

VERTEBRATES

What are vertebrates?

Vertebrates are animals that have a backbone or spinal column, also called vertebrae. These animals include fish, birds, mammals, amphibians, and reptiles.

There are currently around 65,000 known species of vertebrate animals. This sounds like a lot, but vertebrates are only around 3% of all the animals on Earth. Most of the animal species are invertebrates – they have no backbone.

What are some vertebrate animals?

- [Fish](#) - Fish are animals that live in the water. They have gills that allow them to breathe under water. Different species of fish may live in fresh water or salt water. Some examples of fish include the brook trout, the great white shark, lionfish, and the swordfish.
- [Birds](#) - Birds are animals that have feathers, wings, and lay eggs. Many, but not all, birds can fly. Some examples of bird species include the bald eagle, the cardinal, the flamingo, ostriches, and the red-tailed hawk.
- [Mammals](#) - Mammals are warm-blooded animals that nurse their young with milk and have fur or hair. Some examples of mammals include humans, dolphins, giraffes, horses, and spotted hyenas.
- [Amphibians](#) - Amphibians are cold-blooded animals. They start out their lives living in the water with gills just like fish. Later they develop lungs and can move to dry land. Amphibians include frogs, toads, newts, and salamanders.
- [Reptiles](#) - Reptiles are cold-blooded animals which lay eggs. Their skin is covered with hard and dry scales. Reptile species include alligators, crocodiles, snakes, lizards, and turtles.

Cold-blooded and Warm-blooded

Vertebrate animals can be either warm-blooded or cold-blooded. A cold-blooded animal does not have a constant body temperature. The temperature of their body is determined by the outside surroundings. Cold-blooded animals will move around during the day between the shade and the sun to warm up or cool down. Reptiles, amphibians, and fish are all cold-blooded.

Warm-blooded animals can control their internal temperature. They can sweat or pant to cool off and have fur and feathers to help keep them warm. Only birds and mammals are warm-blooded.

Some interesting facts about Vertebrates

- The only mammals that lay eggs are monotremes such as the platypus and spiny anteater.
- There are reptiles living on every continent except Antarctica.
- Most fish have skeletons made of bone. Other fish have skeletons made of cartilage. These include sharks and rays.
- Frogs can breathe through their skin.
- The shortest childhood of any mammal is the hooded seal. They are considered adults when they are just four days old.
- Vertebrates tend to be much more intelligent than invertebrates.
- The smallest vertebrate is thought to be a tiny frog called the *Paedophryne amauensis*. It only grows to about 0.3 inches long.
- The largest vertebrate is the blue whale, which can grow to over 100 feet long and 400,000 pounds.