Eagle Bluff Environmental Learning Center

Amphibians

Class Summary

Quick Facts

Outside: 2 hours 10 minutes
Grade: 4-8th
Offered: April through mid-October
Physical Activity: 3/4 mile walk including a steep hill
Other: No special skills required

Concepts

• Characteristics • Change

• Bioindicator

Minnesota Academic Standards >

• Science • Math • Language Arts

Classroom Activities >

• **Pre-Activity:** *Missing Amphibian*
• **Post-Activity:** *Egg-cellent Experiment*

STEM Components

- **Observe / Study**
- **Classify**
- **Identify**
- **Examine**
- **Investigate**

IB Profiles

[X] **Inquirers**	[ ] **Open-minded**
[X] **Knowledgeable**	[X] **Caring**
[ ] **Thinkers**	[ ] **Risk-takers**
[ ] **Communicators**	[ ] **Balanced**
[X] **Principled**	[ ] **Reflective**

Revised Dec 2011

Outcomes, students will:

1. Be able to list the characteristics of all amphibians.
2. Describe the life cycle of a toad using props.
3. Use sounds to re-create frog behavior.
4. Use careful observations to identify different species of local amphibians.
5. Understand how counting amphibians can be a good way to measure the health of our environment.

Brief Synopsis:

The unique world of amphibians will be explored as students catch live specimens in our ponds, forests, and river. Participation in an amphibian life cycle activity and an amphibian calls game will help round out the visual identification portion of class. Emphasis is placed on the role of amphibians as bio-indicators, and how amphibians are clues that tell us about the health of the environment.

Outline:

Amphibian Characteristics (20 minutes)

Amphibians are a distinct type of animal, with physical characteristics that allow them to live their lives both in water and on land. Students will sort through a "grab bag" of items that represent physical characteristics of animals to select the ones that let amphibians live their double lives.

A Double Life (30 minutes)

Living a double life helps amphibians create less competition between the adults and their young, however, it does not eliminate the amount of dangers they encounter. Students will form teams to try to complete the life cycle of an American Toad, by placing their cards in the correct order without encountering the many dangers amphibians are threatened with in every stage of their life cycle; predators, pollution, disease, overcrowding or drying up.

Frog calls (20 minutes)

The most common time of year to hear amphibians calling is in the spring time when they are hurriedly trying to locate potential mates. Since each amphibian is only looking to find members of their same species, each species has its own distinct call. Students will learn to mimic the call of a local frog and try to locate other students making the same sounds.

Amphibian Hunt (1 hour 20 minutes)

Students will explore different habitats around Eagle Bluff in search of amphibians living in the area. They will have to search, capture, and identify which amphibians they find in each habitat. Because amphibians are good bio-indicators, tracking the types and number of amphibians in each habitat is an important way of monitoring the health of the area.