

# Wetlands Habitat Hopscotch

(Designed for all ages  
For groups of 1 to 25)

## Background:

Wetlands are an important factor to insure the success of bird migration. These habitat areas (Ponds, lakes, wetlands and marshes) are needed for food, shelter and water for many birds, insects and animals. Wetlands also play an important role in improving the quality of ground water. Without these habitat areas birds would not have the energy to make the migration trek from areas as far south as Panama in the case of the Belted Kingfisher. At the time of the European settlement of the United States there were 215 million acres of wetlands. Today there are less than 100 million. Besides providing habitats for waterfowl, wetlands help relieve flooding, filter pollutants and are an integral part of the biosphere.

## Purpose:

This activity is designed to increase the awareness for the need to protect wetlands as a habitat for migrating waterfowl. And the importance wetlands play in cleaning our water.

## Objectives:

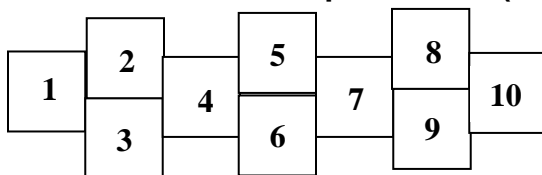
As a result of this activity, the participant will:

1. Become a bird migrating from Indiana to Florida. (Or use your state and a bird that migrates to and from it) They should understand the hardship for the birds when there are less wetlands. Each hopscotch area represents one trip to or from Florida (or designated state) for the bird.
2. The activity demonstrates the dependence of wetlands for migrating birds.
3. Human actions can impact the wetlands.

## Materials needed:

- 1) Sidewalk chalk if doing the activity outside on a sidewalk or parking lot.  
Draw hopscotch squares
- 2) Or hopscotch carpet or squares, or carpet squares (that won't slide)

Number each of the squares 1-10 (draw numbers to face students)



If using sidewalk chalk you can mark your state as # 1 and Florida as number 10. You can also find migration paths of birds that would be a benefit to show

the students prior to the activity and again at the end of the activity.

<http://www.birdnature.com/flyways.html> is a good site. Select an appropriate route that birds in your state would take.

3) Items to mark the areas during the activity so they have to “miss” that wetland (hopscotch square) on their journey. (Example: an X made from paper or just use chalk to mark an X on sidewalk – Any item that is flat.

#### Procedure:

1. Participants will stand in a line behind the hopscotch area. You may have to explain how to “hopscotch”. They will start at # 1, and travel through the 10 hopscotch squares. Have them practice how to “hopscotch” through the design.

2. Next tell the participants to make believe that they are birds that are going to fly to Florida (or state on your state’s flyway) for the winter and then return back to Indiana (or state of your choice). They are going to fly from one end of the hopscotch course to the other. Each square represents a wetland habitat along their migration route.

**Explain what a wetland is:** Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. Water saturation (hydrology) largely determines how the soil develops and the types of plant and animal communities living in and on the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils.

SOURCE: <http://www.epa.gov/owow/wetlands/vital/what.html>

**Explain what habitat is:** A habitat is a plant or animal's home. For people, habitat might stretch from their home (where they have water, cover and a place to raise young), to the supermarket (where they buy food). All the places people go to get what they need to survive can be considered part of their habitat.

Different living things have different needs for food, water and cover, so each kind of animal or plant has a specific kind of habitat.

SOURCE: [http://happeninhabitats.pwnet.org/what\\_is\\_habitat/index.php](http://happeninhabitats.pwnet.org/what_is_habitat/index.php)

**Explain what migration is:** Migration exhibits predictable movement of an animal from one location and climate to another location and climate. Typically these movements are linked to resource availability, seasonal changes.

SOURCE: <http://www.njaudubon.org/SectionOases/Whatismigration.aspx>

**Explain what a flyway is:** A flyway is a pathway used by migratory birds and insects. Birds tend to take predictable routes to get from the winter feeding grounds to the summer breeding grounds and back. Flyways usually occur along coastlines, major rivers and near mountains. Conservationists can help threatened bird and butterfly

populations by protecting habitat along major migratory flyways. There are four (4) major North American flyways that have been named the Atlantic, the Mississippi, the Central and the Pacific Flyways.

*SOURCE:* <http://www.nwf.org/Wildlife/Wildlife-Conservation/Understanding-Wildlife-Conservation/Flyways-and-Wildlife-Corridors.aspx>

Every participant will have the opportunity to "migrate" across the hopscotch course. Explain they are on a "Flyway – like a highway we use to travel in our cars. Birds follow a flyway.

Bird Migration Information.

<http://www.closetonature.com/outdoors/bird-migration.htm>

3. All participants should be successful at the first migration route.

2<sup>nd</sup> time through.

Now tell the students that someone wants to build a shopping center and you will need to wipe out two of the wetlands in order to build it. Put an X on two of the squares. They may not touch any of the squares that have an X in them when the hopscotch through again. If they do touch a marked square – they are out and they did not make it through the migration to the state.

3<sup>rd</sup> time through

After all of the students have had an opportunity to go through remove 2 more wetlands (marking with an X or item – total will be 4 squares) and these were removed because a new road was being built and have the students "migrate" again.

4<sup>th</sup> time through

After all of the students have had an opportunity to go through remove 2 more wetlands (marking with an X or item – total will be 6 squares) and these were removed because a new housing addition was being built and have the students "migrate" again.

5<sup>th</sup> time through

Discuss areas you might know of in your community or along a route they travel that might have been impacted because a wetland area was removed.

Discuss that there are wetland restoration projects and bring some of the wetland areas back, Remove 2 of the X's or items. Discuss some wetland restoration projects taking place. And how it improves the quality of water as well as a resting place for waterfowl on their migration path.

## Questions to ask the participants if time:

1. Explain how this activity represents migration. If you made copies of the migration paths, discuss the routes.
2. Why is it important to protect wetland areas? List benefits of improving water quality as well as migration paths for waterfowl, and home for other animals and insects.
3. How do migrating birds depend on wetlands during migration?
4. What happens if a wetland a bird once visited is removed? The bird won't know it ahead of time so it will make it harder to find food, water and shelter on its journey.

Other good activities for habitat:

Habitat Web Activity [http://happeninhabitats.pwnet.org/pdf/Habitat\\_Web\\_Activity.pdf](http://happeninhabitats.pwnet.org/pdf/Habitat_Web_Activity.pdf)

Habitat Lapsit

[http://projects.4hcurriculum.org/uploadedFiles/Projects/Afterschool\\_Agriculture/Habitat%20Sit.pdf](http://projects.4hcurriculum.org/uploadedFiles/Projects/Afterschool_Agriculture/Habitat%20Sit.pdf)

Oh Deer – Project WILD Activity

<http://wildlife.state.co.us/Education/TeacherResources/ProjectWild/OhDeer.htm>

This activity adapted from "Wetlands/Migration" by Stephen T. Ferguson;  
Williams/Cone, Topsham ME

## **MAKE YOUR OWN - HOPSCOTCH CARPET SQUARES**

Supplies:

- 10 carpet squares (approx. 10-inch x 12-inch) from sample books
- Rubber shelf liner cut into 10 squares that match size of carpet squares Or carpet non skid material
- Glue
- Acrylic paint and paintbrushes

Directions:

1. Glue rubber shelf liner pieces onto the back side of the carpet squares. This prevents the carpet squares from slipping around.
2. Paint numbers 1 - 10 on top of each of the squares. Let dry.
3. Set on floor in hopscotch pattern. Hop away!

### **Hopscotch Carpet (from Painted House-Debbie Travis)**

#### **Tools and Materials Needed**

Chalk

Masking tape

Latex paint (2 colors)

Artist's brush (1/2" flat brush)

Small carpet

#### **Getting Started**

1. Mask out the hopscotch design with tape.
2. Trace the masking tape design with chalk, onto the carpet.
3. Remove the masking tape.
4. Paint the chalked lines with acrylic paint. We chose red for the hopscotch lines. Run the brush back and forth over the line to allow the paint to seep into the carpet pile.
5. Allow the paint to dry.
6. Rub out chalk lines.
7. Paint in the numbers using another color of latex, we chose blue. Let dry.
8. Rubber shelf liner cut into match size of carpet. Or carpet non skid material

## SIDEWALK

On sidewalk or other surface outside.

Draw Hopscotch squares with sidewalk chalk or regular chalk.

As you do the activity you can have one set hopscotch squares and have one line – as you go through each year you add X spots that they can not hopscotch onto.