

WETLAND CRITTERS

Grade Level:

K– 6th Grade

Subject Areas:

Science

Duration:

20 – 30 minutes

Setting:

Classroom

Outdoors

SUMMARY:

Students role-play wetland animals traveling between nesting habitats and wintering grounds and are subject to hazards at either end of the path, as well as along the way.

BACKGROUND:

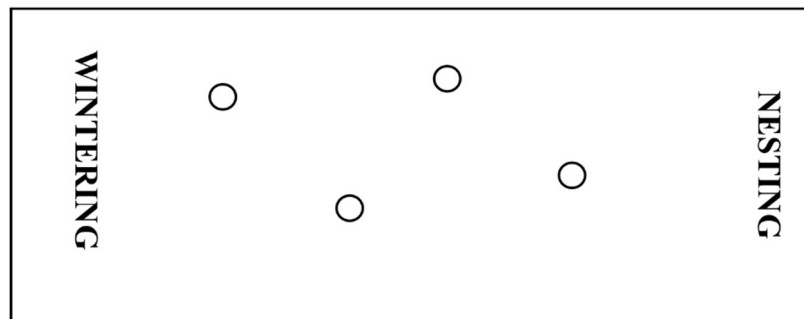
Economic development and urbanization are reducing the availability of natural wetlands. Many animals and plants depend on these wetlands for survival. Pollution, through pesticides effluents and soil erosion reduce the health and safety of wetlands. Natural conditions such as predators, weather, disease and fire also influence both the animals and their habitats and when combined with human impacts can be even more devastating.

MATERIALS:

- Large playing field
- 6 reusable markers (frisbees, hula-hoops, carpet pieces, etc...)
- Masks (optional)

PROCEDURE:

1. Select a large playing area about 20 meters in length. Place the Wintering marker on one end of the playing field and the Nesting marker at the other end of the playing field as shown below.



Place markers along the way that will represent a safe haven.

2. Explain to students that they are wetland animals and will travel between these two areas at your signal. Tell them the markers represents a safe area along the way, but they can only be in this area for 5 seconds.
3. During their travel have students imitate the animal they are by flapping their wings if they're a bird, hopping if they are a frog, make chomping motions with their arms if they're an alligator, etc.
4. Begin the activity with all students at the "Wintering" habitat. Announce the start of the first migration. Have students migrate slowly to the "Nesting" habitat. All students make it safely on the first try.
5. Before students migrate back to the wintering habitat, explain that a large wetland area has been drained to build a condominium. Pick three students to stand on the sidelines. Explain that these three animals have died as a result of loss of habitat due to the condominium. Give those three students nerf balls or beach balls to throw at the other students while they migrate. If hit, they are out of the game. The balls represent "fatal" factors that affect the animals while migrating, e.g., the weather, hunters, development, etc. Remember they can enter the "safe areas" (hula-hoops) and cannot be hit by a ball while migrating but they can only stay in it for 5 seconds, if they stay longer, they are automatically out.
6. Once they return to the "Wintering" habitat explain to the students that there has been severe damage done to the habitat due to an oil spill. Remove three more students to stand on the sidelines.
7. Have the remaining students migrate back towards the "Nesting" habitat.
8. Once students have made it to the "Nesting" habitat bring three or more students back in as surviving hatchlings.

9. Repeat the process of migrating back and forth for eight to ten migration cycles. Introduce some positive factors such as creating new wetlands, restoring damaged ones, putting up nest boxes, setting aside land for a park or conservancy, etc.

10. Ask students to summarize what they have learned about some of the factors that affect the “Wetland Critters”. List and discuss human-caused factors and environmental factors.

11. What kinds of things can and should be done to protect and restore wetland habitats?