

For Creative Minds

The For Creative Minds educational section may be photocopied or printed from our website by the owner of this book for educational, non-commercial uses. Cross-curricular teaching activities, interactive quizzes, and more are available online. Go to www.ArbordalePublishing.com and click on the book's cover to explore all the links.

Animal Migrations: What, When, Where, and Why?



Most people think about birds migrating in the spring and fall because huge flocks of birds are so visible in many areas. But birds are not the only animals that migrate. Some mammals, reptiles, fish, birds, amphibians, and even some invertebrates migrate. Many mammals and birds learn the migration route from their parents while others travel only by instinct. Scientists don't understand how animals know when and where to travel.

Some animals follow food sources or protection from seasonal weather. They often travel the same routes year after year and may even return to the same tree or nesting area as their parents and grandparents before them.

Some animals migrate as part of their life cycles. Animals that live alone most of the time (solitary) will often gather in large numbers at predictable places at predictable times of the year in order to find mates. Other animals travel to specific locations to lay eggs or to give birth and raise young before returning to their "normal" territory.

Animals may migrate year after year, or once in their lifetime.

Migrations can be long distances (for example, from tropical areas around the equator to the poles) or just a few hundred miles. Some might only travel up or down a mountain.

All of the animals mentioned in this book gather in predictable locations at predictable times of the year—right here in North America. You can go to these locations to see the animals.

Use the information in the next few pages to answer these questions:

1. Which animal gathering is closest to where you live?
2. What month or season would you best be able to see the animals?
3. How many animals could you see in one day?
4. Which animals are **mammals**, **reptiles**, **fish**, **birds**, **amphibians**, or **invertebrates**?



Brazilian free-tailed bats fly north to Texas, Arizona, and New Mexico in the spring. Females give birth to pups in June. The pups start to fly in August. Look for thousands of bats in August and September as these **mammals** leave their roosts at dusk. When the weather cools, the bats fly south to where there are still plenty of insects to eat.



Between 500 and 1,000 polar bears gather near Churchill, Manitoba, Canada each fall. They wait for the Hudson Bay to ice over. Once the bay freezes, these **mammals** scatter on the ice to hunt seals and whales through the winter. As the ice thaws in the spring, the bears ride the ice floes back to land. They'll spend the summer looking for whatever food they can find—even plants.

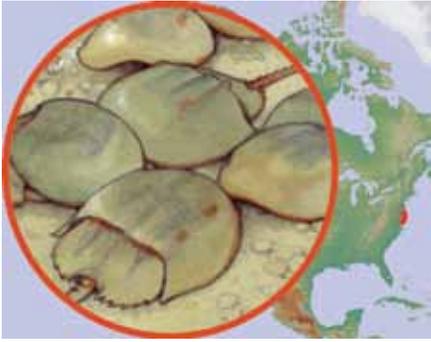
On the first warm, rainy night of spring in New England, salamanders travel to small ponds to breed. Hundreds of these **amphibians** gather to find mates. They will cross roads or crawl over anything in their way to get to the same ponds where they may have been born.



Salmon are born in freshwater but spend much of their lives in the ocean. As adults, these **fish** will return to the freshwater in which they were born. Depending on the location and the salmon species, you might see hundreds or hundreds of thousands of salmon swimming up-current in the summer, fall, or winter so they can breed and lay eggs. Salmon live in both the Pacific and Atlantic Oceans and now some even live in the Great Lakes.

Not all bald eagles migrate. If these **birds** live in areas where the water freezes during the winter, they will migrate to follow food sources. You might see a few or a few hundred eagles hunting salmon as the fish swim toward their breeding grounds. Fish trapped by the locks or dams also make for easy hunting. You can often find eagles around locks and dams on some large rivers.





Once a year, horseshoe crabs gather on beaches to breed. The females lay their eggs in the sand near the high tide line. Around the new and full moons in late May and early June, you can see millions of these **invertebrates** on the beaches around the Delaware Bay. You can also see them on other beaches up and down the Atlantic coast.

Adult red knots fly between South America and the Arctic every year. These tiny **birds** arrive on the shores of the Delaware Bay, just as the horseshoe crabs are laying eggs in the spring. They eat their fill of horseshoe crab eggs. After a short rest, they fly the rest of the way to their summer nesting grounds in the Arctic.



Chimney swifts lay eggs and raise young in eastern North America in the summer. Come fall, these **birds** gather by the thousands, getting ready to migrate. Look for the flocks around chimneys and other tall structures. They'll fly to the rainforests of South America for the winter. Not only are the rainforests warm, but there's lots of food there.



Hundreds of northern elephant seals gather twice a year at rookeries along the Pacific coastline from Alaska south to Baja California. In the late spring and early summer, these **mammals** come ashore to molt. They gather in winter to give birth and find a mate. They don't eat while on land but hunt fish once they are back in the water.



Hundreds of thousands of sandhill cranes gather at the Platte River in Nebraska in the spring. They eat and rest for up to a month before separating and flying further north to their summer nesting grounds. As cold weather approaches in the fall, the **birds** fly south looking for a ready supply of insects and seeds to eat.



Monarch butterflies migrate to warm weather for the winter. When they wake in the spring, they fly north to find the food they need to eat and plants they need to lay eggs. Look for these insects (**invertebrates**) in Mexico, coastal California, Texas, and Florida in the winter.



Gray whales leave their summer feeding grounds in Alaska as the weather starts to turn cold. They swim south towards warmer waters to breed and give birth. Because these huge **mammals** swim close to shore, you can sometimes see them from land on their swim south in the fall or back north in the spring. Look for them in their winter birthing and breeding grounds around Baja California and the Sea of Cortez.



Snakes need to protect themselves from cold weather. At the Shawnee National Forest in southern Illinois, many snakes migrate short distances to winter dens in the cracks and crevices of limestone bluffs. The **reptiles** gather into large balls for warmth and hibernate through the winter. Come spring and fall, you might spot up to 30 snakes in an afternoon crossing the road to or from their winter dens.



Caribou herds leave the forests in the spring and migrate to tundra meadows in Alaska and Northern Canada. Caribou young are born as soon as the snow melts. There's lots of food in the meadows and not too many predators. This gives the young **mammals** a chance to grow big and strong. They spend the winter in the forest where it's easier for them to find food.



1, 2, & 3 Answers will vary. For links and information on specific locations to see animals, go to the related websites on the book's homepage at ArbordalePublishing.com.
 4: **Mammals:** Mexican free-tailed bats, polar bears, elephant seals, gray whales, caribou.
Reptiles: snakes. **Fish:** salmon. **Birds:** eagles, chimney swifts, sandhill cranes. **Amphibians:** salamanders. **Invertebrates:** Monarch butterflies, horseshoe crabs.