



Student Activity

Frogs and Amphibians: Crisis and CSI **NATURE Science Education Series**

Vocabulary:

bellwethers, permeable, species collapse, translucent, pristine, metamorphosis, insidious, eradication, amphibian chytrid fungus, domino effect, stealthy, replicate, chemotherapy, invasive, metamorphose, deformities, parasites, pesticides, chloropicrin, methyl bromide, atrazine, immune systems, immuno-suppression, chemical runoff, carnivore, decimated, toxins, African clawed frog, invasive, female chromosome, reproductive anomalies

Pre-Viewing Discussion:

Have you ever gone frog hunting? What kinds of frogs have you been able to catch? Did you keep a frog as a pet or did you let the frog go? Were there lots of frogs where you went frog hunting?

Why are frogs such fascinating creatures?

Can you recall folktales, legends or fairy tales about frogs? What does this tell us about human beings and their relationship with frogs throughout the ages?

Are frogs amphibians? What characteristics do they share with all amphibians? Are there as many amphibians today as there were a hundred years ago? What makes you think so?

Post-Viewing Discussion:

Why are frogs a bellwether of the health of an environment? What is the significance of their position at the center of the food chain?

Why are biologists so concerned about Chytrid and its effect on frog populations? What are they doing to reverse the effects of Chytrid?

Do you think biologists will be able to control the spread of Chytrid? What other factors, besides the control of the disease, will influence whether or not frog populations can be restored?

What was causing the deformities in frog populations in California? What other causes had upset the balance in amphibian populations in the Salinas Valley?

Further Activities:

Further investigate the anatomy and physiology of frogs. If possible, observe or participate in the dissection of a frog.

Investigate the role of European research projects in studying amphibian diseases.

Find out how some South American frogs use mimicry to avoid predators. Your investigation should include the adaptations of poison dart frogs and their close relatives.

Further investigate the causes of frog deformities.