



Friends of NCTC Program Activity
c. 2022 Friends of National Conservation Training Center

Time For A Change

(ages 5 and older)

Background

As the days get shorter and the weather gets cooler, humans note the Fall Equinox. Animals do the same thing—some migrate, some begin to plan their winter hibernation, and others come to the end of their lives. Fall is a time for change in the natural world.

What You Will Need for This Project

- Butterfly Migration Game Board (https://dnr.maryland.gov/publiclands/Documents/Jr-Rangers_LatH/Jr-Ranger_Monarch-Butterfly-Migration-Game.pdf)
- Dice and marker pieces (one for each player)
- Paper and pencil for haiku
- A variety of seeds
- White glue
- Construction paper (or any heavier paper or even a paper plate)

What to Do

What Season Is This?

According to the calendar, the Fall Equinox happens in 2022 on Thursday September 22. The autumn equinox is when the sun shines directly on the equator and the northern and southern hemispheres get the same amount of sun. After that day, the nights will get longer and the days will grow shorter.

- Find out when the days will begin to grow longer. (Hint: check out the date of the Winter Solstice)
- When will it be sunrise on September 22 where you live? When will it be sunset?
(www.timeanddate.com/sun/)
- When do meteorologists (weather people) chart fall/autumn beginning?
(farmersalmanac.com/meteorological-fall)

Where do the Birds and Butterflies Go?

During the fall months, many birds and butterflies disappear. Most butterflies will die, but the Monarch Butterfly migrates to Mexico where it will overwinter. Some Monarchs are actually tagged so that scientists and other interested people can chart where they go. You can learn more in this short video:

<https://www.youtube.com/watch?v=LawHWsIqa5s>.

Here is a great game you can play with one or two of your friends and find out which of you will be the first to move around the board and make it to Mexico! You need to print off the game board, find a dice, and gather your friends!

https://dnr.maryland.gov/publiclands/Documents/Jr-Rangers_LatH/Jr-Ranger_Monarch-Butterfly-Migration-Game.pdf

START HERE
↑
BUTTERFLY GARDEN
EGG

MONARCH MIGRATION MANIA GAME

Grab your friends and play this fun game to learn more about Monarch Migration!

How to Play: You need 1 dice, 2-4 players and your playing pieces (pebbles, sticks or nuts).

- 1) In order to leave **START** and to fly away from the **BUTTERFLY GARDEN**, each player must roll a 3 to become a butterfly!
- 2) Butterflies move around the board looking for nectar and migrating to Mexico, where they will spend the Winter. There are many challenges along the way!

Object: Be the first Monarch Butterfly to move around the entire board and reach Mexico!

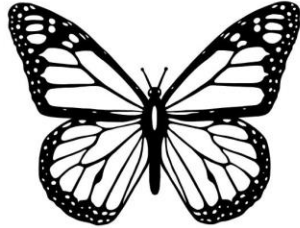


Did You Know? Monarch Butterfly Caterpillars only eat one type of plant: **MILKWEED!** This is the Monarch's **HOST PLANT.**

A good **BUTTERFLY GARDEN** contains **Host Plants (Milkweed)** for Monarch caterpillars to feed upon and multiple **Nectar Sources** for the adult Butterflies to feed on as they migrate south to Mexico.

BUTTERFLY

CHRYSAALIS

CATERPILLAR

A new native plant garden was just planted! Abundant nectar!

Uh oh! Those flowers were sprayed with pesticides. **Go back 3 spaces.**

Scientists catch you and put a tiny sticker on your wing, then safely release you with a tag!

Uh oh! Bad weather and rain is preventing you from migrating. **Lose 1 turn.**

Yay! Good winds help you migrate even farther! Roll the dice again and move ahead that number!

You landed in a State Park with native flowers with many good sources of nectar!

Watch out! A hungry bird tries to eat you! **Lose 1 turn.**

You find lots of flowers with nectar in an over-grown field!

Fly away from the Butterfly Garden! Find flowers for nectar!

Yay! You find a new pollinator garden planted by students and full of nectar!

No rain! Drought causes many flowers to die off. **Go back 4 spaces.**

Eww... bugs! You are hit by someone with a flyswatter. **Lose 1 turn.**

A praying mantis catches YOU as its prey. **Sorry, you are out.**

Brr... Too cold! Unexpected freeze keeps you from flying. **Go back 3 spaces.**

You land at a shopping mall. No nectar sources here. **Lose 1 turn.**

Congrats! You flew over 3,000 miles and made it to **MEXICO** for the Winter! **Move ahead one space!**

A good wind helps you fly south quickly. **Move ahead one space!**

An insect collector catches YOU for a collection. **Sorry, you are out.**

Scientists catch you and notice you are already tagged! They record your number and let you go!

You fly across the highway and get hit by a car. **Sorry, you are out.**

Write a short story about your adventure as a Monarch Butterfly. Learn more about Monarch Butterflies at dnr.maryland.gov

Many birds migrate too! Over 300 species in North America migrate each year! Most are moving south to find more food during the colder weather. Just like us, they notice changes like the length of daylight and lower temperatures. Hummingbirds can migrate up to 1500 miles and hawks and falcons can be seen migrating over mountain ridges. Some robins migrate, but others stay around all winter. The prize for migrating goes to the Arctic Tern that flies over 11,000 thousand miles every year!

One of the most common sights in the fall are flocks of the Canada Goose. You might see them flying overhead in a V-shape and honking as they fly south in the fall. In some areas, they now live year round, but those that do leave come back to where they were born every year! Here's a great website to learn more about them.

<https://www.birdwatchingacademy.com/canadian-geese-migration/>

(If you want to learn about other birds that migrate, <https://birdfact.com/articles/why-do-birds-migrate>)

Write a Haiku About Migration!

Here's a challenge...write a poem about birds or butterflies that migrate. A haiku is a Japanese form of poetry that has only three lines and doesn't have to rhyme. It has five syllables in the first line, seven syllables in the second line, and five syllables in the third line. You can find many examples online, but just try your own thoughts. Here's an example:

I hear the geese above.

How do you know when to leave?

Fly on South my friends.

Do Trees and Plants Migrate?

Of course they don't! But trees do work to make sure that they will continue in the future by creating seeds and many birds feast on the seeds of weeds. These can be especially important during migration season. The fall is a great time to collect seeds. Walnut and hickory nuts are fairly large and can be tasty, especially to squirrels (and us!) Pinecones contain small seeds, maple trees produce winged "helicopters," and sweetgums will produce "gumballs" that have tiny seeds in them. Apples have seeds and so do many flowers like sunflowers!

Make a Seed Collage

To make a seed collage, you can collect nuts, pinecones, and seeds on a nature walk. (In September, you might find PawPaw fruit that have seeds inside the pulp. You can eat pawpaws, too! They taste like banana custard.)

You can also gather them from melons, squash, pumpkins and dry them. To dry seeds, wash them and spread them out on a paper plate. They should dry in a few days. Other seed ideas are dried beans or spices like mustard seeds.

To make the collage, you can either draw lines of glue on construction paper and sprinkle the seeds over the glue or draw the outline of your design and add glue to one section at a time, then place your seeds in the glued area. Once the glue has dried, you can shake off excess seeds.

Helpful Hints for Adults

Birds do not need nesting boxes during the winter, but fall is a good time to think about building one for next spring. It can be a great project for you and your child to plan and construct. The Pennsylvania Game Commission has numerous plans for building nest boxes including a Butterfly Hibernation Box. Regardless of the habitat where you live, you may find a free, downloadable Woodcrafting for Wildlife Plans at

<https://www.pgc.pa.gov/InformationResources/GetInvolved/Pages/WildlifeHomePlans.aspx>

If you would rather start small by making a birdfeeder, try this site:

<https://www.pgc.pa.gov/Education/ForEducators/Documents/How%20to%20make%20a%20Bird%20Feeder.pdf>