

## **What is Migration?**

Birds are built for mobility and movement. Many birds participate in annual migrations that can take them across states or even across the countries. A migration describes the seasonal movement of animals.

## **Why Do Animals Migrate?**

Animals migrate for several reasons. Changes in weather, mating, and food resources are all factors that have influenced migration patterns. Many scientists believe that migratory behaviors are genetically programmed in many animals, such as birds. Changes in day length over seasons can signal to birds it is time to migrate.

## **How Do Birds Know Where to Go?**

Sometimes bird migrations cover *thousands* of miles. The Arctic Tern will travel upwards of 8,000 miles between their northern breeding grounds and their southern oceans. Birds use celestial cues and landmarks to complete their routes.

Common signals include: The position of the sun, patterns in stars, environmental conditions, and even detection of magnetic fields (stronger near the poles, weaker by the equator) to orient themselves.

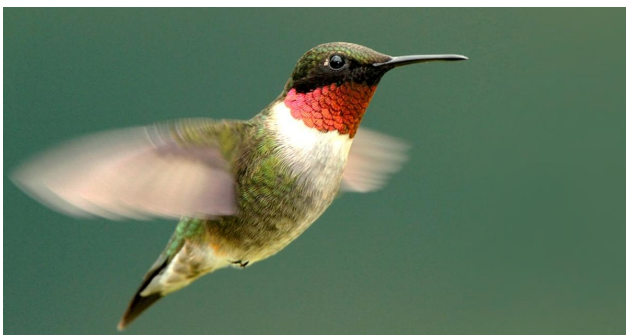
**Today, we will look at 4 North American bird migratory flyways!**



**Yellow-Rumped Warbler**



**Painted Bunting**



**Ruby-Throated Hummingbird**



**Canada Goose**

**Yellow-Rumped Warbler**

**Painted Bunting**

**Ruby-Throated Hummingbird**

**Canada Goose**

These North American birds migrate south for the winter to find food resources year-round. They also use these pathways to mate, usually in the Spring months- that way, baby birds are born when there is a lot of food resources

Using the map below, fill out the Life Cycle Wheel using your favorite of the 4 birds listed. Each bird is color coded to match their migration flyways through North America.



# The At-Home Migration Simulation

Migrations are incredibly dangerous. Animals must travel far distances, using a lot of energy, and be aware of potential danger at all time.

In this game, you will designate **10 checkpoints** around your home to simulate a bird migration. Can you make it to the end?

**Begin your migration by walking to your first checkpoint.**

**Checkpoint 1:** You come across powerlines, to avoid hitting them, crawl on your hands and knees to the next station

**Checkpoint 2:** You have come across a healthy habitat with lots of food, like berries! Rub your tummy and say “YUM” before continuing to the next checkpoint

**Checkpoint 3:** Watch out for the predator!! Freeze for 30 seconds to hide from the threat before continuing to the next station.

**Checkpoint 4:** A ornithologist has caught you for scientific research and band your leg. Tie a string or bandana around your ankle before moving to the next station.

**Checkpoint 5:** A scary storm makes you take cover, hide quickly for 30 seconds until the storm passes.

**Checkpoint 6:** The glass on those buildings were cleaned really well. You accidentally fly into a window and hurt your head. Hold your head and count for 30 seconds.

**Checkpoint 7:** Today’s wind is blowing in your favor and you are able to fly really fast to the next destination, quickly run to your next checkpoint.

**Checkpoint 8:** You come across your favorite backyard, but the owners got a cat! To avoid attracting the cat’s attention, sneak quietly, and tip toe to the next checkpoint.

**Checkpoint 9:** You sprain your wing from the extra-long fly day you had yesterday. Hop on one foot to your final station

**Checkpoint 10:** REST! You have completed your annual migration and may now mingle with bird friends ☺



# Life Cycle Wheel



Use the example below to fill out your bird migration wheel.

- 1) Where do your birds start their journey?
- 2) How far does your bird migrate?
- 3) Where does your bird spend harsh winter months?



Let your creativity flow!



