



Birds, Bees, and Other Beneficial Organisms

Pollinators are very important to our ecosystem. They pollinate plants by going from flower to flower transferring pollen. Without pollinators, we would not be able to enjoy many delicious foods like apples, almonds, cherries, blueberries, pumpkins, and many others.

Get to Know Your Pollinators

Bees: There are over 4,000 bee species native to North America alone! From honeybees and bumblebees to carpenter bees, they prefer large flower petals for landing.

Butterflies & Moths: Butterflies are mostly pollinate by day and moths by night.

Beetles and Other Insects: Over 40% of all insects are beetles, and many provide important pollination services. They tend to visit flowers with wide, shallow, and bowl-like shapes.

Bats: are integral for night blooming flowers and Crops such as avocados.

Birds: Birds, such as hummingbirds, can also be pollinators. Flowers most frequently visited by birds tend to have tubular shapes so they can make use of their long beaks to drink nectar.



What is Pollination & What is a Pollinator?

- Pollination is when pollen grains are moved between two flowers of the same species by wind or animals. This provides for fruit and seeds, allowing plants to reproduce.
- There are over 1,000 pollinators like hummingbirds, bats, and small mammals such as mice. At over 200,000 species, the majority of pollinators are insects like beetles, bees, ants, wasps, butterflies, and moths.
- Worldwide, approximately 1,000 plants grown for food, beverages, fibers, spices, and medicines need to be pollinated by animals. Foods and beverages produced with the help of pollinators include: apples, bananas, blueberries, chocolate, coffee, melons, peaches, potatoes, pumpkins, vanilla, and almonds. Imagine a world without some of these things!
- In the U.S., pollination by honeybees and other insects produces \$40 billion worth of products annually!



Many types of pollinators, like honey bees, bumble bees, and butterflies are declining due to loss of habitat, widespread use of toxic pesticides, parasites and disease!

How you can help:

- (1) not using toxic pesticides
- (2) planting native pollinator habitat, like colorful flowers, gardens, and trees
- (3) telling your friends and family all about the importance of pollinators.





POLLINATOR HUNT

Pollinators are animals such as butterflies, moths, bees, and hummingbirds that drink the sweet nectar of flowers. As they feed, they carry pollen from one flower to another.

Keep a Record!

Date _____ Time _____
Location _____ Weather _____

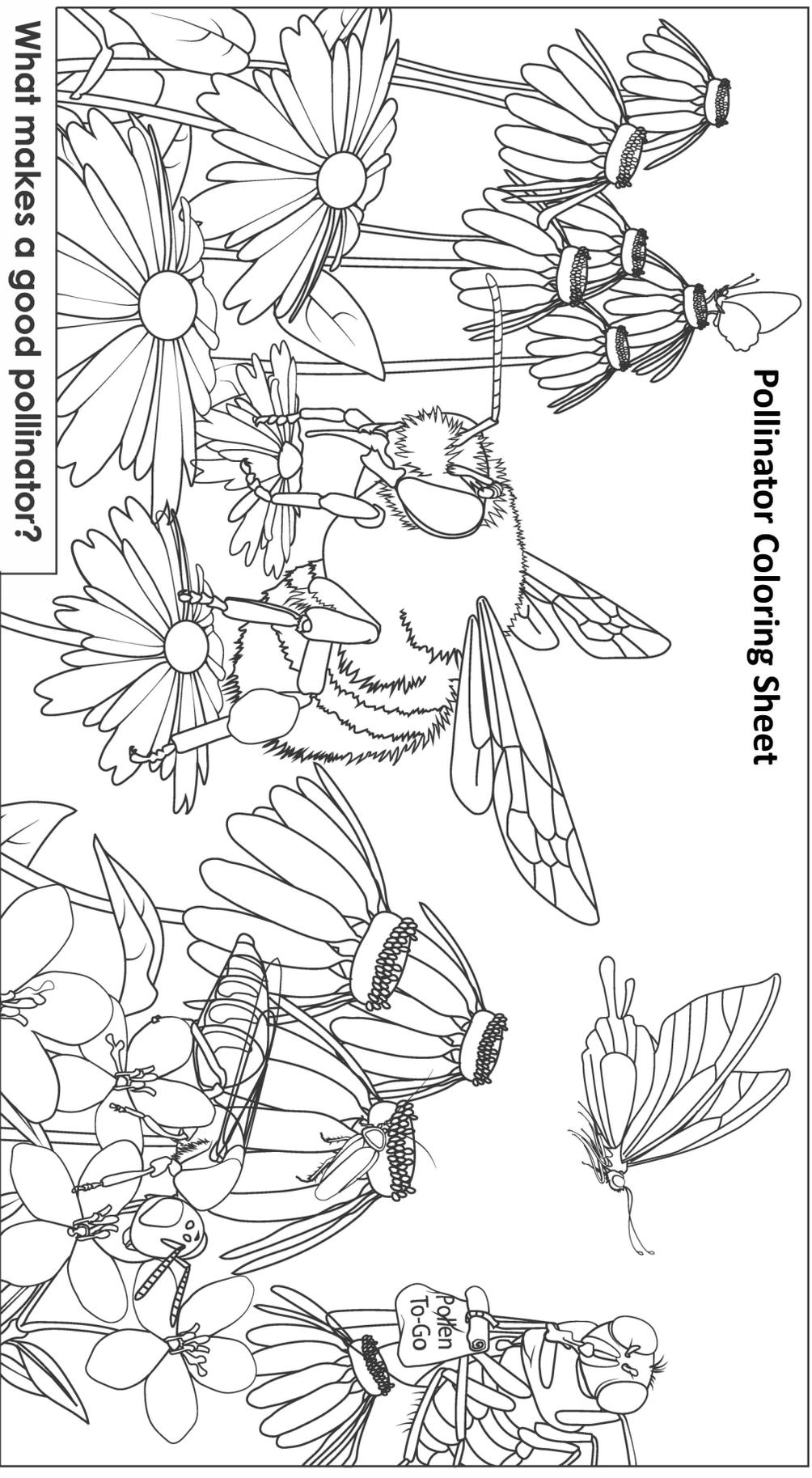
Helpful Things to Take Along

- Pencil or pen
- Field guides on flowers, insects, and birds

Take a walk outside and look for flowers in bloom. Record observations below:

Sketch of flower (Include name if known.)	Color & shape	What kind of pollinators might visit?	Did you see any pollinators? If yes, what kind?

Pollinator Coloring Sheet



What makes a good pollinator?

A **pollinator** is an animal which spreads pollen from one flower to another, which lets the plants produce seeds and fruit.

There are a few things all pollinators have in common:

- They're hairy or fuzzy.
- They love to drink sugary nectar from flowers.
- They can visit many flowers in one day, usually by flying.

Bees are excellent pollinators, but many other animals are too! Can you think of any which might be good at it?

Next time you see a bug on a flower...

Watch it carefully and look for yellow dust on its body - that's pollen! But don't bother it, it has an important job to do. Some pollinators, like bees and wasps, might sting or bite to protect themselves, so we should give them their personal space!