Amazing Amphibians

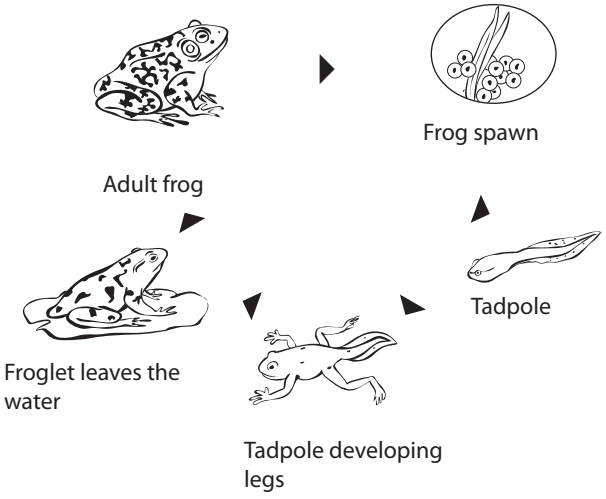
A Lynn Canyon Ecology Centre Information Sheet

What is an amphibian?

The word amphibian comes from the Greek amphibios meaning "both lives". This is an apt description because most adult amphibians are better adapted to life on land, while their larval phases are entirely aquatic. Amphibians cannot regulate their body heat and depend on sunlight to become warm and active. If they get too hot they must find shade to cool down. In cold weather, their bodies chill and they slow down. Some amphibians freeze solid in the winter, then thaw out and become active in the spring.

Metamorphosis - tadpole to frog

Young amphibians do not look like their parents. They are called larvae or tadpoles, and as they develop they change in body shape, diet, and lifestyle. This change is called metamorphosis. Tadpoles have gills to breath underwater and a tail to swim with. As the tadpole gets older it develops lungs, legs, and a different mouth. Finally, the tadpole loses its tail. At this point it is an adult frog, spending most of its time hopping on land rather than swimming in the water.

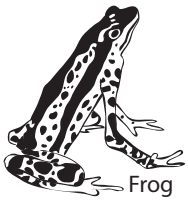


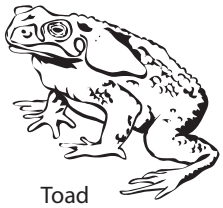
Three groups of amphibians

There are about 5,500 known species of amphibians, divided into 3 main groups: salamanders, frogs and toads, and caecilians.

Salamanders

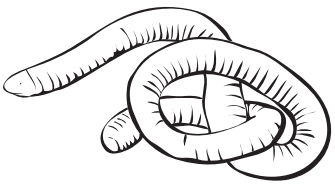
Salamanders have short legs and long, slender tails as adults. They are carnivores, and catch prey like slugs, snails and worms with their sticky tongues. Some salamanders have poisonous skin or glands that secret foul-tasting liquid. These salamanders are brightly coloured to warn predators that they are poisonous.


Frog


Toad

Frogs and Toads

The largest group of amphibians are the frogs and toads. It's often difficult to spot the differences between frogs and toads. Frogs have smooth, wet skin and long, slender legs. They are excellent jumpers. Toads have bumpy, dry skin and short legs. They usually walk and do not jump. Neither frogs or toads have tails.



Caecilians

Caecilians are tropical amphibians that look like large worms or snakes. They have no arms or legs, and sometimes it's difficult to tell which end is the head and which end is the tail. Caecilians live in underground burrows and have tiny or non-existent eyes.

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Amphibian decline

In the late 1980's, amphibian researchers noticed that amphibian populations were declining. Some species were at the brink of extinction. The fact that the reports of declining amphibian populations came from around the world suggests that the decline may be the result of serious global ecological problems.

Amphibians in trouble

The greatest threat to amphibians is the change and loss of their habitat. However, amphibians are also declining in relatively pristine areas. The reasons for these declines may include climate change and increased UV-B radiation. Amphibians are also impacted by introduced species and infectious diseases. Research shows that there is not a single over arching cause for global declines, instead many factors threaten amphibian populations to a greater or lesser extent.

Amphibians conservation

Amphibian specialists have adopted an action plan to address the key problems affecting the world's amphibians. The plan has four key strategies:

Understand the causes of declines and extinctions.

Document amphibian diversity.

Develop and implement long-term conservation programs.

Deliver emergency responses to critically endangered amphibian species.

How can you help?

Build a home for salamanders, frogs and toads. By creating habitat you are making space for wildlife - including amphibians - to live in. Make sure your yard is safe for amphibians and never use harmful chemicals.
Plant a tree.
Build a pond.
Create a rock pile for wildlife.

Neat facts

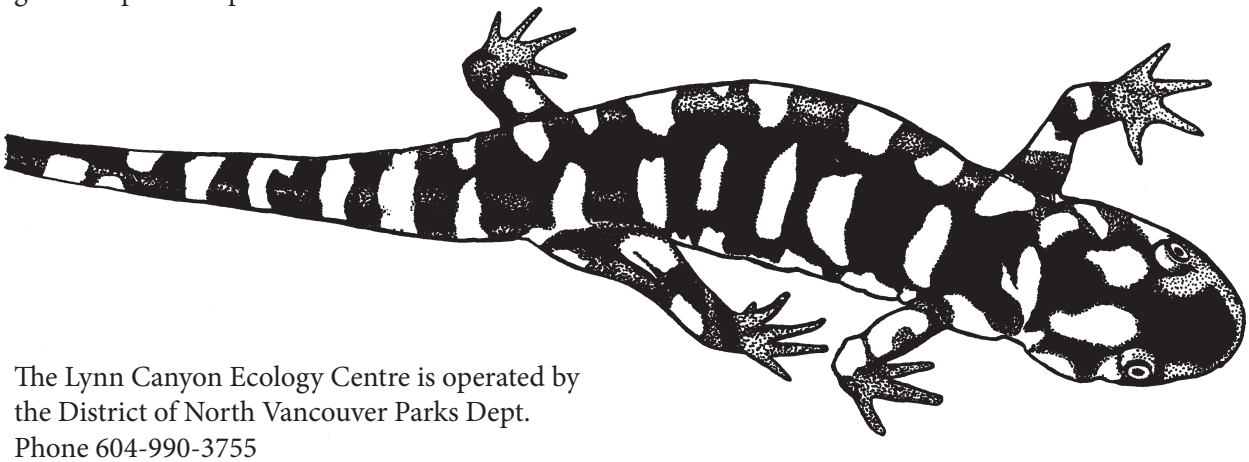
Frogs, toads and salamanders absorb water through their skins rather than drink with their mouths.

Rough-skinned newts are poisonous. One rough-skinned newt contains enough poison to kill 25,000 white mice.

The wood frog has the most northerly range of any amphibian. Antifreeze in the frog's cells stops ice crystals from forming and keeps the frog alive until spring.

When some frogs eat poisonous food, they throw up their entire stomach! The stomach actually protrudes from the mouth. They wipe it clean with their front legs and then swallow it again.

Amphibians cannot tolerate the high salt concentration of sea water, so they do not live in marine habitats.
For more information visit
www.globalamphibians.org



The Lynn Canyon Ecology Centre is operated by the District of North Vancouver Parks Dept.
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