



CRITTER CONNECTIONS



***Migration
in Texas***



Nightshades

What do french fries and ketchup have in common with this issue's featured plant? Well, they are all members of a group of plants called nightshades. Tomatoes, potatoes and eggplants are all members of the nightshade family, Solanaceae. Tomatoes and eggplants are the fruits of the plant, and potatoes are part of the underground root system. While these are all examples of edible nightshades, many of the plants in the nightshade family are very poisonous.

One common example that grows in Texas is the silverleaf nightshade. It grows 1-3 feet tall and has long wavy silver-green leaves. The flowers are purple and have five petals in the shape of a star. In the center of the flowers are large yellow stamens which produce pollen. The stems are covered with nettle-like brown prickles which led to another common name for this plant, white horse nettle. The fruits are like tomatoes, but they are smaller and greenish-yellow in color. They are poisonous to people and animals.

This plant, although beautiful, can be a pest for people who raise grazing animals like goats and cattle. The plants grow and spread quickly and are poisonous to the livestock. If you ever find a plant in the wild that looks like a wild tomato, it is best to leave it there because it may be poisonous.

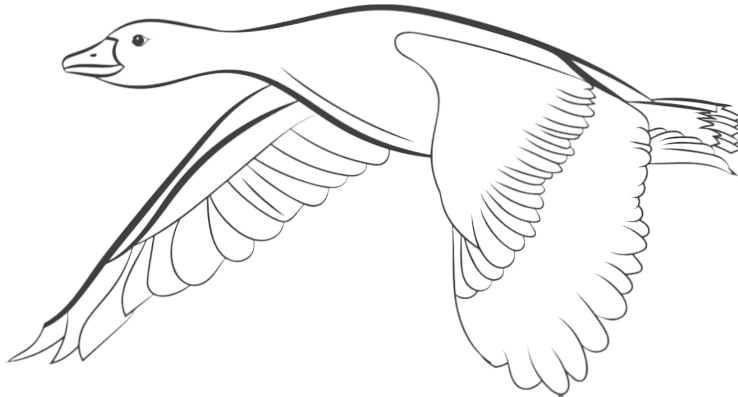
Photos and article source from Ladybird Johnson Wildflower Center



Migration Craft

Materials:

- Template
- Scissors
- Coloring Materials
- Tape
- String or Yarn
- Hanger



Craft Instructions:

1. Trace or copy the provided bird template 5 times or download a copy here: bit.ly/CC_Migration
2. Color and cut out the birds.
3. Cut 5 lengths of string or yarn at 3in, 6in, 9in, 12in, and 15in.
4. Tape a piece of string or yarn onto the back of each bird cutout.
5. Tape the other end to a hanger so they form a V-formation. The 3 inch and 15 inch pieces will hang from the same spot on the right, then the 6 inch and 12 inch pieces will hang from the same spot in the middle, and the 9 inch piece will hang by itself on the left.

Did you know...



- ... that animals migrate underwater, in the air and on land?
- ... that animals migrate for many reasons such as finding food, seeking warmer temperatures and to give birth to their young?
- ... that the humpback and gray whales migrate a round trip of 10,000 to 16,000 miles from Alaska, down the coast of California and into warmer waters of Mexico to give birth?
- ... that animals have different ways to navigate during migration including the position of the sun or stars, the ocean's currents, and the Earth's magnetic poles?
- ... that migrating animals need to fatten up by consuming extra food to ensure they have enough energy for their long journey?
- ... that both tiny animals like zoo plankton (1-2mm) and huge animals like whales (20-27m) migrate?
- ... that migration is an instinctive behavior?
- ... that Texas is a very important pathway for many migrating animals?
- ... that some animals migrate in herds like the American Bison?



American Bison

Photo source: Yellowstone National Park

Color Me



Sandhill Crane

(*Antigone canadensis*)



Migration

by Elanor Dean

Migration is the seasonal movement of animals from one place to another. Animals migrate for different reasons. As temperatures drop in winter, food availability may become scarce so they will migrate to a region with more food and warmer temperatures. Animals also migrate to find a mate and some migrate to have babies.

You may wonder how animals know where to go during their migration, especially newly born animals that have never migrated before. It is an **instinctive behavior**, which means they are born knowing when they need to migrate and where to go. Some animals follow visual cues in the sky like the position of the stars or they can sense the amount of sunlight and will travel based on the sun's position in the sky. Other animals can sense the earth's magnetic field. The earth is like a giant magnet and some animals have an adaptation where they can sense which direction is north or south, like a compass.



Black-bellied Whistling Ducks

While you are probably familiar with bird migration, did you know that many other animals migrate too, including microscopic zoo plankton, butterflies, crabs, fish, spiders, bats, turtles and whales? Let's talk about some examples.

Each summer, between May and July, thousands of male Texas brown tarantulas emerge from their burrows and start traveling along roads and trails searching for mates. The male spider can track and sense a female from her chemical scent. Once mated the male tarantula will die, but female tarantulas can live many years. While they might look scary and large, tarantulas are actually harmless to humans.



Texas Brown Tarantula

You may have heard of salmon migrating up river to **spawn**, or release their eggs into the water, but did you know that several Texas fish migrate too? Examples include flounder and speckled trout. Both of these saltwater fish live in Galveston Bay close to the land, but in fall they swim further out into the Gulf of Mexico to spawn. They will return to the bay as it gets cold in winter, but a sudden drop in temperature can cause them to migrate in much larger groups. This mass migration is excellent for fishermen because there are more fish available to catch.

Another Texas animal that migrates during mating season is the blue crab. Blue crabs spend most of their lives in **estuaries** which are areas where freshwater rivers flow into the ocean, creating a mix of fresh and saltwater. Blue crab eggs need salty water to properly develop, so female crabs take their eggs and migrate toward the saltier waters of the Gulf of Mexico. Once the eggs are ready to hatch, she releases the larvae and returns home.



Kemp's Ridley Sea Turtles

Female sea turtles leave the ocean and migrate to beaches to lay their eggs on land. Sea turtles will remember the beach where they hatched and will return many years later to lay eggs of their own. Between April and August, endangered Kemp's Ridley sea turtles migrate to the Padre Island National Seashore near Corpus Christi, Texas. Because this species is in danger of extinction, park rangers track nesting sites and move the eggs to a protected area to keep them safe as they develop. Once the eggs are ready to hatch, the park schedules hatchling release events where you watch hundreds of baby turtles crawl into the ocean.



Some species of bats will also migrate to seek warmer temperatures and more insects to consume. One example is the Mexican free-tailed bat which travels to Mexico in the winter. In early springtime, millions of bats migrate north into Texas and live together in colonies. One of the largest colonies of Mexican free-tailed bats is in Bracken Cave in central Texas where close to 20 million female bats and their pups live. Another large colony of bats lives under Congress Avenue Bridge in Austin, Texas. You can visit both locations to see millions of bats emerge into the night skies to eat flying insects.

Different butterfly species migrate too. You may notice during certain times of year there are lots of butterflies flying across roadways and drinking nectar from flowers. The American snout is an example of a butterfly which you may have seen flying in large groups across the highway. They migrate in search of food and for hackberry plants to lay their eggs. The Monarch butterfly is another example of a migrating insect. These butterflies have an amazing migration in the fall, traveling 3,000 miles from central Canada, down through Texas and into Mexico where they hibernate over winter. Then in the spring they wake up and migrate north into Texas to lay their eggs. It is important to plant milkweed plants for the butterflies to lay their eggs and flowering plants for the adults to drink nectar.



American Snout

Most bird species migrate, but you may not see them in large groups because they migrate during the night or they are so high in the sky they are too small to see. One place to see many migratory birds between April and May is High Island near Galveston, Texas. Many small birds like warblers, tanagers, orioles, buntings and even hummingbirds travel from Mexico across the Gulf of Mexico and land at High Island exhausted and searching for food. The nearby coastal habitat is also where you will find long-legged wading birds like cranes, ibis, stilts, egrets, sandpipers and herons. If you visit during migration, you will see many different birds resting and eating before continuing their journey north.



Summer Tanager

Texas is an important path for many migrating species because it is next to Mexico, where they live in the winter. They must have clean water, food and shelter along their journey, and you can help in different ways by providing these basic needs. By planting certain plants at home or your school, you can provide food for migrating birds and butterflies. Cleaning up litter also helps migratory animals and recycling and reducing plastic especially helps sea turtles because plastic can float into the oceans and pollute beaches. Another form of pollution you may not consider is light pollution. We do not usually think about light as a form of pollution, but at night migratory birds follow the stars and get confused when they see lights from our homes. **Lights Out, Texas** is a program that every Texan can participate in to help migratory birds by turning off outdoor lights at night from March-June and September-November when birds are migrating. Read about Lights Out, Texas to learn more.



Black-necked Stilts

Many bird species migrate, and they are protected under a law known as the Migratory Bird Act. Have you ever seen a group of birds flying overhead in a v-formation? Those birds are probably migrating. Many birds including ducks, pelicans, ibis, cranes and geese fly in this formation to conserve energy. Great-tailed Grackles are another example of a migratory bird. Have you ever visited a grocery store in the fall and spring and noticed thousands of black birds flying around and squawking very loudly? Those are grackles, migrating through Texas.

WORD BANK

Instinctive behavior – also known as inherited behavior is a behavior that animals are born with the ability to do and do not need to learn

Spawn – to release or deposit eggs, common for fish and frogs

Estuary – a habitat with a mix of fresh and saltwater formed where rivers flow into the ocean

Lights Out, Texas – a program formed by Audubon Texas and Texan by Nature to protect migratory birds by turning off lights at night

Sources: Audubon, National Park Service, Texas Parks and Wildlife
 Photos from Wikimedia Commons: Alan Schmierer, Hrchenge, Robert Webster, Ospr3yy, Ken Chan, Bettina Arrigoni

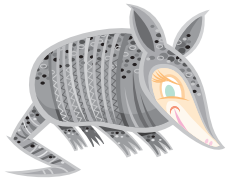
Migration Quiz Time!

1. Circle **TRUE** or **FALSE** – Migration is a **LEARNED** behavior?
2. Which of the following is not a reason why animals migrate?
 - A. to mate
 - B. to find food
 - C. to escape from predators
3. Migration is often related to changing (circle one) **SEASONS** or **MOOD**.
4. Which of these Texas animals migrates?
 - A. Monarch butterfly
 - B. Mexican free-tailed bat
 - C. Blue crab
 - D. All of the above



Answers: 1. False 2. C 3. Seasons 4. D

Photo Source: Luna sin estrellas



Nancy's Corner



"How can you help migrating animals?"

1. Plant milkweeds for Monarchs to lay eggs.
2. Plant flowering plants for butterflies and hummingbirds to drink nectar.
3. Reduce, Reuse and Recycle plastic to help sea turtles.
4. Participate in Lights Out, Texas.

What migrating animal is your favorite? Write a fun fact you learned below:

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