

# Frogs at Risk

**South America's frog populations are on the decline. That spells trouble for the environment.**

The mountains and thick forests of Ecuador, in South America, are home to 417 types of frogs and toads. Tiny red-eyed tree frogs hide inside flowers. Bumpy-skinned toads use their sticky tongues to catch mosquitoes and other prey. Colorful poison dart frogs rest on tree branches. These brightly colored frogs are packed with poison, which protects them from their enemies.

Now, many **species**, or types, of frogs and toads in Ecuador are at risk of dying out. According to a recent report by the group NatureServe, eight frogs have become **extinct**, or died out, in North and South America

in the last 100 years. "It's the same magnitude event as the extinction of the dinosaurs," says scientist Luis Coloma.



Leigh Haeger

*Ecuador is home to hundreds of types of frogs and toads. But now scientists are worrying about their health.*

## What Are Amphibians?

Salamanders, frogs, and toads are all **amphibians**. Amphibians are animals with backbones that spend part of their life in water and part on land. Frogs and toads lay jellylike eggs in water. The eggs hatch into tadpoles, which breathe through gills. As the tadpoles grow into frogs or toads, they develop lungs and live on land.

Like reptiles, such as lizards and snakes, amphibians are **cold-blooded**. That means their body temperature depends on the environment. Unlike reptiles, amphibians lack protective scales. Amphibians must live near water so that their skin stays moist.

## Vanishing Species

Over the last 50 years, many amphibian species have become extinct. Two of every five of the 3,046 species that live in North and South America are at risk of vanishing.

Why are these creatures in trouble? Their **habitat** is being destroyed as loggers cut down trees to make room for farms and roads. A habitat is a place in nature where a plant or an animal makes its home. Disease, weather changes, and pollution are other causes of the decline in amphibian populations.

Scientists are concerned about the decrease in the number of frogs. The health of frogs is closely linked to the health of the environment. "Amphibian extinction is an indicator of [a problem with the environment]," scientist Jonathan Campbell told *Weekly Reader*.

Because amphibians breathe through their skin, they easily absorb pollution. They are usually the first to disappear when the environment is under threat. As a result, some frogs are born with **deformed**, or wrongly shaped, body parts, such as extra legs and eyes. When frogs with strange body parts are found in an area, it is a clue that the environment is polluted or suffering.

## What Can Be Done?

Scientists are fighting to save amphibians. Some scientists believe that South America's poison dart frogs have chemicals in their body that can be used to treat diseases, such as cancer. The scientists want governments to pass laws that will reduce pollution and to create parks that protect the amphibians' habitat.

"Almost half of the extinctions are happening for unknown reasons," scientist Robert Kaplan told *Weekly Reader*. "Scientists have a lot of work to do, and quickly."

### Endangered Amphibians

Here are some of Ecuador's threatened frogs and toads.

- **Splendid leaf frogs** live in top layers of trees and come down to the ground only once a year, on a moonless night, to lay eggs.
- **Giant glass frogs** live in trees and have translucent, or almost see-through, skin. The creature's red heart is visible from the outside.
- **Harlequin toads** have colorful, smooth skin, often with spots or streaks of orange, red, yellow, blue, or green.

### Think Critically

Why is it important for scientists to know whether an area is polluted?

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. According to the passage, there has been a decrease in the number of frogs in Ecuador. Which of the following is *not* a cause of the drop in Ecuador's frog populations?

- A habitat loss
- B pollution
- C drought
- D disease

2. How does the author organize the information in this passage?

- A The author describes events in chronological order.
- B The author compares and contrasts reptiles and amphibians.
- C The author provides solutions to a historic problem.
- D The author describes the cause and effects of a problem affecting frogs.

3. The reader can conclude that if Ecuador's frog environment were healthy, then

- A frog populations would increase
- B frog populations would decrease further
- C reptile populations would also drop
- D reptile populations would become extinct

4. Read the following sentence from the passage: "The scientists want governments to pass laws that will **reduce** pollution and to create parks that protect the amphibians' habitat."

In this sentence, the word **reduce** means

- A lessen
- B increase
- C spread
- D share

5. What is the main idea of this passage?

- A Many different types of frogs live in South America.
- B Frogs are amphibians that breathe through their skin.
- C Scientists are working to save amphibians.
- D South America's frogs are dying out.

6. Look at the Endangered Amphibians box. From what did giant glass frogs get their name?

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7. What can be concluded from the scientist Luis Coloma's statement that the extinction of frogs is "the same magnitude event as the extinction of the dinosaurs?"

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8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

The eggs hatch into tadpoles \_\_\_\_\_ frogs lay the jellylike eggs in water.

- A before
- B instead
- C after
- D however

9. Answer the following questions based on the sentence below.

Today, scientists are studying why many frogs are vanishing, because they want to protect these creatures.

Who? scientists

Are doing what? \_\_\_\_\_

When? \_\_\_\_\_

Why? \_\_\_\_\_

10. **Vocabulary Word:** magnitude (*noun*): the great size or importance of something.

Use the vocabulary word in a sentence: \_\_\_\_\_

\_\_\_\_\_

## Teacher Guide and Answers

**Passage Reading Level:** Lexile 950

**Featured Text Structure:** Cause/Effect – the writer presents the reason an event happened and its results

**Passage Summary:** “Frogs at Risk” focuses on declining frog populations in the forests of Ecuador. The author describes what amphibians are, explains why frogs are in trouble, and provides suggestions for protecting frogs.

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6. Look at the Endangered Amphibians box. From what did giant glass frogs get their name?

**Suggested answer:** Giant glass frogs got their name because they have translucent, or almost see-through, skin. Their red hearts are visible from the outside.

7. What can be concluded from the scientist Luis Coloma's statement that the extinction of frogs is "the same magnitude event as the extinction of the dinosaurs?"

**Suggested answer:** Coloma's statement that the extinction of frogs is the same "magnitude" as the extinction of dinosaurs means that it is an event of equal importance. The extinction of dinosaurs was a major event in biological history, and the scientist is comparing the two events to establish the frog extinction's importance.

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Who? scientists

Are doing what? **studying why many frogs are vanishing**

When? **today**

Why? **because they want to protect these creatures**

10. **Vocabulary Word:** magnitude (*noun*): the great size or importance of something.

Use the vocabulary word in a sentence: answers may vary.