



Day 1 Migrating Animals

Migrating animals, such as hummingbirds, red-winged blackbirds, herons, and monarch butterflies, are returning to Michigan with the coming of spring. These animals left in the fall because they usually do not have their food source available in Michigan during the winter. Some of these food sources include: nectar from flowers, insects, fish and aquatic plants. Go for a hike and look for some of these sources of food; do you see any animals using them yet?

Day 2 Energy

Animals, including pollinators, get their energy from the food that they eat. Pollinators visit flowers to be able to eat nectar, a sweet liquid that flowers produce. Some pollinators such as honeybees use pollen to feed their young but most just pick it up by accident. Go outside and look for animals eating things to get their energy. Animals get their energy from eating plants and other animals, how do plants get their energy?

Day 3 Early Pollinators

Pollinators are animals that unintentionally move pollen from flower to flower. By moving the pollen from flower to flower the plants get fertilized and make seeds. Take a cotton swab, a cotton ball, a pipe cleaner, a pom pom or something else fuzzy outside and find a flower. Rub the fuzzy item on the flower to see if you can get pollen off of an anther; if you get pollen it should look like a colored dust on your object. If you do not find a flower around your home you can do this with flour, cinnamon or another safe powder from your kitchen. See if you can observe a pollinator in action or look closely at a picture. What about their body allows animals to accidentally pick up and transfer pollen?

Day 4 Bumblebees

Bumblebees are some of the first pollinators to be seen in the spring. During the winter they sleep under or inside of logs. Bumblebees, like other insects, are cold-blooded animals, meaning their body temperature matches their environment. Why do you think bumblebees need to sleep through the winter but can wake up during the spring? Head outside and roll some logs to see if you can find other pollinators that are still sleeping.

Day 5 Team Work

Pollinators and flowers work together really well. The mouths and bodies of pollinators often fit their preferred flowers. A long flower tube is pollinated by a hummingbird with a long tongue. A snapdragon's petals can be pushed apart by a strong bumblebee. Design a pollinator and a flower that work well together. Consider body shape, mouth parts, and flower structure in your design. You can draw, build, or sculpt your pollinator and flower.

Pollinators Studies by Grade Level

Kindergarten

Pollinators are animals and have needs to survive. What do flowers give to pollinators to help them meet their needs? Role play your favorite pollinator while outside and pretend to visit flowers to survive early spring.

1st Grade

Many pollinators are cold-blooded, meaning their body temperature matches their environment. Have a conversation about the role that the sun plays in the lives of pollinators during the spring. Why are pollinators absent in the winter but active during the spring?

2nd Grade

Can you mimic pollination outside by building flowers from natural materials? Pollination occurs when an animal spreads pollen from one flower to another. What materials could you use for pollen? What materials could you use for the animal that spreads the pollen? Can you make your pollen move from one flower to another?

3rd Grade

Insect pollinators survive the winter in different stages of their life cycle. Some insects survive as adults while others survive as eggs in the leaf litter. Many bees, hornets and wasps survive by the adult queens overwintering with eggs in her abdomen. Some moths survive as pupas while others survive as larva. Investigate leaves, logs and soil near you to see what stages of insects you can find.

4th Grade

Pollinators have specialized body parts to help them be successful at transferring pollen from flower to flower. Hair and feathers on their bodies rub the pollen off of the flower when the animal gets close for food. Specialized mouth parts such as long, pointed beaks and proboscises allow the animal to reach into the flower to collect nectar. Investigate a flower or a pollinator to see the adaptations that make pollination possible.

5th Grade

Flowers are part of a plant. A plant's role in a food chain is a producer, an organism that makes its own food. Pollinators, including insects and birds, are attracted to flowers to be able to get a source of food, most often nectar. This makes pollinators consumers in the food chain. Draw a food chain that includes a flower, a pollinator, and something that would eat the pollinator and then show how the energy would transfer through the organisms.