

WINGS BIRDSAFE CLASSROOM MIGRATION GAME

Adapted from New Jersey Audubon Society, www.njaudubon.org

Grade Level(s): Grades 3-5

Duration: 60 minutes

Description: Students will play a game in which they will imagine they are birds migrating through or to Wisconsin. This activity requires a space large enough for students to move around sufficiently such as a wide hallway, gym, multipurpose room or outdoors.

Goals: To gain a sense of a bird's journey through migration and the obstacles they encounter.

Objectives: The students will:

- Understand the basic reasons for bird migration
- Understand that birds encounter obstacles during their migratory journey both natural and those created by humans
- Develop strategies to help migratory birds

Wisconsin State Performance Standards:

Science

F.4.1 Discover* how each organism meets its basic needs for water, nutrients, protection, and energy* in order to survive

F.4.4 Using the science themes*, develop explanations* for the connections among living and non-living things in various environments

Materials:

- 24 Migration Cards (text attached)
- 10 Wild Cards (text attached)
- 34, 3X5 index cards
- Glue stick, tape or stapler
- 24 clip-on clothespins (optional)
- Felt-tipped marker

Teacher Preparation:

1. Prepare the Migration Cards. Print out the text for the cards (attached) and cut and attach each to its own index card. Write the card number (1-24) on the other side of the index card with marker.
2. Clip a clothespin to each card to prevent the cards from blowing away (if the activity is done outside). These cards will be laid out to form a simulated migration path.
3. Prepare the Wild Cards. Print out the text for the cards and cut and attach each to its own index card. Write "Wild" on the back of each card with a felt-tipped marker. Divide Wild Cards into two piles and clip each pile together with a clothespin.

4. Find an appropriate location to play the game either indoors or outdoors. You will need approximately 100 feet of clear pathway for the students to follow with separate starting and ending points. The path does not have to be linear.
5. Prepare the Migration Pathway (just before the game is about to begin). Place the Migration Cards face-down in numbered, sequential order along the pathway, approximately four feet apart.
6. Create two Wild Card stations by setting a Wild Card pile off to the side of the pathway in two separate locations.

Motivational Activity:

Discuss with the students what they need to make sure a journey goes smoothly. For instance, if the student's family were to go on a trip to Florida, what kinds of things would they need to get there safely and successfully? (Good weather, a car or airplane in good condition, fuel, money, food, suitcase, safe places to sleep and rest along the way, etc.)

What are some things that might make the trip more difficult? (Flat tire, car or aircraft breakdown, run out of gas, get into an accident, get sick, no place to eat or sleep, money lost or stolen)

Discuss how these things are similar to what migrating birds need to have successful migrations. Talk about what kinds of things birds need, i.e. fuel (food), a place to sleep (habitat), good weather, they need to be in good physical condition, avoid accidents, predators and collisions with tall buildings, windows, etc.

Procedure:

1. Tell students that they are going to pretend to be migrating birds by playing a migration game.
 2. Depending on the number of students, divide them into four "flocks" of two, three or four students each. Assign each flock a number from one to four.
 3. Show the students each of the Migrant Bird Descriptions. Briefly talk about each of the species' descriptions. Have the students select one of the species they would like their flock to role-play.
 4. Once they have decided on a flock species, have each flock agree on what their starting location and final destination will be, depending on their selected species. For example, if they have decided to be Red-eyed Vireos, have them decide if they will be starting in Wisconsin and ending in South America, or vice-versa.
 5. Explain the rules of the game:
 - a. Each flock is to pick up their migration card, read it, replace it face down on the pathway and perform the actions on the card by role-playing as if they were the migrant bird. Encourage students to take turns reading card instructions so everyone in the flock has a chance.
 - b. Show students where the Wild Card stations are located along the Migration Pathway. If their flock is instructed to pick a Wild Card, the whole flock must fly to one of the Wild Card stations together.
 - c. Explain that each flock will face different obstacles during their migration and that some flocks may not make it all the way. If your flock picks a card that ends your migration, students should take that card and sit down on the sidelines and wait quietly until the rest of the class finishes.
 - d. If a flock lands on a space that another group is occupying, that flock should draw a Wild Card from one of the Wild Card stations.
- Note: Make sure to watch that Migration Cards are kept in order along the path.*
6. Start the game by sending each flock onto the Migration Pathway: Flock 1 to Migration Card #1, Flock 2 to Migration Card #2, and so on. Start your migration!
 7. When flocks* have reached the finish, assemble the whole group for discussion. *Other than those who seem to be stuck in a holding pattern, unable to reach the finish line.

Closure and Assessment:

1. What obstacles did you encounter as birds? Have students describe specific events. Which of the obstacles were created by people? (pollution, windows, bright city lights) Which were natural? (hawks, cold spells, storms)
2. What things helped you complete your migration? Which of these were created by people? (bird feeders, wildlife refuges, wildlife hospitals) Which were natural? (good winds, plentiful food)
3. Why didn't you all finish at the same time? (held back by obstacles or advanced by helpful things) Why didn't some flocks finish at all? (covered in oil, shot, collided with windows)
4. In the wild, what do you think happens to the birds that were covered in oil, shot, or injured? Are they likely to survive? Why or why not? (they would very likely perish)
5. What kinds of habitats would birds use as they migrate through Wisconsin? (marshes, fields, coastal regions, yards and gardens, parks, ponds, streams, rivers, woodlands)
6. What should people consider when altering a natural habitat by building and development? (How the land is currently being used by wildlife; what impact the changes will have on wildlife; and how they can plan ahead to make any necessary development "wildlife-friendly")
7. What are some things that we can do to help migrating birds? (provide bird feeders and keep them stocked, use natural landscaping, help keep birds from colliding with our windows, turn off the lights in tall buildings during migration, create or restore "green-spaces" for birds).
8. Ask the students what they think they can do to keep birds from colliding with windows at their homes and school. (Window decals or stenciled designs on the glass, netting in front of the windows, close drapes on windows that align and let birds see through a building; in tall apartment buildings, close drapes at night during bird migrations. See <http://www.wihumane.org/wildlife/wings/homecollisions.aspx>).

Migration Cards, Wild Cards, and Player Bird Cards on following pages.

Migration Cards

Photocopy and mount on 3x5 index cards.

1

Watch out!! There's a radio tower ahead. Don't hit it!

Swerve around the tower as you fly ahead 3 spaces.

2

Many seeds, berries and insects are available in a yard with a wildlife garden.

Smack your bill (lips) 4 times and fly ahead 4 spaces.

3

You land by a polluted pond and become sick from drinking the water.

Sit down, hold your stomach and groan 5 times, then fly ahead 1 space.

4

Watch out for the Cooper's Hawk!

Either freeze, count to 10, and then cautiously fly ahead 2 spaces, or make a break for it and take a Wild Card!

5

You are almost caught by a cat and sprain your wing in the escape.

Get it back in shape: Say "Ouch!" and then slowly swing your left arm around 10 times. Take a Wild Card.

6

You are catching insects near a road when you are almost hit by a car! You are not badly hurt, but you are sore and dazed.

Sit down and moan 5 times and then SLOWLY fly ahead 1 space.

7 You hit a window and are stunned. You feel weak and have a terrible headache. A kind person takes you to a wildlife rehabilitator for care.

Sit down, close your eyes and rest. Count to 10, then fly ahead 1 space.

8 You find a bird feeder in a backyard.

If you can eat seeds, enjoy the free food! Pretend to eat 10 seeds, one at a time, and then move ahead 5 spaces.

If you are not a seed-eater, either fly ahead 1 space OR take a Wild Card.

9 It's raining, it's pouring, and you can't fly far in this rainstorm.

Flap 10 times in place, flying against the storm, then either fly ahead 1 space or take a Wild Card.

10 A shopping center has been built on your favorite migration resting site.

Fly around in 3 wide circles, looking for a place to rest and feed. Then either take a Wild Card and hope it takes you to some food, or because you are tired and hungry, fly ahead only 1 space.

11 While migrating at night, you become confused by bright lights in a big city.

Fly in a circle 5 times, then either fly ahead 1 space out of the city or take a Wild Card.

12 You land in a park and find lots of food to eat.

Say "Yum!" Rub your stomach 10 times and fly ahead 5 spaces.

13

You are able to fly a long distance in one day because of good tail winds.

Fly ahead 5 spaces or take a Wild Card.

14 You get covered with oil from a spill and you can't fly or keep warm.

If you have a Wildlife Hospital Card, use it to get clean! Place it on the bottom of the Wild Card deck and draw another card.

If you don't have a Wildlife Hospital Card, your migration is over. Take this card, sit down with your flock and wait for the others to finish the game.

15

Strong winds from the wrong direction keep you from migrating very far.

Fly ahead only 1 space.

16

A farmer used too much bug spray on his field. It makes you feel sick.

Sit down, moan and hold your stomach for 15 seconds, then fly ahead 1 space.

17

You just collided with a window on a house.

Hold your head, act like you are dizzy; count to 10 out loud and take a Wild Card.

18

You have been shot with a BB gun and now you can't fly. Say "Ow! Ow!"

If you have a Wildlife Hospital Card, use it to get help! Place it on the bottom of the Wild Card deck and draw another card.

If you don't have a Wildlife Hospital Card, your migration is over. Take this card, sit down with your flock and wait for the others to finish the game.

19

Beautiful, warm weather and a good tail wind help you fly.

Fly ahead 4 spaces.

20

You land in a wildlife refuge.

Sit down, say "Delicious," and pretend to eat 10 caterpillars, then fly to your final destination!

21

Oops! An unexpected freeze kills off all the insects that you usually eat.

Fly around in 3 big circles to try to find more food and then either fly ahead 1 space or take a Wild Card.

22 You are attracted to the lights from a tall building. You hit a window and now you can't fly.

If you have a Wildlife Hospital Card, use it to get help! Place it at the bottom of the Wild Card deck and draw another card.

If you don't have a Wildlife Hospital Card, your migration is over. Take this card, sit down with your flock and wait for the others to finish the game.

23

Strong winds along the lakeshore blow you off course.

Puff and pant like you are tired as you fly backwards 2 spaces and take a Wild Card.

24

Enjoy resting and feeding in a park.

Sit down and pretend to eat 10 delicious bugs. Because you are so strong after resting and eating, you fly to your final destination!

Wild Cards

Photocopy and mount on 3x5 index cards.

Fly ahead three spaces

(Place this card on the bottom of the Wild Card deck)

Fly ahead five spaces!

(Place this card on the bottom of the Wild Card deck)

Fly backward three spaces

If you can't fly backwards, place this card on the bottom of the deck and take another Wild Card

Wildlife Hospital

Save this card in case you become injured!
Take this card with you and move ahead one space.

Fly ahead four spaces

(Place this card on the bottom of the Wild Card deck)

Fly ahead one space

(Place this card on the bottom of the Wild Card deck)

Wildlife Hospital

Save this card in case you become injured! Take this card with you and move ahead one space.

Fly ahead two spaces

(Place this card on the bottom of the Wild Card deck)

Fly backward two spaces

If you can't fly backwards, place this card on the bottom of the deck and take another Wild Card

Wildlife Hospital

Save this card in case you become injured!
Take this card with you and move ahead one space.

Dendroica fusca

Blackburnian Warbler



+1



+3



+1



- 4



Length
4.5 inches

Wingspan
8 inches

Weight
0.5 oz



Diet

Insects and spiders; occasionally small fruits and berries



Breeding Habitat and Summer Range

Mature coniferous and mixed coniferous/deciduous forests; Central and eastern Canada, northeastern U.S., Appalachian Mountains



Wintering Range

Parts of Venezuela, Columbia and Peru in South America (Milwaukee to Lima, Peru =3853 miles)



Migration Threats

Window collisions and collisions with communication towers, habitat loss on wintering grounds, habitat loss and fragmentation on breeding grounds, pesticides, predators

- Only North American warbler with an orange throat.
- Uses spiderwebs to hold nest to tree branches.
- "*Dendroica*" means: "lover of trees".

Vireo olivaceus

Red-eyed Vireo



+2



+3



+1



- 4



Length
6 inches

Wingspan
10 inches

Weight
0.6 oz



Diet

Insects and spiders, fruits



Breeding Habitat and Summer Range

Deciduous and mixed forests, parks with large trees;
Canada, northern and eastern U.S.



Wintering Range

Amazon Basin (Brazil, Venezuela, Colombia, Bolivia)
(Winnipeg, Canada to Manaus, Brazil= 4266 miles)



Migration Threats

Window collisions and collisions with communication towers,
habitat loss and fragmentation on breeding grounds, misuse
of pesticides, predators




- Nicknamed "preacher bird" because it sings continuously from dawn until dusk.
- The red eye is only visible from close range
- Brown-headed Cowbirds often parasitize their nests.



Zonotrichia albicollis




White-throated Sparrow



+3   

+3   

+3   

- 4    



Length

6.75 inches

Wingspan

9 inches

Weight

0.91 oz



Diet

Seeds, fruit, insects



Breeding Habitat and Summer Range

Mixed and coniferous forests with low, dense vegetation;
Canada and northern Midwest and Northeastern US



Wintering Range

Southeastern U.S. and Coastal California
(Winnipeg, Canada to Atlanta, Georgia =1290 miles)



Migration Threats

Window collisions and collisions with communication towers,
habitat loss on breeding grounds, pesticides, predators

- Comes in two color "versions" ("morphs"), those with tan head stripes and those with white head stripes, like the bird pictured above. They almost always mate with the opposite color morph.

- Song is said to sound like, "Old Sam Pea-bod-ee"

- Sometimes spend parts of the winter as far north as Wisconsin.

Wilsonia canadensis

Canada Warbler



+1



+3



+2



- 4



Length

5.25 inches

Wingspan

8 inches

Weight

0.36 oz



Diet

Insects and spiders



Breeding Habitat and Summer Range

Moist, mixed woods with well-developed understory, often near water. Southern Canada, Northeast and northern Midwestern US; Allegheny Mountains



Wintering Range

Central and South America from Costa Rica to Venezuela (Milwaukee to Venezuela=2754 miles)



Migration Threats

Window collisions and collisions with communication towers, habitat loss on wintering grounds, habitat fragmentation on breeding grounds, predators

- One of the last warblers to arrive in the north and one of the first to leave in the fall.

- Nicknamed "The Necklaced Warbler" due to its distinct black markings on the upper breast.

Junco hyemalis

Dark-eyed Junco



Length	Wingspan	Weight
6.25 inches	9.25 inches	0.67 oz



Diet

Seeds, insects and spiders



Breeding Habitat and Summer Range

Various forest types, often in conifers.

Alaska, Canada, New England, and parts of western U.S.



Wintering Range

Winters across U.S. as far south as Mexico; flock together in open woods, brushy edges, suburbs (Canada to Mobile, Alabama = 1406 miles)



Migration Threats

Window collisions and collisions with communication towers; predators

- This bird prefers cool weather! Year-round resident in northern Wisconsin, only seen in winter in southern Wisconsin.
- The oldest recorded junco was 11 years old.
- Most common winter visitor to bird feeders in North America.