



## MIGRATION OF CANADA GEESE THROUGH MAINE

<b>5-E Lesson</b>	<b>MIGRATION OF CANADA GEESE THROUGH MAINE</b>
<b>Grade Span</b>	K-2
<b>Time Span</b>	A few minutes a day for walks to look for geese. Activity 30-45 minutes.
<b>Standards</b>	2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats
<b>Focus Question</b>	1. Why do birds migrate? 2. What is it about birds that make it easier for them to migrate better than other animals?
<b>Overview</b>	
<b>Objectives</b>	1. Students will know what bird migration is. 2. Students will know why birds migrate. 3. Students will know how birds find their way on migrations. 4. Students will be able to name some of the hazards birds find on their migrations. 5. Students will learn the importance of protecting our wetlands and natural environments
<b>Materials Needed</b>	<ul style="list-style-type: none"> <li>● Chalk</li> <li>● Rope</li> <li>● sticks or materials for building a hopscotch layout</li> <li>● Notebook</li> </ul>



<b>Vocabulary</b>	<p>Migration - Bird migration is described as the regular, recurrent, seasonal movement of bird populations from one geographic location to another and back again. Birds require specific environmental resources for reproduction, and adequate food for the young is a primary determinant to where and when a species will breed. The most common pattern involves flying north in the spring to breed and returning in the fall to wintering grounds in warmer regions in the south.</p>
<b>Teacher Prep</b>	<p>Before Activity-spend a few days taking walks on the school grounds during migration time to see if you can view geese migrating. Have students find the best places on the school grounds to view migration.</p> <p>WETLANDS/MIGRATION HOPSCOTCH AUTHOR: Stephen T. Ferguson Williams/Cone, Topsham ME</p> <ul style="list-style-type: none"><li>• <a href="https://seagrant.psu.edu/file/1446/download?token=z6d1ysWr">https://seagrant.psu.edu/file/1446/download?token=z6d1ysWr</a></li><li>• Why Birds Migrate</li><li>• <a href="https://study.com/academy/lesson/bird-migration-lesson-for-kids.html">https://study.com/academy/lesson/bird-migration-lesson-for-kids.html</a></li></ul> <p>More useful websites for Canadian Geese Info</p> <ul style="list-style-type: none"><li>• <a href="https://americanexpedition.us/learn-about-wildlife/canada-goose-facts-information-photos/">https://americanexpedition.us/learn-about-wildlife/canada-goose-facts-information-photos/</a></li><li>• <a href="https://www.maine.gov/ifw/fish-wildlife/wildlife/wildlife-human-issues/living-with-wildlife/geese.html">https://www.maine.gov/ifw/fish-wildlife/wildlife/wildlife-human-issues/living-with-wildlife/geese.html</a></li></ul>



## Background

Many bird populations migrate, and the most common pattern involves flying north in the spring to breed in the temperate or Arctic summer, then returning in the fall to wintering grounds in warmer regions to the south. The longer days of the northern summer provide greater opportunities for breeding birds to feed their young. Many northern-breeding ducks, geese, and swans also are migrants, but need only to move from their northern breeding grounds far enough south to escape frozen waters.

**\*Lesson info can be given in classroom or outside in the area for the activity- students should have a handout with info or the can be given prior to the activity.**

### **What is Migration?**

Bird migration is described as the regular, recurrent, seasonal movement of bird populations from one geographic location to another and back again. Birds require specific environmental resources for reproduction, and adequate food for the young is a primary determinant to where and when a species will breed. The most common pattern involves flying north in the spring to breed and returning in the fall to wintering grounds in warmer regions in the south.

The body structure and physiology of birds, unlike other animals, makes it possible for them to seek environments most favorable to their needs at different times of the year. Their ability to fly, their lungs and air sacks, and their metabolic abilities all contribute to this facility.



## Procedure

### Engage:

Before Activity-spend a few days taking walks on the school grounds during migration time to see if you can view geese migrating. Have students find the best places on the school grounds to view migration.

### Explore:

Best to be done in an open field/parking area

1. Teacher will draw or use materials (stick or ropes) to mark an area in the grass to mimic a large hopscotch course. Each square should be 3'X 3' with a total of 10 squares
2. Have students line up at the beginning of the course. Tell the students that they will be birds starting the migration north. Each square represents a different wetland along their path northward to breed. The students do not need to step on every square but they must not step out of the course. All students should be successful on their first migration.
3. Tell the students you are a developer that will be destroying two of the wetlands to build new apartment buildings in the area. Put an X or somehow close one of the "wetlands". Tell the students to make the migration again and that they must not step in the destroyed areas. If they do, they die and will no longer be able to participate in the migration. After all students have run through, mark off two more squares and repeat. Repeat until all students fail to make the migration.

### Explanation:

At the end of the activity ask the students the following questions:

- How does this game represent migration?
- Why did some birds die earlier than others?
- Why did some birds die even though there were some wetlands remaining?
- Why is it important to preserve wetlands in every state?
- How do migrating birds depend on wetlands?

### Extension:

To continue learning students can be given the topics below to research or it can be given in a lesson format in the classroom

#### 1. *Why do birds migrate?*

Birds migrate for several reasons. **Migration** is a necessary part of the survival of many types of birds. During the winter, there is not enough food to sustain the many bird populations that depend on a constant supply of a variety of foods. This lets birds know it is time to move on, or migrate, to another area that can meet their needs. During the winter, birds migrate south, and in the spring, they return to the north where the weather has changed from cold to warm. The warmer weather in the spring means there will now be enough food for the birds.

#### 2. *How do birds find their way on migration?*

The secrets of their amazing navigational skills aren't fully understood, partly because birds combine several different types of senses when they navigate. Birds can get compass information from the sun, the stars, and by sensing the earth's magnetic field. They also get information from the position of the setting sun and from landmarks seen during the day.

Canadian geese often migrate as family units with several generations making up the group. They can use landmarks from previous flights to help with their navigation.

More useful websites for Canadian Geese Info



	<p><a href="https://americanexpedition.us/learn-about-wildlife/canada-goose-facts-information-photos/">https://americanexpedition.us/learn-about-wildlife/canada-goose-facts-information-photos/</a> <a href="https://www.maine.gov/ifw/fish-wildlife/wildlife/wildlife-human-issues/living-with-wildlife/geese.html">https://www.maine.gov/ifw/fish-wildlife/wildlife/wildlife-human-issues/living-with-wildlife/geese.html</a></p>
<b>Wrap-Up</b>	<p><b>Evaluate:</b><i>It's important to figure out what students understand after the first four E's. Tests and quizzes are one option, but there are many others.</i></p> <p><b>Formative Assessment:</b> <b>Summative Assessment:</b></p> <ul style="list-style-type: none"><li>• How does this game represent migration?</li><li>• Why did some birds die earlier than others?</li><li>• Why did some birds die even though there were some wetlands remaining?</li><li>• Why is it important to preserve wetlands in every state?</li><li>• How do migrating birds depend on wetlands?</li></ul>