## DateLife Workflows

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## Taxon Cetacea

There are 198 species in the Open Tree of Life Taxonomy for the taxon Cetacea. Information on time of divergence is available for 89 of these species across 6 published and peer-reviewed chronograms from the following studies:

- 1. Toljagić O., Voje K.L., Matschiner M., Liow L., & Hansen T.F. 2017. Millions of Years Behind: Slow Adaptation of Ruminants to Grasslands. Systematic Biology, .
- 2. Bininda-Emonds, Olaf R. P., Marcel Cardillo, Kate E. Jones, Ross D. E. MacPhee, Robin M. D. Beck, Richard Grenyer, Samantha A. Price, Rutger A. Vos, John L. Gittleman, Andy Purvis. 2007. The delayed rise of present-day mammals. Nature 446 (7135): 507-512
- 3. Hedges, S. Blair, Julie Marin, Michael Suleski, Madeline Paymer, Sudhir Kumar. 2015. Tree of life reveals clock-like speciation and diversification. Molecular Biology and Evolution 32 (4): 835-845
- 4. Steeman, M., Hebsgaard M., Fordyce R., Ho S., Rabosky D., Nielsen R., Rahbek C., Glenner H., Sørensen M., & Willerslev E. 2009. Radiation of Extant Cetaceans Driven by Restructuring of the Oceans. Systematic Biology 58 (6): 573-585.

Species are distributed across chronograms as follows:

The following species were completely absent from chronogram data base: Amphiptera pacifica, Balaena agamachschik, Balaena mangidach, Balaenoptera andrejewi, Balaenoptera caerulescens, Balaenoptera emargenata, Balaenoptera grimmi, Balaenoptera maculata, Balaenoptera nigra, Balaenoptera punctulata, Catodon polycyphus, Catodon polyscyphus, Catodon svineval, Cephalorhyncus commersonii, Cephalorhyncus heavisidii, Clymenia gadamu, Delphinapterus senedetta, Delphinorhynchus maculatus, Delphinorhynchus pernettyi, Delphinorhynchus santonicus, Delphinus abusalam, Delphinus anarnacus, Delphinus attenuatus, Delphinus bertini, Delphinus bonnaterrei, Delphinus boryi, Delphinus caerulescens, Delphinus carbonarius, Delphinus coronatus, Delphinus cymodice, Delphinus cymodoce, Delphinus epiodon, Delphinus eurynome, Delphinus fabricii, Delphinus feres, Delphinus gadamu, Delphinus hamatus, Delphinus harlani, Delphinus leucocephalus, Delphinus livittatus, Delphinus maculatus, Delphinus maculiventer, Delphinus minimus, Delphinus nesarnac, Delphinus niger, Delphinus pernettyensis, Delphinus pernetyi, Delphinus perniger, Delphinus rappii, Delphinus rhinoceros, Delphinus salam, Delphinus siculus, Delphinus symodice, Delphinus walkeri,

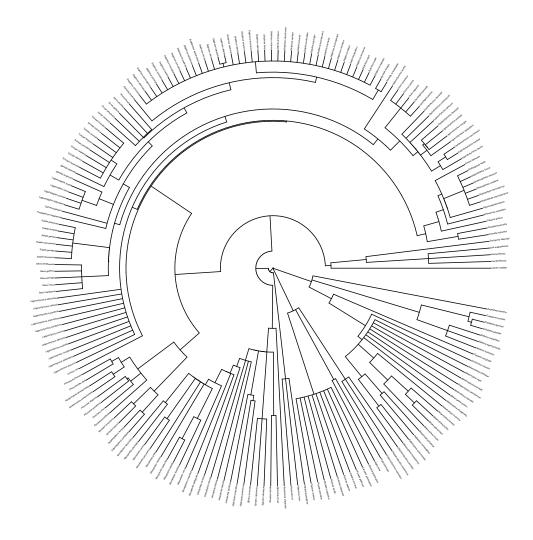


Figure 1: Cetacea Species Presence across chronograms in DateLife Data Base

Epiodon rafinesque, Epiodon urganantus, Eudelphinus tasmaniensis, Globicephala macrorhyncus, Globicephalus fuscus, Globicephalus uneidens, Globicephalus chinensis, Inia araguaiaensis, Inia boliviensis, Lagenodelphis australis, Lagenodelphis obliquidens, Lagenoelphis hosei, Lagenorhynchus bombifrons, Lagenorhynchus nilssonii, Lagenorhynchus posidonia, Lagenorhyncus superciliosus, Lagenorhyncus acutus, Lagenorhyncus albirostris, Lagenorhyncus australis, Lagenorhyncus cruciger, Lagenorhyncus obliquidens, Lagenorhyncus obscurus, Mesoplodon hotaula, Mesoplodon lazardii, Monodon spurius, Neophocaena asiaeorientalis, Phocaena posidonia, Physeter gibbosus, Physeter katadon, Physeter krefftii, Physeter polycephus, Physeter polycystus, Physeter pterodon, Platanista indi, Prodelphinus malayanus, Sotalia gadamu, Sotalia maculiventer, Sotalia perniger, Sotalia santonicus, Sousa gadamu, Sousa plumbea, Sousa sahulensis, Steno fuscus, Steno gadamu, Steno malayanus, Steno perniger, Tursio catalania, Tursio cymodoce, Tursio eurynome, Tursiops australis, Tursiops catalania, Tursiops cymodice, Tursiops dawsoni, Tursiops fergusoni, Tursiops nesarnack