

Citizen Science Saturday- Pollinators

What is a pollinator?

A pollinator is an animal such as birds, bats, bees, butterflies, beetles, flies and other small mammals that pollinate plants. They visit flowers to drink nectar or feed off of pollen and transport pollen grains as they move from spot to spot. Pollinating animals travel from plant to plant carrying pollen on their bodies in a vital interaction that allows the transfer of genetic material critical to the reproductive system of most flowering plants.

What is Pollination?

When a pollen grain moves from the anther (male part) of a flower to the stigma (female part), pollination happens. This is the first step in a process that produces seeds, fruits, and the next generation of plants. This can happen through self-pollination, wind and water pollination, or through the work of vectors that move pollen within the flower and from bloom to bloom.

Pollinator Partnership

There is a ton of great information and resources about pollinators at www.pollinator.org

Pollinator Activities:

- Listen to the story, “Are you a Bee?” by Judy Allen.
- Great article on making a Mason Bee Hotel, <https://www.ecolandscaping.org/03/landscaping-for-wildlife/beneficialpollinators/attract-mason-bees-no-protective-gear-needed/>
- Pollinator Obstacle Course (Instructions below)

Pollinator Citizen Science Projects:

- **Butterflies and Moths of North America** (BAMONA) is an ambitious effort to collect, store, and share species information and occurrence data. You can participate by taking and submitting photographs of butterflies, moths, and caterpillars. <https://www.butterfliesandmoths.org/>
- **Journey North**, Track Monarch Butterfly Migration. Report your sightings each fall and spring as the monarchs travel to and from Mexico. Track migration on real-time migration maps and follow the migration news. Fall migration extends from August to November; spring migration from March to June. Find out what to report each spring and fall. Scientists rely on the help of

citizen scientists to understand the monarch's conservation needs. Your observations make a valuable contribution — and help tell the dramatic story of the monarch's journey to Mexico. <https://journeynorth.org/monarchs>

Pollinator Obstacle Course Stations:

1. Nectar Relay:

For this activity you will need:

- Ice cube tray or Styrofoam egg carton
- Dropper
- Water with yellow food coloring
- Optional: Paper flower

Directions: Start with a small bowl of nectar & your dropper (flower on the bowl optional) at one end of your playing area. Place the ice cube tray or egg carton at the other end of the playing area. Explain to your child that they will be acting like a bee and gathering nectar from flowers and bringing it back to their honey comb hive. They must “fly” to the flower and use the dropper to suck up nectar. Then fly back to their hive to deposit the nectar into the hive. The goal is to transfer all the nectar safely to their hive!



2. Bee Pollen Transfer:

For this counting activity you will need:

- Empty egg carton bottom
- Yellow pom poms
- Kid-friendly tweezers
- Dice

Directions: Explain that your child will be sorting a number of pollen balls into their hive according to the number on the dice they roll. You can give them a time limit to add difficulty.



3. Honey Bee Waggle Dance:

For this activity you will need:

- Cut out flowers (4 different colors)
- Bee dance instructions

Directions: Start by cutting out or drawing 4 large flowers. You will need a large open area and you will fan out the 4 flowers on the ground. Here's how to play: stand in a group where you can see the flowers. Explain to your child that they will be acting as a honey bee that has found a great flower and is giving directions to the other bees on how to get there. Honey bees do this by dancing! Ask your child to pick a flower (but not to tell you) and dance directions to the flower they have picked. It's called the waggle dance because they waggle their abdomen as they dance, so make sure your child is waggling their tail end too! If you head to the correct flower then they did a great job! Take turns picking flowers and dancing directions!

