

Life Cycle of an Amphibian

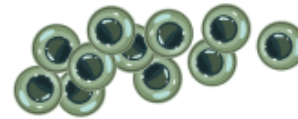
Amphibians are sometimes thought of as being closely related to reptiles, but there are several significant differences in their life cycles. Both lay eggs and are cold-blooded (ectotherms). Reptiles lay hard-shelled eggs whereas amphibian eggs are encased in jelly. Reptile young are born with lungs, yet amphibians are born with gills to breathe underwater. Reptiles live in a wide range of habitats, but amphibians live in or near water for their entire life.

As the tail disappears, frogs and toads move on to land for part of their time. Some adult amphibians spend most of their time in water, and some spend most of their time on land. It depends on the species.

Once the amphibian has developed all four legs and started to take on its adult form, it stops eating vegetation. It uses nutrients stored in the tail to feed now. Eventually, the tail disappears.



Amphibians lay their eggs (spawn) in water, often near to the edge or in shallow areas. Frogspawn forms in clumps, while toadspawn is laid in long ribbons. Spawn appears in spring, usually in February or March.



Over the next 7 to 9 days, the embryos inside the eggs will start to develop. If you look closely, you can observe these changes each day.



During the following 14 weeks, the tadpole will start to develop. This takes slightly longer in toads. It only eats plants at this time.



After this period, the embryos will hatch as tadpoles. Tadpoles have a head and a tail but no limbs at this point.



RETRIEVAL FOCUS

1. What is the main difference between frogspawn and toadspawn?
2. How long does it take for amphibian spawn to hatch?
3. How long does it take a frog to develop from a tadpole into a small frog?
4. Where are the nutrients stored that a frog will need to use once it has all four legs?
5. What determines whether amphibians spend most of their time on land or in the water?