Creepy Crawly Creatures

Purpose: Many people would probably agree that reptiles and amphibians are creepy and crawly. Little do they know that they are actually agreeing with the Latin meaning of the word, "herp." Students will become herpetologists in this class, and explore and discover the often misunderstood and unfamiliar world of reptiles and amphibians.

Concepts:

- Amphibians and reptiles are classified according to different characteristics
- Both reptiles and amphibians are common in Minnesota
- Reptile and amphibian declines are a global phenomenon
- Amphibians are often considered bio-indicators of environmental health
- The scientific process can provide information useful for conservation and management decisions

Learning Outcomes: Students will be able to

- Taxonomically classify herps in all of their diversity
- Differentiate characteristics that are unique to reptiles, amphibians, or both
- Identify and describe at least five native species of herps found in MN
- Participate in a scientific investigation
- Analyze scientific information to make conservation decisions

Minnesota Academic Standards:

Science:

- 1.1.1.2 Recognize that describing things as accurately as possible is important in science because it enables people to compare their observations with those of others.
- 5.4.1.1.1 Describe how plant and animal structures and their functions provide an advantage for survival in a given natural system.
- 5.4.2.1.1 Describe a natural system in Minnesota, such as a wetland, prairie or garden, in terms of the relationships among its living and nonliving parts, as well as inputs and outputs.
- 7.4.3.1.3 Distinguish between characteristics of organisms that are inherited and those acquired through environmental influences.
- 7.4.3.2.3 Recognize that variation exists in every population and describe how a variation can help or hinder an organism's ability to survive.



Audubon Center of the North Woods

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CLASS LENGTH: K-3 – 1 ½ HR, 4-6 – 3 HR

AGES: K-6

SEASON: F, SP, SU

GROUP SIZE: 15-20

SAFETY: Light hiking along ACNW trails, offtrail exploration for herps

MATERIALS: pet boxes with wet paper towels, 2 ropes, bucket of sand with ping pong balls, plastic bag, cheerios in a bucket of water, CD player, frog calls CD, flagging tape, clipboards, Herp Plot Survey data sheets, pencils, IUCN herp sheet.

PRE-CLASS PREP: Gather four plastic pet boxes with lids (appropriate size for species). Line the bottom with a wet paper towel. Place one species of frog or toad into each box. Replace lid on box and leave in herp room until appropriate time during class. Display any posters, artifacts, and props in classroom (need plastic bag, paper towel, spray bottle with H20, bucket half full of water with cheerios, and bucket of sand with buried ping pong balls), buckets for collecting.

CLASS OUTLINE:

- I. Introduction (15 min)
- What reptiles and amphibians do we know? (15 min)
- III. Human Herp Venn-Diagram (30 min)
- IV. Herp Handling Stations (30 min)
- V. Frog Call Chorus Game (15 min)
- VI. A Scientific Investigation (60 min)
- VII. Reflection Concept Map (10-15 min)
- VIII. The Sending (5 min) A. Helping Herps
- IX. Cleanup (10 min)

RESIDENTIAL OUTDOOR ENVIRONMENTAL EDUCATION - 2008