

Reptiles and Amphibians Team of 2014-2015 - November 3rd, 2014

Chytrid Fungus is a disease that has been destroying populations of amphibians all over the world, specifically North and South America and Australia. The 2014-2015 Reptiles and Amphibians team is Emily Cross and Allie Cohen. We are determined to understand the disease and how it affects Reptiles and Amphibians on all continents.

The purpose of studying these populations is because Reptiles and Amphibians are indicator species, which means that they are an early warning system of environmental health. This is due to their sensitivity to air and water pollutants and changes in the environmental condition.

More to Come!

Chytrid Fungus - December 23rd, 2014

Chytrid fungus, Phylum Chytridiomycota, are aquatic, algae like fungi that have flagellated zoospores. They usually live in aquatic environments, but some species live on land particularly in the soil or other moist habitats. Chytridiomycota are dependent on water to survive, however, they can be found dwelling within host organisms. They existed roughly 500 million years ago and are, usually, unicellular. Some chytrids are saprobes, or decomposers, while others may be harmful parasites. The chytrid *Batrachochytrium dendrobatidis* is what causes the infectious disease to amphibians known as Chytridiomycosis. The fungus is capable of causing sporadic deaths in some amphibian populations and even extinctions of whole species.

There have been many amphibian die-offs around the world. Many of them appear to be caused by a newly discovered fungus, *Batrachochytrium dendrobatidis* (Bd). Bd is a member of group of fungi called chytrids, which are usually found underwater growing on dead plant or animal matter. Bd is the only chytrid fungus known to feed on living vertebrates. It primarily affects the skin of amphibians, causing the disease known as amphibian chytridiomycosis.

Amphibians breathe and take up water through their skin. Chytridiomycosis interferes with these essential processes. Infected frogs may become lethargic, they are often unable to right themselves if turned upside down, and they may jump or swim in circles. They may rest with their legs outstretched, or sit with their rear end raised up. Sometimes their skin appears bloodshot or sloughs off excessively. They may also sit out in the hot sun, when healthy amphibians would seek shelter in shade or water.

In most places, almost as soon as Bd is detected at a new site, the frogs begin dying off. In a period of a few months, frog populations can go from abundant to nearly nonexistent. Most mass die-offs occur soon after frogs transform from tadpoles into frogs, leaving pond or stream shorelines littered with dead frogs. But in some places frogs may be infected even though die-offs are not observed

Thank You Patagonia! - February 6th , 2015

Thanks to you we have great gear!

From early mornings with the bird team to late nights with the Reptiles & Amphibians team, we will be trapping, recording, and doing research in the driest and warmest possible way.