Bees… Beetles…. Birds… and Bats –

YourHardworkingPollinators!

Most plants depend upon pollinators to reproduce and we depend upon plants. In fact, one out of every three bites of food we take began as a plant that was pollinated! Healthy food isn't the only thing we need pollinators for. Cotton used to make clothing, sheets and towels also comes from plants that must be pollinated.

Pollination begins when a pollinator visits a flower in search of food in the form of pollen or nectar. Pollinators are like us—they have to eat or they don't function very well. While a pollinator is busy eating, pollen from the flower's anthers can stick to its body. As the pollinator buzzes, crawls or flies through the flower "buffet", it leaves pollen behind.

Pollination occurs when pollen grains from a flower's anthers are moved to its stigma. Some pollinators you might be familiar with are bees, beetles, butterflies, hummingbirds and bats.

More Than HONEY

Bees are very hardworking pollinators. They do so much more than just provide us with honey. For example, they pollinate alfalfa. Cows eat alfalfa hay, so without bees, we wouldn't have milk, cheese or hamburgers!

SOLVE THE PUZZLE BELOW to discover a few more of the foods we wouldn't have without bees.

DIRECTIONS: The letters to fill in the blanks are directly below the column in which they belong but they are jumbled up. Place each letter into the column above it in the right order and you will find foods that bees provide us through pollination! The "food" words will read across from left to right.

P	E	A	C	H	E	S								
				T	W					R				
	P	M	A	U	S	S	E	E	R	M	M	O	S	
R	S	P	C	C	E	B	S	A	M	P	K	S		
T	E	T	R	N	O	B	P	R	M	E	E	I	N	S
A	O	A	L	A	E	E	E	R	L	I	L	O	N	S

What Is It?

These pictures are all parts of a pollinator. Write what you think they are in the spaces and then check your answers on the back! What do you think this pollinator is?

1._____ 3._____

2._____ 4._____

Where would we BEE without Pollinators?

A POLLINATOR'S MOST IMPORTANT JOB IS TO MOVE POLLEN. Pollen is a tiny, sticky grain. It can be found on the male part of a flower, the anther. The pollen must be moved to the female part of the flower, the stigma. A good "pollen mover":

- ☒Likes to travel! A pollinator needs to be on the go a LOT to move pollen around.
- ☒Is hairy! The more hair, scales or feathers a pollinator has, the more pollen it can collect on its body to be moved around.
- ☒Has a specialized mouth made for collecting nectar!

National Association of Conservation Districts

POLLINATOR PARTNERSHIP www.pollinator.org

USDA

Visit: www.conservationlearn.org fortheeducatorsguide,additionalworksheetsandresources

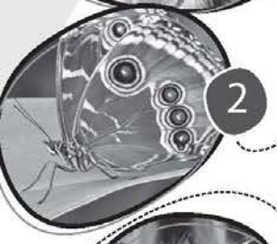
Visithttp://www.pollinator.orgforadditionalresources

What Is It?

A BUTTERFLY!

Butterflies work hard at pollinating, which is good for us because pollination leads to seed and fruit production.

1 **PROBOSCIS**
(butterfly tongue). A butterfly's tongue works like a curly straw. When the butterfly is using it to drink nectar, it is straight, and when it isn't being used, it curls up.



2 **WING**
Butterflies rest with their wings held upright.

3 **EYE**
Butterflies have super color vision and can sense color wavelengths better than humans!

4 **LEG**
Butterflies taste with their feet!!!

We Need POLLINATORS

ACROSS

4. American _____ pollinate more than 90 commercial crops in the United States.
5. Three-fourths of the world's food crops that YOU must have depend on animal pollinators to _____.
6. Insect _____ plants are responsible for 99% of the vitamin C that comes from the foods you eat!
8. _____ pollinated by fruit bats and birds, is the #1 fresh fruit eaten in the U.S.

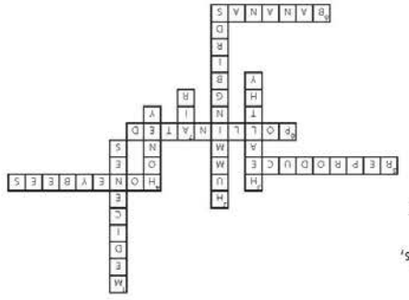
DOWN

1. Many _____ that we need come from pollinated plants.
2. In 2010 the U.S. exported 99,075 metric tons of pineapples, many of which were pollinated by _____.
3. Pollinators play an important role in _____ ecosystems.
4. The yearly value of _____ bee pollination to the agricultural plants they pollinate in the U.S. is estimated at over 9,000,000,000 dollars.
7. Most plants depend upon pollinators to survive; we depend on plants for _____ to breathe.

Pollinators NEED US

The pollinator population in North America has been declining for several years. Here are a few ways you can do your part to make sure pollinators aren't missing in your neighborhood.

- FEED THEM! Plant native flowers in your yard or in pots on your deck. Even a few pots can attract some pollinators to your neighborhood. For more information go to: www.pollinator.org.
- GIVE THEM A DRINK OF WATER. Keep clean water in a birdbath. You can also set out a dish of water with some small stones in it. The pollinators use the stones for a perch while they are drinking.
- PROVIDE THEM WITH A HOME! Make homes for birds, bats or bees. You can make them out of recycled containers and materials.
- BUY LOCAL! Support the farmers and beekeepers in your community by buying local honey and locally grown produce.
- DON'T "BUG" POLLINATORS. When you see pollinators like butterflies, beetles or birds, don't touch or frighten them.
- CUT DOWN ON THE AMOUNT OF PESTICIDES AND OTHER POISON SPRAYS USED AROUND YOUR HOME AND IN YOUR YARD. Learn about natural remedies for unwanted pests.



Answer Key:
More than Honey: peaches, almonds, apples, pumpkins, blueberries, strawberries, tomatoes, melons, coffee.
We Need Pollinators: Across: 4 honeybees, 5 reproduce, 6 pollinated, 8 bananas
Down: 1 medicines, 2 hummingbirds, 3 healthy, 4 honey, 7 air.