

Timetree of Life: Evolutionary Tree *(of life currently living)*

See **Vertebrate Evolution** datapack that includes extinct branches of that group

See **Marine Genera** datapack for FAD/LAD (ranges) of all Phanerozoic animals

Compiled by Rebecca Bobick (2015). Converted to GTS2020 age mode in Jan 2021

This is a work in progress, please help us improve our dataset by sending comments, and suggestions to James Ogg (jogg@purdue.edu), Purdue University

Main Source: **The Timetree of Life** (Hedges, S.B., and Kumar, S., editors), Oxford Univ. Press, 2009.

Three output sets --

Tree for each Group (listed below)

Merged Tree for each of 3 Kingdoms (Microbes, Plants, Animals)

MegaTree (single one for all life)

Tree for each Group -- sets (note, some trees are "overviews")

Microbes

Earliest Life (includes Archaeobacteria)

Eubacteria

Eukaryota

Haptophyte Algae (Haptophyta)

Diatoms (Bacillariophyta)

Plants

Land Plants (Embryophyta)

Mosses (Bryophyta)

Liverworts (Marchantiophyta)

Ferns

Gymnosperms

Flowering Plants (Magnoliophyta)

Magnoliids

Eudicots

Asterids

Eurosoid I

Eurosoid II

Monocots

Fungi

Animals (Metazoa)

Cnidarians (Cnidaria)

Scaphopod Mollusks (Scaphopoda)

Cephalopod Mollusks (Cephalopoda)

Nematodes (Nematoda)

Sea Urchins (Echinoidea)

Arthropods (Arthropoda)

Spiders (Araneae)

Holometabolous Insects (Holometabola)

Bees, Ants, and Stinging Wasps (Aculeata)

True Flies (Diptera)

Beetles (Coleoptera)

Lacewings (Neuroptera)

Stalked and Acorn Barnacles (Thoracica)

Crabs, Shrimps, and Lobsters (Decapoda)

Fish

Jawless Fishes (Cyclostomata)

Cartilaginous Fishes (Chondrichthyes)

Ray-finned Fishes (Actinopterygii)

Overview

Sturgeons and Paddlefishes (Acipenseriformes)

Teleost Fishes (Teleostei)

Overview

Cod Icefishes (Notothenioidei)

Labyrinth Fishes (Anabantoidei)

Lungfishes (Dipnoi)

Amphibians (Lissamphibia)

Overview

Frogs and Toads (Anura)

Salamanders (Caudata)

Caecilians (Gymnophiona)

Amniotes and Reptiles

Amniotes (overview)

Lizards, Snakes, and Amphisbaenians (Squamata)

Snakes (Serpentes)

Turtles (Testudines)

Crocodylians (Crocodylia)

Birds (Aves)

Overview

Ratites and Tinamous (Paleognathae)

Waterfowl and Gamefowl (Galloanserae)

Advanced Birds (Neoaves)

Passerine Birds (Passeriformes)

Shorebirds (Charadriiformes)

Diurnal Birds of Prey (Falconiformes)

Cranes, Rails, And Allies (Gruiformes)

Woodpeckers, Toucans, Barbets, and Allies (Piciformes)

Owls (Strigiformes)

Swifts, Treeswifts, and Hummingbirds (Apodiformes)

Mammals (Mammalia)

Overview

Monotremes (Prototheria)

Marsupials (Metatheria)

Placental Mammals (Eutheria)

Overview

Armadillos, Anteaters, and Sloths (Xenarthra)

Tenerecs and Golden Moles (Afrosoricida)

Primates (Primates)

Pikas, Hares, and Rabbits (Lagomorpha)

Rodents (Rodentia)

Hedgehogs, Shrews, Moles, and Solenodons (Eulipotyphla)

Bats (Chiroptera)

Carnivores (Carnivora)

Rhinoceroses, Tapirs, and Horses (Perissodactyla)

Whales and Even-Toed Ungulates (Cetartiodactyla)