

Larry Hogan, Governor Jeannie Haddaway-Riccio, Secretary March 2019 Publication #7172015-771

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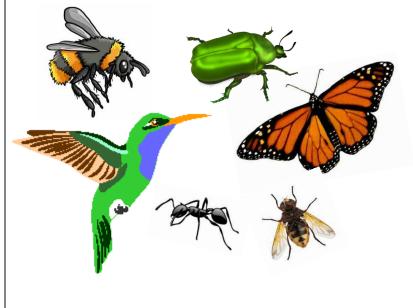
Your Observations

Date:_____ Time:_____ Location:______

What pollinator did you see?_____

What was it doing?_____

Pollinator Journal







Pollinator Discovery

Before you begin your pollinator adventure, put together a nature discovery kit! Below are some items you might want to include.

- Field Guides
 Pen/Pencil
 Camera
 Butterfly Net
 Flashlight
 Magnifying Glass
 Jar w/ holes in lid
- Binoculars
 Ruler
 Dip Net
 Nature Journal
 Sketching Supplies
 Map



Tips for Observing Wildlife

- **1.** Blend in with your surroundings. Bright-colored clothes and/or smelly perfumes can alert wildlife.
- 2. Keep still and wait. If you find a good wildlife-watching spot, then sit down and be quiet. Loud noises can often scare wildlife away.
- **3. Respect wildlife.** Most wildlife are best viewed at a distance, especially if you see a mother with its young.

Naturalist's Code of Ethics

- 1. I will help to protect animals, plants and their environment. I will not disturb animals, their nests, feeding sites or places they need to survive.
- 2. I will ask permission to view wildlife on private property.
- **3.** When I am outdoors with others, I will be a role model. I will share my knowledge of nature and will ask others to follow this code of ethic.
- **4.** I will try to leave the environment cleaner than I found it. I will carry out my trash, food and tools.
- 5. I will leave rocks, plants and wildlife as I find them for others to enjoy.

I Pledge to Follow the Naturalist's Code of Ethics



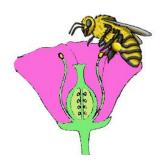
(Signed)

(Date)



Pollinator Facts

- One of out every 3 foods we eat and drink is a result of pollinators
- Flower flies are better pollinators than butterflies!
- Pollinators are important for the food web
- Bats, birds, and even some small mammals can pollinate
- Some plants have only 1 pollinator
- Chocolate and vanilla are both pollinated by animals
- A single blueberry bee can visit over 50,000 flowers in its life, creating up to 6,000 blueberries
- Pollinators around the world are declining



Put it in Poetry!

Haiku poetry is a short form of poetry developed in Japan centuries ago. The purpose of haikus is to tell a story that stirs emotion. Each poem has only 3 lines (5 syllables, 7 syllables and 5 syllables).

Find a nice quiet spot where you can observe a nature scene. Brainstorm your poem by writing down 6 to 8 sentences of different images that you see. Then, take two of the sentences that you think will create a picture and pare them down into 3 short lines.

> Be still and listen as warblers sing up the sun. The day starts anew

First line= 5 syllables

Second line= 7 syllables

Third line= 5 syllables

14

Fancy Flies

Did you know? Many flies are better pollinators than butterflies! Flies pollinate crops like chocolate. Often, flies are attracted to flowers that are blue, purple, or white. Can you find some flowers that flies may like?

Blue Flowers:

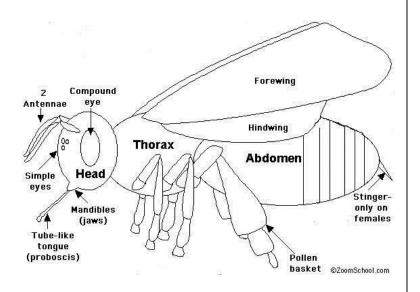
Purple Flowers:

White Flowers:



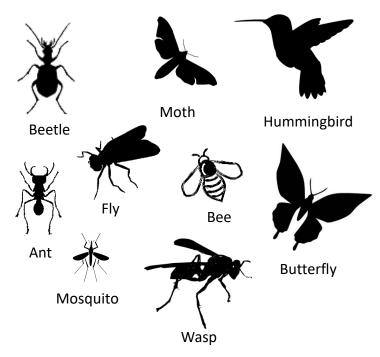
Bee Anatomy!

Bees are specially designed to find flowers and to carry pollen. Bees use their antennae and eyes to locate colorful flowers. As they land on the flower, pollen attaches to the hairs on their legs and bodies. Some bees have pollen baskets to catch pollen. Color the different parts of a bee!



Who Pollinates Flowers?

To make a seed, pollen has to travel from one flower to another. Many flowers rely on animals to transfer pollen. Over 100,000 animal pollinators can be found worldwide! Below are some common pollinators.



Pollinator Safari

pollinators!

that you found?

Why was it so cool?

Go explore and find

What was the coolest pollinator

What Foods are Pollinated by Animals?

Below are some foods that are pollinated by animals. Circle the ones that you like!

Fruit:

- Apple
- Apricot
- Blueberry
- Cherry
- Lemon
- Kiwi
- Mango
- Melon
- Orange
- Peach
- Pear
- Plum
- Raspberry
- Strawberry

Vegetable

- Asparagus
- Broccoli
- Cabbage •
- Carrot
- Cucumber
- Eggplant
- Pepper
- Pumpkin
- Radish
- Tomato

Almond Chocolate

Other

- Coconut
- Sunflower
- Walnut

- Squash



How many body parts does it □Moth have? Wasp How many legs?_____ Does it have antennae?_____ What was it doing?_____ Other Notes:

What one food above can you not live without??

Ant

Beetle

Bumble Bee

Butterfly

Caterpillar

Generation Flower Flowe

Honey Bee

Mosquito

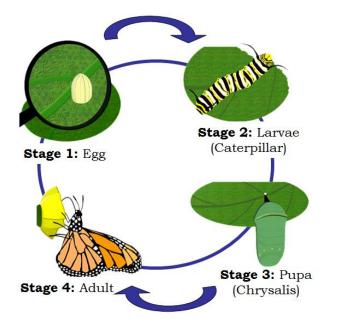
Hummingbird

4

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Monarch Lifecycle

Did you know butterflies, bees, and moths all go through metamorphosis? Metamorphosis is a process some animals go through to become adults. It is a series of physical changes. Butterflies, for example, start as eggs that hatch into caterpillars. Caterpillars then pupate and turn into butterflies!



For more info on Maryland butterflies, go to: dnr.maryland.gov/wildlife/Pages/plants_wildlife/butterfliesofmaryland.aspx

Be(e) a Friend to Pollinators!

You can help pollinators with these 5 easy steps!

1)Feed the bees! Plant a garden with native flowers for pollinators at your home and at your school.

2)Don't use poison sprays! Bug your family to stop using sprays in the garden. Many pesticides can hurt bees, butterflies, and other important pollinators.

3)Be kind to pollinators.! Many pollinators are fragile- be gentle and quiet when they are near.

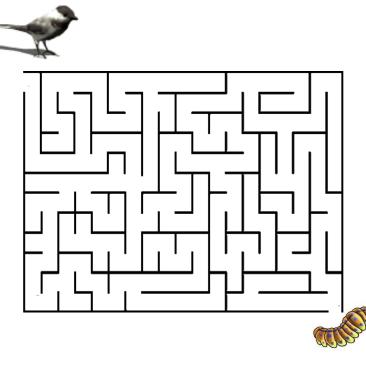
4)Protect habitat! Help pollinators by keeping their habitat safe.

5)Bug someone! Teach your family and friends why they should help pollinators too!



Food Web Maze!

Did you know many pollinators are important food for other animals? A single family of chickadees needs over 6,000 caterpillars to raise their babies! Help the momma chickadee find the caterpillar!



Flower Quest!

Describe a flower you have found:

What color is it?_____

Does it have a smell?_

Draw your flower below. Who do you think pollinates it?

Date:_____ Time:_____ Location:____