

### **Traveling Birds**

**Post-visit activity** connection to Cave and Canopy Climber

**Grade level: 3<sup>rd</sup> grade** NGSS 3-LS2-1, 3-LS3-2, 3-LS4-3 CCSS RI.3.3, RI.3.7, SL.3.4, MP.4, 3.MD.B.4

**Concepts:** migration of birds

**Materials needed:**

1. Either a large map of the world for whole class participation or individual world maps for group work
2. Various colors of yarn
3. Glue

**Procedure:**

1. Read the book, "On the Wing: American Birds in Migration" by Carol Lerner or another book about migration of birds to the class.
2. Discuss that birds migrate to and from many locations in the world.
3. Have the students select a migratory bird from the following list or others you select: Artic Tern, Albatross, Northern Pintail, Finch, Western Sandpiper, Cedar Waxwing, American Robin, American Goldfinch, Ruby-throated Hummingbird, Eastern Bluebird, Barn Swallow, Gray Catbird, Dark Eyed Junco.
4. Have the students research the migration path of the bird they have selected.
5. Have the students glue their yarn on the map showing where the bird starts and where they go when they migrate.
6. The students could further their research to discover if their bird is a nocturnal or daytime migration bird, why do the birds travel in flocks rather than alone, do they have a specialized formation pattern, what do they do for feeding while migrating, and what do they do for sleep.
7. Have the students present their findings in a variety of methods that the students decide for themselves that will best fit their information.
8. There are many good video clips of migratory birds available to explore at <http://cams.allaboutbirds.org/>.

**What's Happening:**

When you think about migration, the first thing that comes to mind is probably watching large flocks of geese flying in a V formation. Birds respond to changes in their environment and move from place to place to meet their needs. When geese migrate in the spring, they fly north where there is more space to breed. In the fall, when the weather gets colder and the food gets scarce, geese fly south. Many other species of birds migrate as well. Some birds fly just a short distance, from high in the mountains to the lower mountainsides. Some species fly over one or more states, and some even fly to other countries or across large bodies of water, thousands of miles away! How do they do this?

One current theory is that the Earth's magnetic poles help to guide the birds in their migrations, as though the birds have a compass or magnet in their heads. Other ideas are that birds can orient themselves by the use of landmarks such as mountains, large rivers, or coastlines. In addition, wind direction over the seas, and the location of the Sun, Moon and stars may help.

**Book List:**

1. How Do Birds Find Their Way by Roma Gans
2. Red Knot: A Shorebird Incredible Journey by Nancy Carol Willis
3. Flight of the Golden Plover by Debbie S. Miller
4. Moonbird: A Year on the Wind with the Great Survivor B95 by Phillip Hoose

**Extension Activities:**

1. Many stamps are to honor various birds. Design a stamp based upon the bird they researched.
2. Write a story or poem that features their bird.
3. Write a news report that appears on the air over the time of the migration giving weekly update of what is happening to the bird as it travels.

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