



The World of Frogs: From Bollington to the Amazon

As an experiment, some of our SciBar participants prepared this glossary, independently of Dr Andrew Gray. You may find it informative to consider these concepts and visit the websites. Your comments on this experiment are most welcome.

Adaptation features of animals or plants that make them suited for a particular environment. For example, tadpoles have gills and a tail when they live in water. Many frogs are green as a camouflage adaptation to make it more difficult for predators to see them.

Amphibians are cold-blooded vertebrates. Most amphibians metamorphose (change) from a young form that breathes water to an adult form that breathes air (*amphi bios* = two modes of life). Amphibians include frogs, toads, salamanders and newts.

Cold-blooded animals that do not have a constant body temperature but instead take on the temperature of their surroundings. Basking in a warm spot can help them to remain active even at quite low temperatures.

Endangered species a species whose numbers are so small that the species is at risk of extinction.

Estivation a period of inactivity during hot dry months.

Extinct when all members of a species have died.

Frogs amphibians, in the order *Anura*, with no tail and long powerful legs that help them jump and swim. They breathe air and eat insects. Frogs usually live near ponds, lakes or streams, as their moist skin loses a lot of water. Frogs lay eggs in water and these develop into tadpoles. Tadpoles metamorphose (change) into frogs.

Fungus scientists think the decline and disappearance of some

frog species, in central and South America, may be partly due to a disease caused by a fungus that makes it difficult for frogs to breathe through their skin.

Gill an organ that obtains oxygen for an animal from water.

Herpetology the branch of science that studies amphibians and reptiles.

Hibernation a state of inactivity during cold months.

Larvae offspring very different in appearance from the adult. Larvae develop into adult form during metamorphosis.

Rainforest a forest with high annual rainfall. Tropical forests are usually rainforests.

Tadpoles the larvae of frogs and toads. Tadpoles live in water and breathe through gills, like fish. To begin with they have tails and no legs, and they eat algae and other plants. Eventually tadpoles grow legs, start eating small invertebrates in the water, develop lungs and leave the water.

Toads are actually frogs! However, the type of frogs in the family *Bufo* are usually called toads. Unlike frogs, toads usually walk, not jump. They have drier skin than frogs and some are adapted to drier climates.

Tree frogs are adapted to spend most of their life in trees. They have "toe pads" to help them climb and stick to smooth surfaces. Some tree frogs have webbed hands and feet so they can "glide" or travel further when they jump.

Useful weblinks:: Andrew's Frog Blog:

Manchester Museum, live animals exhibits

<http://frogblogmanchester.wordpress.com/>

<http://www.museum.manchester.ac.uk/collection/liveanimals/>