Möller, A. Natoli, S. Gaspari, M. McGowen, I. Chen, H. Gray, M. Gore, R. M. Culloch, M. S. Kiani, M. S. Willson, A. Bulushi, T. Collins, R. Baldwin, A. Willson, G. Minton, L. Ponnampalam and A. R. Hoelzel. 2020. Phylogenomics of the genus *Tursiops* and closely related Delphininae reveals extensive reticulation among lineages and provides inference about eco-evolutionary drivers. Molecular Phylogenetics and Evolution 146:106756.
- Natoli, A., A. Cañadas, V. M. Peddemors, A. Aguilar, C. Vaquero, P. Fernandez-Piqueras and A. R. Hoelzel. 2006. Phylogeography and alpha taxonomy of the common dolphin (*Delphinus* sp.). Journal of Evolutionary Biology19:943—954.

- Natoli, A., A. Cañadas, C. Vaquero, E. Politi, P. Fernandez-Navarro and A. R. Hoelzel. 2008. Conservation genetics of the short-beaked common dolphin (*Delphinus delphis*) in the Mediterranean Sea and the eastern North Atlantic. Conservation Genetics 9:1479—1487.
- Nyakatura, K. and O. R.P. Birinda-Emonds. 2012. Updating the evolutionary history of Carnivora (Mammalia): A new species-level supertree complete with divergence time estimates. BMC Biology 10:1—31.
- Oliveira, L. R. and R. L. Brownell, Jr. 2014. Taxonomic status of two subspecies of South American fur seals: *Arctocephalus australis australis* vs. A. a. gracilis. Marine Mammal Science 30:1258—1263.
- Oliveira, L. R. D., L. D. Fraga, P. H. Ott, S. Siciliano, F. Lopes, R. Almeida, J. C. Wickert, L. Milmann, D. Danilewicz, N. R. Emin-Lima and A. C. Meirelles. 2019. Population structure, phylogeography, and genetic diversity of the common bottlenose dolphin in the tropical and subtropical southwestern Atlantic Ocean. Journal of Mammalogy, 100:564-577.
- Oliveira, L. R., J. I. Hoffman, E. Hingst-Zaher, P. Majluf, M. M. C. Muelbert, J. S. Morgante and W. Amos 2008. Morphological and genetic evidence for two evolutionary significant units (ESUs) in the South American fur seal, *Arctocephalus australis*. Conservation Genetics 9:1451-1466.
- Olsen, M. T., A. Galatius, V. Biard, K. Gregersen and C. C. Kinze. 2016. The forgotten type specimen of the grey seal [*Halichoerus grypus* (Fabricius, 1791)] from the island of Amager, Denmark. Journal of the Linnean Society 2016:1—8.
- Orr, H. A. and J. A. Coyne. 2004. Speciation. Sinauer Associates, Sunderland, Massachusetts.
- Patterson, B. D., H. E. Ramírez Chavez, J. F. Vilela, A. E. R. Soares and F. Grewe. 2021. On the nomenclature of the American clade of weasels (Carnivora: Mustelidae). Journal of Animal Diversity 3:1-8.
- Pérez-Alvarez, M., S. Kraft, N. I. Segovia, C. Olavarría, S. Nigenda-Morales, R. J. Urbán, L. Viloria-Gómora, F. Archer, R. Moraga, M. Sepúlveda, and M. Santos-Carvallo. 2021. Contrasting phylogeographic patterns among Northern and Southern Hemisphere fin whale populations with new data from the Southern Pacific. Frontiers in Marine Science 8:630233.
- Perrin, W. F. 2009. Species. Pages 1084—1087 in W. F. Perrin, B. Würsig and J. G. M. Thewissen (eds) Encyclopedia of Marine Mammals. Academic Press, Amsterdam.
- Perrin, W. F., M. L. L. Dolar and D. Robineau. 1999. Spinner dolphins (*Stenella longirostris*) of the western Pacific and Southeast Asia: Pelagic and shallow-water forms. Marine Mammal Science 15:1029—1053.
- Perrin, W. F., J. L. Thieleking, W. A. Walker, F. I. Archer and K. M. Robertson. 2011. Common bottlenose dolphins (*Tursiops truncatus*) in California waters: Cranial differentiation of coastal and offshore ecotypes. Marine Mammal Science 27:769—792.
- Perrin, W. F., P. E. Rosel and F. Cipriano. 2013. How to contend with paraphyly in the taxonomy of the delphinine cetaceans. Marine Mammal Science 29:567—588.
- Price, S. A., O. R. P. Bininda-Edmonds and J. L. Gittleman. 2005. A complete phylogeny of the whales, dolphins and even-toed hoofed mammals (Cetartiodactyla). Biological Review 80:445—473.
- Prothero, D. R., D. Domning, R. E. Fordyce, S. Foss, C. Janis, S. Lucas, K. L. Marriott, G. Metais, D. Naish, K. Padian and G. Rössner. 2022. On the unnecessary and misleading taxon "Cetartiodactyla". Journal of Mammalian Evolution 29:93-97.

- de Queiroz, K. 2007. Species concepts and species delineation. Systematic Biology 56:879-886.
- Reeves, R. R., W. F. Perrin, B. L. Taylor, C. S. Baker and S. L. Mesnick (eds) 2004. Report of the Workshop on Shortcomings of Cetacean Taxonomy in Relation to Needs of Conservation and Management, April 30—May 2, 2004 La Jolla, California. NOAA Technical Memorandum NOAA-TM-NMFS-SWFSC-363:1—94.
- Rice, D. W. 1998. Marine mammals of the world. Systematics and distribution. Society for Marine Mammalogy Special Publication 4:1–231.
- Rosel, P. E. and L. A. Wilcox. 2014. Genetic evidence reveals a unique lineage of Bryde's whales in the northern Gulf of Mexico. Endangered Species Research 23:19—34.
- Rosel, P. E., L. A. Wilcox, T. K. Yamada and K. D. Mullin. 2021. A new species of baleen whale (*Balaenoptera*) from the Gulf of Mexico, with a review of its geographic distribution. Marine Mammal Science 37:577—610.
- Rosel, P. E., A. E. Dizon and J. E. Heyning. 1994. Genetic analysis of sympatric morphotypes of common dolphins (genus *Delphinus*). Marine Biology 119:150—167.
- Rosenbaum, H., R. L. Brownell, Jr., M. W. Brown, C. Schaeff, Y. Portway, B. N. White, S. Malik, L. A. Pastene, N. J. Patenaude, C. S. Baker, M. Goto, P. B. Best, P. J. Clapham, P. Hamilton, R. Payne, V. Rowntree, C. T. Tynan, J. L. Bannister, and R. DeSalle. 2000. World-wide genetic differentiation of *Eubalaena*: Questioning the number of right whale species. Molecular Ecology 9:1793—1802.
- Ruiz-García, M., E. Banguera and H. Cárdenas. 2006. Morphological analysis of three *Inia* (Cetacea: Iniidae) populations from Colombia and Bolivia. Acta Theriologica 51:411—426.
- Ruiz-García, M., S. Caballero, M. Martinez-Agüero and J. M. Shostell. 2008. Molecular differentiation among *Inia geoffrensis* and *Inia boliviensis* (Iniidae, Cetacea) by means of nuclear intron sequences. Pages 1—25 in V. T. Koven. ed., Population Genetics Research Progress Chapter 6.
- Sasaki, T., M. Nikaido, S. Wada, T. K. Yamada, Y. Cao, M. Hasegawa and N. Okada. 2006. *Balaenoptera omurai* is a newly discovered baleen whale that represents an ancient evolutionary lineage. Molecular Phylogenetics and Evolution 41:40—52.
- Scheel, D.-M., G. J. Slater, S.-O. Kolokontronis, C. W. Potter, D. S. Rotstein, K. Tsangaras, A. D. Greenwood and K. M. Helgen. 2014. Biogeography and taxonomy of extinct and endangered monk seals illuminated by ancient DNA and skull morphology. ZooKeys 409:1—33.
- Siciliano, S., V. H. Valiati, R. Emin-Lima, A. F. Costa, J. Sartor, T. Dorneles and L. R. De Oliveira. 2016. New genetic data extend the range of river dolphins *Inia* in the Amazon Delta. Hydrobiologia 777:255—269.
- da Silva, V. M. F. 1994. Aspects of the biology of the Amazonian dolphin genera *Inia* and *Sotalia fluviatilis*. Ph.D. thesis, University of Cambridge, Cambridge, U.K. 328 pp.
- Spaulding, M., M. A. O'Leary and J. Gatesy. 2009. Relationships of Cetacea (Artiodactyla) among mammals: Increased taxon sampling alters interpretations of key fossils and character evolution. PLoS ONE 4(9) e7062.
- Taylor, B. L., F. I. Archer, K. K. Martien, P. E. Rosel, B. L. Hancock-Hanser, A. R. Lang, M. S. Leslie, S. L. Mesnick, P. A. Morin, V. L. Pease, W. F. Perrin, K. M. Robertson, K. M. Parsons, A. Viricel, N. L. Vollmer, R. R. Reeves, F. Cipriano, M. Krützen and C. S. Baker. 2017a. Guidelines and quantitative standards to improve consistency in cetacean subspecies and species delimitation relying on molecular genetic data. Marine Mammal Science 33:132—155.

Taylor B. L., W. F. Perrin, R. R. Reeves, P. E. Rosel, J. Y. Wang, F. Cipriano, C. S. Baker and R. L. Brownell Jr. 2017b. Why we should develop guidelines and quantitative standards for using molecular genetic data to delimit subspecies for data-poor organisms like cetaceans. Marine Mammal Science 33:12—26.

Thompson, K., C. S. Baker, A. van Helden, S. Paatel, C. Millar and R. Constantine. 2012. The world's rarest whale. Current Biology 22:R905—R906.

Torres-Florez, J. P., R. Hucke-Gaete, R. LeDuc, A. Lang, B. Taylor, L. E. Pimper, L. Bedriñana-Romano, H. C. Rosenbaum, and C. C. Figueroa. 2014. Blue whale population structure along the eastern South Pacific Ocean: evidence of more than one population. Molecular Ecology 23:5998–601.

Viaud-Martinez, M. Martinez Vergara, P. E. Gol'din, V. Ridoux, A. A. Özturk, B. Özturk, P. E. Rosel, A. Frantzis, A. Komnenou and A. J. Bohanak. 2007. Morphological and genetic differentiation of the Black Sea harbour porpoise *Phocoena phocoena*. Marine Ecology Progress Series 338:281—294.

Viaud-Martinez, K. A., R. L. Brownell, Jr., A. Komnenou and A. J. Bohanak. 2008. Genetic isolation and morphological divergence of Black Sea bottlenose dolphins. Biological Conservation 141:1600—1611.

Vollmer, N. L., E. Ashe, R. L. Brownell Jr, F. Cipriano, J. G. Mead, R. R. Reeves, M. S. Soldevilla and R. Williams, R. 2019. Taxonomic revision of the dolphin genus *Lagenorhynchus*. Marine Mammal Science, 35: 957–1057.

Wada, S., M. Oishi and T. K. Yamada. 2003. A newly discovered species of living baleen whale. Nature 426:278–281.

Wang, J. Y., T. R. Frasier, S. C. Yang and B. N. White. 2008. Detecting recent speciation events: The case of the finless porpoise (genus *Neophocaena*). Heredity 101:145—155.

Wang, J. Y., S. C. Yang and S. K. Hung. 2015. Diagnosability and description of a new subspecies of Indo-Pacific humpback dolphin, *Sousa chinensis*, (Osbeck, 1765) from the Taiwan Strait. Zoological Studies 54:36.

Wang, J.Y., A.P.B. Costa and T.A. Jefferson. 2021. The correct name of Lahille's bottlenose dolphin, *Tursiops truncatus gephyreus* Lahille, 1908. Marine Mammal Science 37: 696-701.

Webber, M. S. 2014. Family Otariidae (eared seals). Pages 84—101 in D. E. Wilson and R. A. Mittermeier (eds). Handbook of the Mammals of the World. 4. Sea Mammals. Lynx Ediciones, Barcelona.

Wickert, J. C., S. M. Von Eye, L. R. Oliveira and I. B. Moreno. 2016. Revalidation of *Tursiops gephyreus* Lahille, 1908 (Cetartiodactyla: Delphinidae) from the southwestern Atlantic Ocean. Journal of Mammalogy 97:1728—1737.

Wyss, A. R. and J. Flynn. 1993. A phylogenetic analysis and definition of the Carnivora. Pages 32—52 in F. S. Szalay, M. J. Novacek, and M. C. McKenna (eds). Mammal Phylogeny: Placentals. Springer-Verlag, New York.

Yamada, T. K., S. Kitamura, S. Abe, Y. Tajima, A. Matsuda, J. G. Mead and T.F. Matsuishi. 2019. Description of a new species of beaked whale (*Berardius*) found in the North Pacific. Scientific Reports 9:1–14.

Last updated June 2024 by members of the Committee on Taxonomy:

• Ana P. Costa (Chair)

- Frederick I. Archer
- C. Scott Baker
- Daryl J. Boness
- Robert L. Brownell, Jr.
- Morgan Churchill
- Daryl P. Domning
- Thomas A. Jefferson
- Carl Kinze
- Michael McGowen
- Larissa R. Oliveira
- Patricia E. Rosel
- John Y. Wang
- Tadasu K. Yamada