



Domain	Eukaryota
Kingdom	Animalia
Phylum	Chordata
Subphylum	Vertebrata
Class	Amphibia

VERTEBRATES

Amphibians

368 MYA – PRESENT

Amphibians are a class of vertebrates that usually change from a juvenile, larval water-breathing form to an adult air-breathing form during their life. The class includes frogs, toads, salamanders,

newts, axolotls, and the legless caecilians. Some amphibians look like scaleless reptiles, but do not lay waterproof eggs, and so they need to lay their eggs in water to prevent them drying out.

Fossil Record

Amphibians evolved from lobe-finned fish, sarcopterygii, in the late Devonian, before diversifying during the Carboniferous to be one of the top predators, occupying a similar niche to modern crocodiles. These large amphibians had gone extinct by the Cretaceous, due to resource competition against better adapted crocodiles. Only smaller amphibians were not out competed, and continued to evolve and survive to today.

Habitat and Lifestyle

Most amphibians require water for reproduction and tend to live in or around fresh water where they lay eggs. When these eggs hatch, the young breathe through gills until they go through a metamorphosis to develop into miniature adults. In the case of frogs, they lose their tail and gills, and develop legs and lungs.

All amphibians are predators. The large extinct labyrinthodonts preyed on any animal which ventured too close to them, while smaller amphibians hunted and ate insects similar to modern frogs.

Fossilisation

Most early amphibian fossil finds were parts of jaws from Europe and America. Several important amphibian fossils have been found in Australia, including Triassic and Cretaceous labyrinthodonts from Victoria and Sydney.

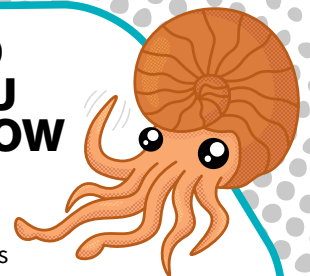


Fire Salamander, *Salamandra salamandra*.
Image from onkelglocke, pixabay.



Green and golden bell frog, *Litoria aurea*.
Image from Stephen Mahoney, Australian Museum.

DID YOU KNOW



The axolotl, also called the Mexican walking fish is not a fish, but an amphibian and has discovered the secret of eternal youth. It is a salamander which, unlike most amphibians, maintains its juvenile form for life. It retains its gills and continues to obtain oxygen from the water and does not venture onto land. It also can regenerate parts of its body, such as its limbs and tail, and even parts of its brain.

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