

Migration Stations

Grades: 3-6

Objective: *To understand the importance of wetlands as resting and feeding stops for migratory birds.*

Background:

Wetlands provide resting and feeding areas for birds migrating from their southern wintering grounds to breeding grounds in the north. However, coastal development, the diversion of rivers, and pollution have destroyed and continue to destroy wetlands at an alarming rate. Thus, the number of areas where birds can rest and feed along their migratory routes is becoming limited.

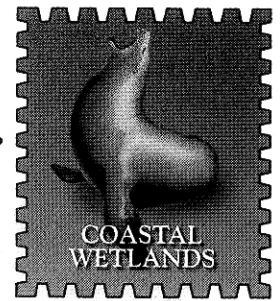
Procedures:

ROUND ONE

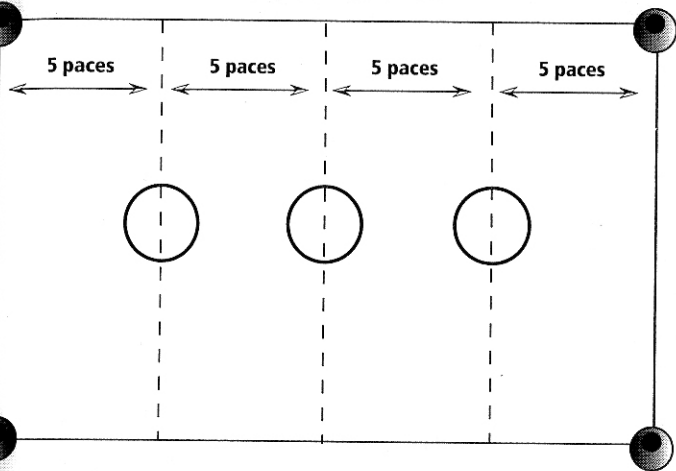
- 1 Set up the field: Use safety cones to mark off a large rectangle – approximately 35 feet long; place 3 rope circles from one end of the rectangle to the other, each five paces from the next; and lay at least 5 popsicle sticks per student in each rope circle.
- 2 Line up students at one end of the rectangle. Tell them that they are birds and that this end of the marked area is where they spend the winter.
- 3 Give each student 5 popsicle sticks and tell them that the sticks represent food that they need for energy.
- 4 Explain to students that they must migrate to their breeding grounds at the other end of the rectangle and that with each step they must drop one popsicle stick until they reach a rope circle, which represents a wetland.
- 5 Tell students that when they arrive at a wetland, they can pick up food; that is, they should take as many popsicle sticks as they think they will need to make it to the next wetland. *(Remind students that the popsicle sticks are food and that they, as birds, cannot eat a lot at one time.)*
- 6 Continue until all students reach the breeding grounds.
- 7 Discuss the importance of the wetlands for food and rest for migrating birds.

Materials:

- 4 safety cones or other apparatus to mark off an area
- 3 circles of rope, each approximately five feet in diameter
- Popsicle sticks, poker chips, index cards, or rocks (at least 20 times as many students)
- 3 cardboard boxes, each approximately three feet square
- Felt tip pens



Approximately 35 feet



ROUND TWO

- 1 Mark approximately one-quarter to one-third of the popsicle sticks with the letter "P."
- 2 Prepare field as in Round One, making sure that all the marked sticks are placed into the circles with the marked side facing down.
- 3 Place one cardboard box in each rope circle, covering up some of the popsicle sticks.
- 4 Line students up as in Round One. Explain that now houses have been built on portions of

the wetlands. Tell students that as they migrate to the breeding grounds, they may not take the popsicle sticks that are underneath the houses.

5 Have students proceed to the first wetland and pick up the food available. Ask students to examine the popsicle sticks that they picked up. Explain that if anyone has a stick marked with the letter "P," that means that food is polluted. Tell students with polluted food to take one step back out of the wetland.

6 Have students continue migrating until there is no longer any food available. Point out that this time not every student made it to the breeding grounds because of the lack of food found in the developed wetland and because of polluted food.

7 Review with students the difficulties that birds face as they migrate from wintering grounds to breeding grounds.

Learning Extensions:

- Have students visit a local wetland and use a field guide to identify the birds that you observe.
- Organize a classroom, school-wide, or community-wide wetland clean up and record the variety and quantity of debris found.

SIDE TRIP

ADMISSION

Worm Pudding

At first glance, wetlands may appear to be unattractive muddy areas. However, for many animals such as juvenile fish and migrating birds, wetlands are teeming with the food that they need to survive. Demonstrate this point for your students by making a wetland snack. Crumble some brownies into a bowl and mix with chocolate pudding to make a muddy texture. Stir in gummy worms and Swedish fish. Serve this wetland snack to your students, reminding them how wetlands contain an abundance of food that birds, fish, and other animals need to survive.