



## Agroforestry's Impact to Endemic Frogs

[Source: TH](#)

A recent study by the **Nature Conservation Foundation (NCF-India)** and the **Bombay Environmental Action Group (BEAG)** assessed the impact of [agroforestry](#) on **endemic frog** species in the northern [Western Ghats](#).

- **Findings of the Study:** [Amphibian](#) diversity was **lowest in paddy fields**; abundance was least in orchards compared to **undisturbed plateaus**.
  - [Endemic species](#) like **CEPF burrowing frog (*Minervarya cepfi*)** and **Goan fejevarya (*Minervarya gomantaki*)** were less abundant in modified habitats.
  - Generalist species like ***Minervarya syhadrensis*** were more common in [paddy fields](#) indicating **habitat-driven shifts**.
- **Western Ghats:** [Western Ghats](#), made up of [lateritic plateaus](#) (flat-topped landscapes rich in **iron and aluminum**) were formed millions of years ago through [volcanic activity](#).
  - It is a biodiversity [hotspot](#) and home to around **252 amphibian species**, including 226 frogs.
  - However, globally, **40.7%** of amphibian species (8,011 species) are **threatened** due to **habitat destruction, pollution, climate change**, and diseases like [chytridiomycosis](#).

# FROGS

Frogs are amphibians—a class of animals best known for living in both water and land. Amphibians have no hair or scales, and generally reproduce by laying eggs under water. Unlike warm-blooded humans, amphibians are cold-blooded, meaning their temperature changes based on the temperature of their surroundings. Here are some facts and stats about the amazing, amphibious frog.

Frogs drink and breathe through their skin. They have thin, moist skin that gases can easily penetrate. Although frogs have lungs, they depend on additional oxygen absorbed through their skin, especially when swimming underwater.

Frogs are the only amphibians without a tail. Their scientific order, Anura, means "tailless" in Ancient Greek.

Their eardrums are located outside their bodies, just behind their eyes.

Frogs have exceptional night vision and are highly sensitive to movement. Their bulging eyes, which sit high on their heads, allow them to see in almost all directions.

Frogs rely on their eyes to swallow food. They push meals down their throats by sinking their eyes down, into their skulls, which applies pressure on the roof of their mouths.

Transparent inner eyelids, known as nictitating membranes, protect their eyes when swimming underwater.

Most male frogs possess vocal sacs, flexible membrane pouches that, when filled with air, amplify calls they make to attract potential mates.

Frog skin can be bumpy. Some of these bumps are mucous glands which lubricate the skin, or granular glands which produce poisons to protect them from predators.

Coloring is determined by chromatophores, pigment-containing cells that are layered in the skin. By manipulating and moving dark pigment found in certain cells, many frog species can adjust the brightness of their skin.

Webbed feet help frogs swim by pushing water away, propelling them faster through the water.



## GROW, TADPOLE, GROW!

Most frogs hatch as fish-like larvae known as tadpoles. At this early stage, most species live exclusively in water (though there are some terrestrial tadpoles). Tadpoles eventually transform into froglets in a process known as metamorphosis. Depending on the species, this process can take days or even years. Here's a breakdown of the typical life cycle.



Frogs in captivity have been known to live more than 20 years.

Many species of frog can jump more than twenty times their body length.



Kingdom  
Phylum  
Class  
Subclass  
Order

Animalia  
Chordata  
Amphibia  
Lissamphibia  
Anura

## THE DIFFERENCE BETWEEN



There isn't one. Toads are frogs! "Toad" often references a frog that has particularly dry and warty skin.

## HERE, THERE, EVERYWHERE!



There are over 4,000 known species of frog living on every continent except Antarctica. They thrive in a wide range of environments: from tropical forest to frozen tundra to desert.

## SMALL, MEDIUM, LARGE

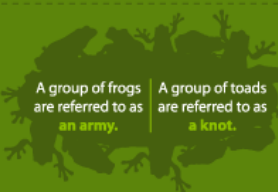
The West African goliath frog can grow to 15 inches and weigh as much as 7 pounds.

The Cuban tree toad typically grows to only half an inch.

## TOTALLY OLD SCHOOL



Scientists believe the earliest known frogs date back about 250 million years—to a time when dinosaurs were still roaming the earth.



A group of frogs are referred to as an army.

A group of toads are referred to as a knot.

Read More: [Charles Darwin's Frog](#)

