



Peepers and Leapers

Purpose:

To become aware of the diverse populations of frogs in Kentucky.

Academic Expectations:

1.1,1.2,1.3,1.9,1.10,2.17,2.18, 2.19, 2.20, 2.21, 2.22, 2.25, 2.27, 2.29, 2.32,2.35,2.36,2.37,2.49,2.52,2.53,2.54, 3.55, 3.57, 3.58, 3.60, 3.61, 4.63, 4.64, 4.65, 4.66, 4.67, 5.68, 5.69, 5.70, 5.71, 5.72, 6.73, 6.74, 6.75.

Objectives

1. Compare 2 life cycles of different frog species
2. Distinguish various frog habitats
3. Recognize the ecological role of native frogs.

Vocabulary

amphibian: any of a class of vertebrates, including frogs, toads, newts, and salamanders that usually begin life in water as tadpoles with gills and later develop lungs; they are cold-blooded and scaleless.

aquatic: growing in, living in or frequenting water.

arboreal: living in trees or adapted for living in trees.

frogs: any of a large group of tailless, leaping amphibians with long powerful hind legs, short forelegs, a smooth skin and webbed feet.

salamander: any of a group of tailed amphibians related to frogs and toads, with soft, moist skin.

tadpoles: the larva of certain amphibians, as frogs and toads, having gills and a tail and living in water.

toads: any of a group of tailless leaping amphibians with rough, warty skin, that eats insects, and lives on moist land rather than in water, except during the breeding season.

Lab Sheets

1. Comparison of Life Cycles
2. Kentucky Frogs and Toads

Outcomes

Given the lists provided, draw and identify the various frogs and toads found in Kentucky using field guides.

Develop a predator list of native Kentucky animals which may depend upon frogs as a part of their diet.

Bobbitt's Corner

Spore Prints

Materials: Wild mushrooms freshly cut(supermarket kind will not work), paper, bowl.

Cut the cap off a mushroom. Put it down on paper. Cover the mushroom and paper with the bowl and leave overnite. The next day, you will have a spore print. To preserve it, spray carefully with a clear, acrylic spray.

LAB SHEET I

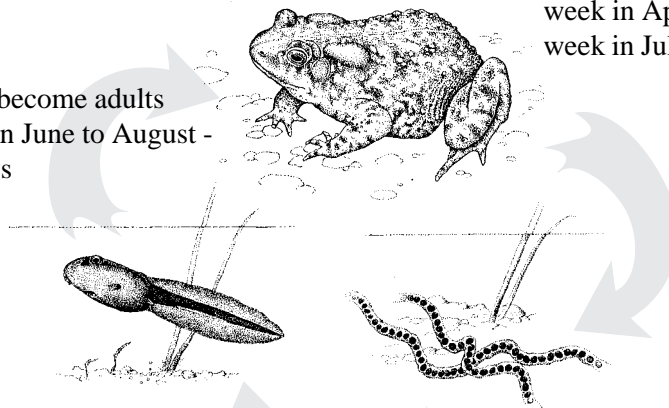
Comparison of the life cycles of the American Toad (*Bufo americanus*) and the Spring Peeper (*Hyla crucifer*)

American Toad *Bufo americanus*

Characteristics - known as the "hoptoad" of the Northeast, usually brown but females can vary in pattern. Only one or two large warts in each of the largest dark spots on back.

Breeding time - 1st week in April to last week in July

Tadpoles become adults
1st week in June to August -
50-65 days



Length of tadpole and color
1 ½ inches-dark almost black

Eggs - long spiral tubes of jelly,
found submerged in quiet pools,
4,000-8,000 eggs laid at a time

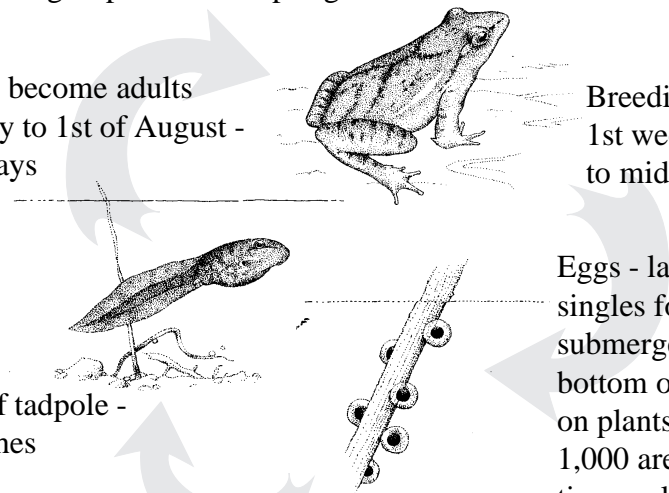
Hatching time-
egg to tadpole
3-12 days

Spring Peeper *Hyla crucifer*

Characteristics: small x on back, can be brown to greenish, found in woodlands, small ponds. Forms small choral groups heard in Spring.

Tadpoles become adults
1st of July to 1st of August -
90-100 days

Breeding time -
1st week April
to mid-June



Length of tadpole -
1 1/3 inches

Eggs - laid in
singles found
submerged, near
bottom of pond
on plants. 800-
1,000 are laid at a
time, color of
eggs are creamy
brown or black

Hatching time -
Egg to Tadpole -
7 - 10 days

Kentucky Frogs and Toads

LAB SHEET 2

There are 20 species of frogs and toads found in Kentucky. The following is a list compiled by the late Dr. Burt Monroe, Jr.

Eastern american toad
Fowler's toad
Eastern narrowmouth frog
Blanchard's cricket frog
Bird-voiced treefrog
Cope's gray treefrog
Green treefrog
Northern spring peeper
Barking treefrog
Gray treefrog
Mountain chorus frog
Upland chorus frog
Northern crawfish frog
Bullfrog
Green frog
Pickerel frog
Northern leopard frog
Southern leopard frog
Wood frog
Eastern spadefoot

Main differences between toads and frogs:

1. Toads have rough and bumpy skin, frogs are smooth and shiny.
2. Toads' eggs are laid in strings, frogs' eggs are laid in masses.
3. Toads hibernate in the ground, many frogs hibernate in mud, ponds and lakes.
4. Toads generally feed at night, most frogs feed during the day.