

Next Stop, Migration Station

**Grade Level, TEKS Science Objective:**

Science, Grades K-5, TEKS: 2, 3, 4, 5, 9 & 10

**Topic:** Migratory Birds

**Theme:** Human impacts are making it more difficult for migratory birds to complete their long and dangerous migrations, which could cause us to lose many cool and important species.

**Learning Objectives:** Know what migration is and why some birds do it, name at least 3 dangers migratory birds face (at least one man made one), name one thing they can do to help migratory birds

**Materials:** dice, numbered scenarios sheets, coloring utensils, bird cut-outs, construction paper strips, glue sticks

*optional use of iPad*: migration maps, pictures of migratory birds

**Introduction:** Presenters introduce themselves and the U.S Fish and Wildlife Service/National Wildlife Refuge System. Explain briefly what a National Wildlife Refuge is, what they can do there, where the nearest one to them is located. Explain how the program works, such as holding the boundary sign to talk, brief discussion, activity, and a take home. Ensure everyone will get a chance to talk and to always be respectful of whoever has the sign.

**Introductory Question:** What is the furthest you have traveled for a trip, did you make any stops, and why?

**Transition:** Migratory birds must travel about 600 miles twice a year!  Some birds migrate hundreds, if not thousands, of miles one way. What is migration? It’s when animals systematically travel really far from one location to another. Why do you think they do this?

**Content:** Birds migrate for food, nesting, and for more pleasurable weather. In the winter, they migrate south where there they can still find insects or berries to eat. In the spring they migrate north for better nesting conditions and for a fresh food source.

**Transition:** Can you imagine having to walk 600 miles twice a year? Would it be dangerous? What are some obstacles you think you would have if you did?

**Content:** Migratory birds must face a lot of dangers/obstacles during migration. Some obstacles are natural, some are man-made. What do you think some of these dangers are? Feral cats/predators, cars, loss of habitat, bad weather, windows, pesticides, etc. Be sure to talk about loss of habitat.

**Transition:** What are some things that might help make migration easier and/or less dangerous? Food, water, place to sleep, plenty of trees, riparian areas.

**Content:** Riparian areas are important because they provide all the thing’s birds need to have a safe migration. Does anyone know what a riparian area is? A riparian area is a well vegetated area along the side of a water source such as a bayou. Riparian areas have a mix of trees, shrubs, flowers, and other vegetation. What benefits do you think this would have for migratory birds? The trees and shrubs provide a safe, comfy place for the birds to rest along their long journeys. The trees and shrubs provide fresh food for the birds to eat. The bayou is a great water source for the birds and a healthy riparian area will help filter pollutants to that the water stays nice and clean for the birds. Riparian areas have the added benefit of helping us by helping keep water clean and reduce flooding.

**Transition:** Let’s see how you would do navigating the challenges of migration if you were a migratory bird. Optional: show a couple examples of migratory birds and let them pick one to play as.

**Activity:** Scenarios Game with Dice

Have all the kids line up on the start line and establish an end line. The kids will go down the line rolling the die and the programmer will read the card for the number matching the dice roll. The goal is to get to the finish line. This can be done in individual turns or you can have them move as a group.

**Transition:** Was it hard to finish your migration? What was hard about migrating? What made it easier?

**Conclusion:** What happens if a lot of birds can’t complete their migrations? **What can you do?** Keep your cats indoors! Promote natural habitat and native species. Trees are really important shelter for migratory birds. Don’t litter! Littering dirties the water that birds need to drink on their trip. Don’t use pesticides in your garden/lawn! These can get into the water or a bird’s food and cause them or their eggs to get really sick. If you see an injured bird or one hits your window and doesn’t fly away soon, call a wildlife rehabilitator. Refer to take home sheet.

**Craft:** Perching bird cut-out craft

Give everyone a bird cut-out and a strip of construction paper. The strip is what the birds once colored will be perching on. Use a glue stick to connect the two. When coloring, kids can reference examples of migratory birds/color as they please.

**Take Home:** Craft. Sheet about steps mentioned to help protect migratory birds, could include the number of wildlife rehabilitator(s) in Houston that they can call if a bird hits their window and becomes injured.

**Notes/Helpful Hints:**

Emphasize riparian habitat, especially for Houston Public Library programs





