

Activity #12: *The Tale of Chipilo* Migration Simulation & Skit

Purpose:

This activity simulates habitat changes due to seasonal variations and how this affects the movement of certain bird populations as they follow the availability of food. It could be done by older students as a play for younger students.

Background Information:

Migration is a survival tactic of many birds. Since spring time in the north produces an abundance of animal and plant life, many birds leave the tropics where there is more competition over resources. After breeding and raising their young up north, they travel south to the tropics as their northern food supplies dwindle. Why not just stay in the tropics? There is food during the winter in the tropics, but there is also a high level of competition from the resident tropical birds. Many birds have evolved to follow a migratory path which was allowed for more abundant food and plant resources, but which forced them to retreat back to the tropics every winter to avoid the cold and lack of food.

Vocabulary:

forage (Chipilo)	resident birds (Chipilo)
migration (Chipilo)	competition for food sources
availability	carrying capacity
limited resources	food chain
wintering grounds (Chipilo)	breeding grounds (Chipilo)

NOTE TO TEACHER:

This activity can easily be modified to fit your time and schedule – it can be a simple one period activity or can stretch over a 3 day period, culminating in a performance for another group of students. The names and birds can also be changed or modified. It can have almost no props or costumes to many props and costumes. Have the activity fit your needs.

Materials:

1. Migration skit: “Wildlife’s Wonders”
2. Notecards or construction paper for name tags
3. Colored markers
4. Yarn or string
5. Internet or magazine photos of the following animals:

- Emerald Toucanet
 - Resplendent Quetzal
 - Golden-cheeked Warbler (male & female)
 - Black-and-white Warbler
 - Summer Tanager
 - Jackal
 - Giraffe
6. Treats (M&M's, jelly beans, goldfish, gummi worms cut into thirds, etc.), OR beads, tiny bits of paper, etc... to represent food - a large bag of M&M's or goldfish would work. If you used non-edible items, you would need about 100+ items, depending on your class size.
 7. Two containers or baskets for the treats
 8. A bag, sock, gift bag or some small container for each student to represent the crop of a bird where students can put their food.
 9. Ropes for circling foraging areas, 15-30 ft. depending on number of kids (optional)
 10. Costuming and props
 11. Plastic leaves and flowers
 12. Confetti, horn blowers, etc... for the "fiesta" at the end of the skit

Class Time:

One period to discuss migration and make props, masks, posters, name tags

One-two class periods to practice and perform

One class period to perform to another class and clean up

DAY 1

Introduction:

Have a large bowl of treats on one side of a classroom. Students will have to "compete" to get a treat. After a while of letting students try to get to the bowl to eat, place a second bowl of treats on the opposite side of the classroom. What happens? Students will "migrate" to the second bowl! After a minute, have them all sit down. Ask them, "What just happened? Why did you walk over to the second bowl?" This will lead into a discussion about migration. Make a list of their reasons why birds migrate.

Activity:

Afterwards, tell them you'd like their help in performing a skit to simulate bird migration. Then begin working on signs, props and costumes. Give students a chance to look over the play to see who'd like to try out for the two co-hosts of the show. Have them do this while others are working on props and costumes.

1. Write names on notecards with drawings if possible; punch holes on far sides of the top of each notecard and make yarn necklaces for each one.
 - Jeff Jackal
 - George Giraffe
 - Emerald Toucanet
 - Resplendent Quetzal
 - Golden-cheeked Warbler (male)
 - Golden-cheeked Warbler (female)
 - Black-and-white Warbler
 - Summer Tanager
 - Any other resident or migratory birds you'd like to add
2. Make large signs:
 - central Texas (with some scenery photos or drawings)
 - tropics (with some scenery photos or drawings)
 - Wildlife Wonders
3. Work on costuming and props:
 - Food dispersers as trees – have them wear brownish pants and green shirts
 - Decorated baskets for leaves, flowers and food
 - Based on the bird they are, dress accordingly- have students think about what they might have at home that they can use
 - Use puppets when available and appropriate
 - Decide on what you will use for “crop” bags and have available
4. Hang signs in opposite ends of your room.
5. Have food baskets ready for food on each end of the room.
6. Decide who will be the two hosts.
7. Decide who will be the food dispersers. (1-2 per area)
8. Divide the rest of the students into three roughly equivalent groups –resident birds, migrants, and young birds
9. Decide who will be which birds and have each person decide on costuming.

10. Begin practicing the play if time allows.

DAY 2:

Practice the play and finish up props, costumes and signs.

DAY 3:

Perform!

Have your students ask the class that watched their performance these questions:

- Why did some birds migrate from the tropics? (more food from insects in the North which created a better home to raise young; less competition for food)
- Why would birds in central Texas migrate to the tropics each year for the winter? (warmer weather, more insects in tropics, lack of food in the North)

Extensions:

- Using a rope, make the foraging area smaller. This could be from fire, deforestation, building roads and cities, etc. What happens when your area gets smaller? Less food, more competition, harder to survive.
- Have students prepare more questions to ask the class that watches their performances related to birds or bird migration.
- Migratory Bird Treaty Act – what is it? Why is it important?
- What migratory songbirds are on the endangered species list? What are the issues that affect these birds? What is being done to protect them in both the United States and the tropics?
- Why do some birds migrate in the opposite direction – go north in the summer and south in the winter? Arctic birds have discovered that while the Arctic summer is very short, it has an incredible diversity of life because of the long days of sunlight. The birds that have moved north to mate and lay their eggs, then find an abundance of food and less competition. They migrate south soon after raising their young before the climate in the north becomes cold again, days grow shorter and productivity quickly declines. The winter southern climate is milder with an increased abundance of food.

Alignment:

Grade 3 (red)

Grade 4 (blue)

Grade 5 (green)

Grade 6 (purple)

English Language Arts & Reading student expectations: 7; 5; 5; 5, 26(A)

Mathematics student expectations: N/A

Science student expectations: 9(A-C), 10(A); 7(C), 9(A,B), 10(A); 9(A-D), 10(A); 10(C), 12(E,F)

Social studies student expectations: 4(A,D), 17(E), 18(A); 7(B,C), 9(C), 22(A,C,D); 6(B), 9(A), 25(A,C,D); 3(A), 4(D,F), 6(A,B), 22(A,C,D)

Activity #12: *The Tale of Chipilo* **Migration Skit** **“Wildlife’s Wonders”**

Jeff Jackal

Welcome to our hit nature show, “Wildlife’s Wonders”—where the life is WILD and WONDERFUL! This is Jeff Jackal coming to you live from the tropics and our northern correspondent, George Giraffe joining us in central Texas! Hellooo, George! (*as if calling from very far away*)

George Giraffe

Hi, Jeff—great to be back with you again! As you know, today’s show will focus on that burning question, Why DO so many birds fly SO FAR each year? What exactly is happening? To begin to answer that question, we go back to you, Jeff!

Jeff Jackal (holds up two fingers to signal the food dispersers)

It’s winter in Guatemala—the weather is perfect and the bugs are sensational—to eat that is! Why look, it’s the stunning Emerald Toucanet! And wait, what’s that flash of green I see coming out of the woods? It must be the Resplendent Quetzal! Absolutely gorgeous! Those bugs must be delicious and it looks like there’s plenty to eat! (*While this is being reported, food dispersers are dispersing lots of bugs.*) They all look SO happy and satisfied! Who would EVER want to leave this paradise? George, how are things looking in central Texas?

George Giraffe

Well, I’ve got to say that bug production is on the low side here. And it’s a bit nippy and cold! Nothing to leave home for, that’s for sure! (*No bugs being passed out in central Texas...*)

Jeff Jackal (holds up 1 finger to signal the food dispersers)

But wait.... looks like we *may* have a problem! It seems like there is currently a bit of a food shortage. Looks like everyone is not catching quite as many insects as before! Could there be..... a problem in paradise? (*While this is being reported, food dispersers are slowing down the numbers of bugs passed out.*)

Yes, I’m sensing a bit of discontent and restlessness among some of the birds—is that a Golden-cheeked Warbler making such a flap? How about that Black-and-white Warbler? And look at the fuss that Summer Tanager is making! Seems like they might have a plan up their wing! (*Migrants huddle together and start flapping their wings as if making a plan.*)

George Giraffe

I do believe you’re right, Jeff, and wait.... Oh my gosh! The oak trees are blooming like crazy here in central Texas and suddenly there seem to be lots of juicy caterpillars everywhere you look! I do believe spring is here!! Wow! (*Food disperser could throw out tiny flowers, green leaves and put “bugs” on the tables.*)

Jeff Jackal

The migrants are leaving! The migrants are leaving! They seem to be sensing that more bugs can be found somewhere else. And I’ve got to say—seems like the residents are VERY happy to see the

migrants go! Less food to share with the migrants and more for them they seem to be thinking!
(Residents wave happily good bye to the migrants and migrants fly slowly south.)

George Giraffe

With my long neck I can see all kinds of birds flying this way! Not easy flying thousands of miles, facing storms and limited food sources along the way! But gosh, now they've finally made it to central Texas and boy, oh boy! They sure seem happy to be surrounded by all this food! Looks like many of them are setting up homes and starting families. *(Young birds come in with open mouths and the migrant birds feed them their bugs. Food dispersers make sure there is plenty of food out.)*

(Then food dispersers slow down the food dispersing, making it harder for bird to find food.)

Summer has been going on for quite some time here and well, looks like the bug production is slowing down here in central Texas. Food is getting harder and harder to find! It looks like our migrants and their young are packing up and heading south to the tropics, Jeff.

Jeff Jackal

And it looks like the bug production down here is increasing again! And so the cycle of migration continues – just another one of.....

Jeff Jackal & George Giraffe

Wildlife's Wonders!

(As the migrants make it back to the tropics a big fiesta begins with lots of food being passed out.)