

MARINE EVOLUTION

Chronological History of Life in the Oceans

3.8 Billion Years Ago

Archaean Eon

First life emerges in hydrothermal vents. Single-celled organisms begin the long journey of aquatic biological history.

Prokaryotes

Cyanobacteria

Stromatolites

541 Million Years Ago

Cambrian Explosion

A rapid diversification of life forms. Development of hard shells, exoskeletons, and complex predatory behaviors.

Trilobites

Anomalocaris

Brachiopods

419 Million Years Ago

Devonian Period

Known as the "Age of Fishes." Massive diversification of jawed fish and the appearance of the first lobe-finned fish.

Dunkleosteus

Early Sharks

Ammonites

252 Million Years Ago

Mesozoic Era

Marine reptiles dominate the seas while modern coral reefs begin to take shape following the Great Permian Extinction.

Ichthyosaurs

Plesiosaurs

Mosasaurus

50 Million Years Ago - Present

Cenozoic Era

Mammals return to the sea. The rise of modern cetaceans (whales/dolphins) and the evolution of the current marine ecosystem.

Basilosaurus

Megalodon

Blue Whales