



Pollinators: Bee-cause We Love Them

A TILT KidsTrek

Have you ever wondered how bees make honey? Join the Thousand Islands Land Trust (TILT) on our historic Zenda Farms Preserve for an exciting buzz around the Community Garden see a real life bee hive in action and to find out where pollinators like to hang out. This field guide will help you explore the preserve and learn how important pollinators are!



A TILTKids Trek at Zenda Farms Preserve



Welcome!

To Zenda Farms Preserve

YOU ARE HERE



Today, you will be buzzing around the preserve and Community Garden to learn about how bees and other pollinators help plants grow!

Just like people, plants need a boy and a girl to make a new seed, which will then grow into a new plant! But they can't walk, so how can this happen? The answer is pollination!

Pollinators, like bees, butterflies, ladybugs, birds, and bats, love to drink the sugary nectar that is made by flowers.



When pollinators move flower to flower, the pollen on their bodies will rub off onto the next flower.



When pollinators suck up nectar, they brush up against the flower and get pollen on their bodies.



The pollen makes its way into the flower and forms a SEED. The seed has everything it needs to make a new plant.

Did you know?

When honeybees get back to their hive, they do a little “waggle dance” to share where the best food is! Can you do a waggle dance?

How do bees make honey?

1. First, a female foraging worker bee sucks nectar (sugary juice) from a flower with her long tongue.
2. The bee stores nectar in a special honey stomach to take back to the hive.
3. The bee delivers nectar to an indoor worker bee, and it is then passed mouth to mouth from bee to bee to dry it out. Fanning the nectar also helps to dry it out as well. This process changes nectar into honey!
4. The honey is placed in storage cells shaped like a hexagon- that means they have six sides.
5. The storage cells are capped with beeswax, which the bees excrete from wax glands on their abdomens.
6. Now protected from air and water, honey can be stored indefinitely, providing food during cold winter months.

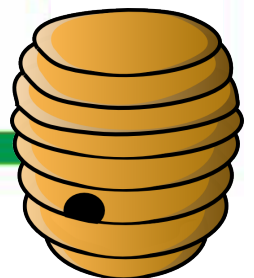
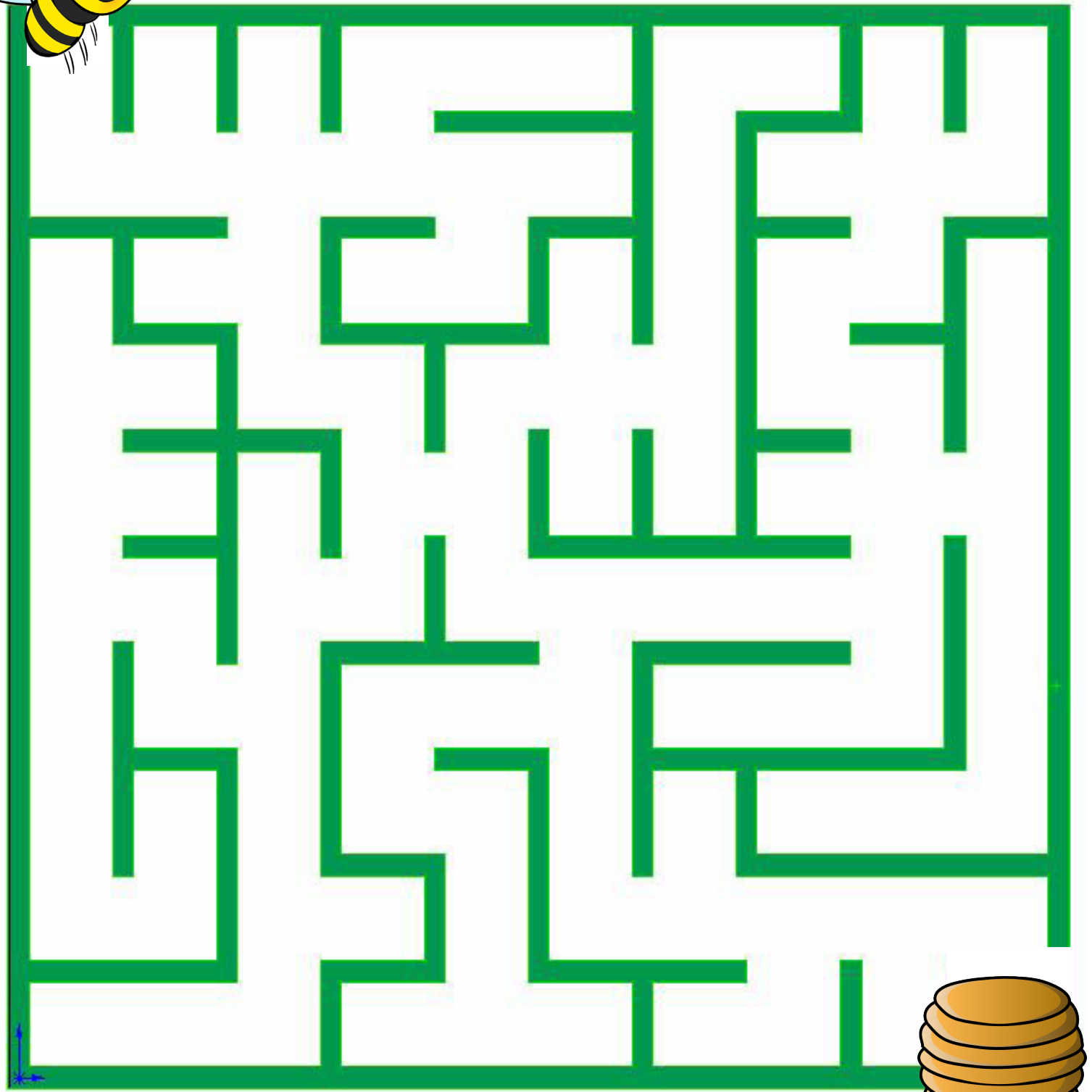
Take time to thank a bee!

Circle all the food you've eaten this past week.

Without honeybees, none of these fruits or veggies could grow!



HELP THE BEE GET TO THE HIVE!



Did you know?
Bees make the long trip
from their home to a flower
more than **40** times a day!



WHAT'S THE BUZZ?

We can thank bees for 1 out of every 3 mouthfuls of food we take! But in the last 20 years, bees began to disappear by 90%! Why??

One possible reason is pesticides. Pesticides are chemicals we spray on plants to keep pests away, which might include weeds, insects, and even animals. If a pesticide is sprayed on a plant that a bee is trying to pollinate, the bee can die.

But pesticides aren't the only story. Parasites and disease are also huge factors, as well as poor nutrition. For healthy bees, you need a healthy environment.

WHAT CAN YOU AND YOUR FAMILY DO TO PROTECT BEES?

1. Plant bee-friendly flowers in your garden or yard.
2. Let "wildflower" weeds bloom before you pull them.
3. Don't use chemicals or pesticides on your lawn.
4. Buy local, raw honey and support local beekeepers.
5. Bees get thirsty! Put out a small bowl of freshwater outside your house.
6. Buy local, organic food.
7. Take classes from your local bee association and learn how to be a beekeeper!
8. Don't be afraid! Remember, honeybees are not out to sting you. Stay still and calm if you see one nearby or if one lands on you.
9. Share what you learned with your family and friends!

Circle the differences!

Honeybee



Wasp



Some differences

Honeybees

- Less aggressive
- Die after one sting
- Feeding habit: pollinators
- Long and fat body
- Flat and wide legs
- Round body
- Live in hives made of beeswax
- Social

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Wasps

- More aggressive
- Can sting multiple times
- Feeding habit: predators
- Long and thin body
- Round and waxy legs
- Cylindrical body
- Live in nests made of paper
- Can be social OR solitary

Pollinator Spotlight

Bees aren't the only stars of this story!



Hummingbirds

Favorite flowers- red, orange, or white tube-shaped flowers



Bats

Favorite flowers- light colored, bowl shaped flowers that bloom at night and have a strong fruity or musty scent



Butterflies

Favorite flowers- bright flowers of all colors, either flat-topped or small flowers in clusters



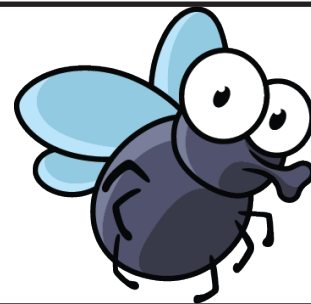
Moths

Favorite flowers- light colored or white flowers that open at dusk with a strong, sweet scent



Beetles

Favorite flowers- white or dull-colored bowl-shaped flowers with a fruity or stinky smell



Flies

Favorite flowers- Flowers with a stinky smell

WHAT'S YOUR FAVORITE FLOWER?

Bees, butterflies, and birds, oh my!

Name and draw pictures of all the pollinators
you saw today at Zenda Farms.



“Pollinators: Bee-cause We Love Them” is part of TILT’s KidsTrek series, encouraging living, learning, and conserving in the 1000 Islands Region.

We here at TILT believe that encouraging a child’s innate sense of wonder while they’re young will result in a respect for the natural world that will last throughout their lives. TILT is now offering a new level of membership- TILTKids - that gets your family all the usual member benefits, with extra goodies thrown in for the kids. Your support ensures that we can continue to offer this special programming in the future. Thank you!



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The Thousand Islands Land Trust (TILT) is working to conserve the natural beauty, diverse wildlife habitats, water quality, and outdoor recreation opportunities of the 1000 Islands region, for present and future generations!