What's all the BUZZ about?

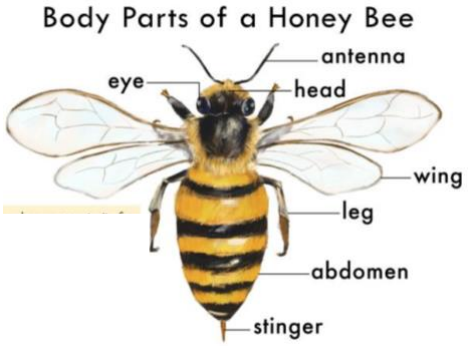
ALL I HEAR IS BUZZING IS MY HEAD!

This morning I was sitting under a tree in my backyard that is covered right now with tiny pink flowers. As I was sitting there, I began to hear a low humming sound, and then as I paid more attention, it become a louder and louder buzzing. I thought I was losing it! But then, I looked up and began to notice all of the little bees buzzing and moving around the flowering tree...Spring is here! Everywhere I go walking, more and more flowers are blooming every day. Next time you go outside, sit next to a tree and see if you can hear the *Buzzzzzz*!

To Bee or not to Bee!

Bees are insects in the order *Hymenoptera*. They have 6 legs and 2 antennae. Bees have wings, which they use to fly. Bees feed on pollen and nectar. You are probably most familiar with the Honey Bee, which pollinates a lot of our plants and trees and lives in hives where they make honey. But, did you know that these bees aren't actually from Oregon? They were introduced in the 1600s for agriculture. Oregon has many bees you may not have noticed- some live in trees and other burrow in the mud, sand or soil. See if you can notice a bee flying into a small hole in the ground.

EXPERIMENT 1: Bee observant of those around you

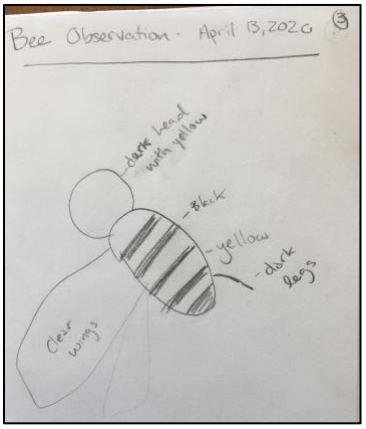


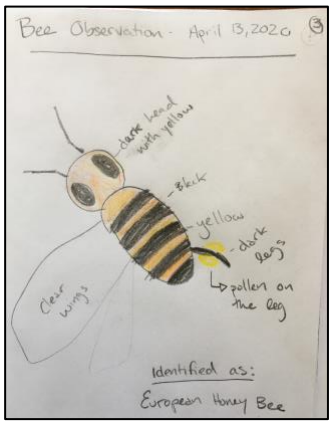
You will need:

- Your observation journal
- A pencil
- Colored pencils (optional)
- The bees of Oregon guide (below)
- Magnifying glass (optional)

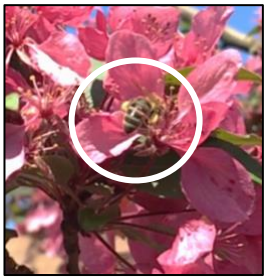
Instructions:

1. Go outside and find some flowers. Make sure to check with an adult that it's a safe place to go.
2. See if you can find a bee. You may have to be patient and wait for a while.
3. Once you spot your bee, see if you can identify the color of its abdomen and head. See if you can identify all of these parts of the body and if it has stripes on its abdomen.
4. Try make a quick sketch in your observation journal. You can either label the colors by name or color them in with colored pencils as you go. These don't have to be perfect drawings, just enough to help you identify them.
5. Use the sheet on the next page to try and identify the bee you saw!





Here are pictures from my bee observation. First I took a really quick sketch, then went back and labeled in color and detail. I also took some photos to compare with the key below! Happy bee-hunting!



You can click HERE for a printable version of this amazing bee identification guide from The Oregon Bee Project.

BEES OF OREGON

A sampling of the 500+ known species of Oregon bees to show variation in form and color.


European Honey Bee


Red Nomad Bee


Longhorn Bee


Nevada Bumblebee


Metallic Sweat Bee


Blue Orchard Bee


Cuckoo Bee


Vosnesenski's Bumblebee


Large Sweat Bee


Digger Bee


Pugnacious Leaf-cutter Bee


Mining Bee


Small Carpenter Bee


Wool-Carder Bee


Black Mason Bee


Small Sweat Bee


Cuckoo-leaf-cutter Bee


Green Leaf-cutting Bee

www.oregonbeeproject.org

Photographs by Thomas Shahan — Oregon Department of Agriculture
Order and print this poster at https://www.odaguides.us/

CRAFT 2: Build a brilliant Bee!

The best part about crafting, is seeing how creative you can get with the materials you have!
Today we will be building a bee out of a toilet paper roll! Choose one of the bees above and see if you can make your colors and wing placement scientifically-accurate!

Image 1: These bees were made at the Boys and Girls Club of the Umpqua Valley last fall. See if you can make some just as creative!

You will need:

- 1 toilet paper roll
- pipe cleaners or small twigs for legs and antennae
- Markers or paint
- Paper scraps (any color)
- Glue or tape
- Scissors
- Pencil
- String (optional)

Instructions:

1. Gather all of your supplies. Ask an adult for help if needed.

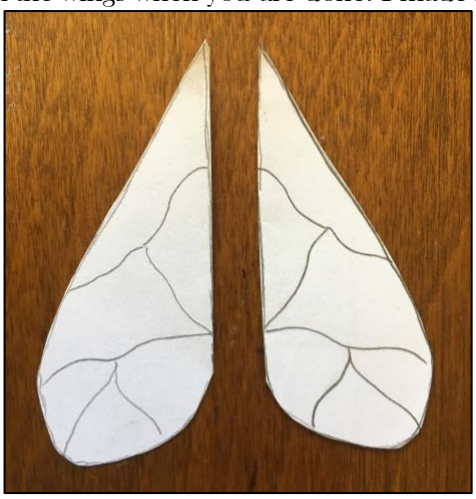
2. Take a look at the native bees guide above and select a bee to create.

3. Start by cutting out holes for the legs and antennae. If you have a hole-punch that works great too. Cut out 1 hole in the top for the antennae to come out, 2 front leg holes and 2 mid-body leg holes that are larger enough for 2 legs to come out of. I found it easiest to bend the roll in ½ and then make 2 cuts, then pull out the piece of cardboard that's left.

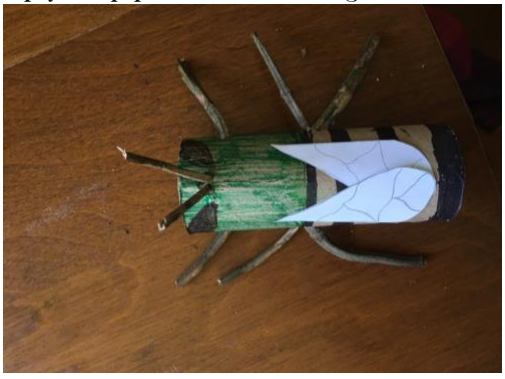
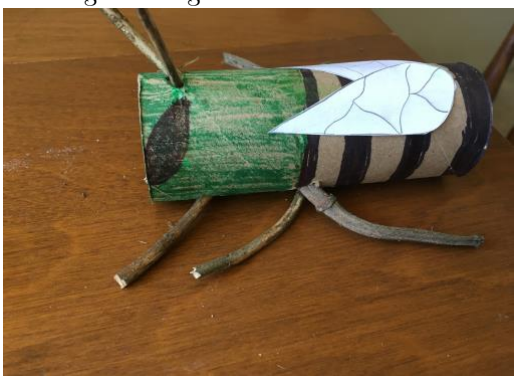
4. Next color the bee using markers or paint. Try to make the color sections accurate to the scale of the head, thorax and abdomen. I chose to make the metallic sweat bee! Allow paint to dry of using.

5. Draw on eyes or glue on googley-eyes if you have them. Leave the antennae hole in the middle

6. Next cut out your wings and draw in the lines. If you fold you scrap paper in ½ first, then your wing shapes will come out identical. Glue on the wings when you are done. I made mine folded down wings.


7. Finally, cut up your pipe cleaners or twigs and fit them through the leg holes!

8. You can feed a string through the middle to hang it up if you like ☺

Why do bees matter?

Bees are very important for our ecosystem here in the Umpqua Watershed. The bees are busy pollinating the flowers for the apples, plums and other fruit we will eat this summer. Bees pollinate flowers all over the Umpqua, which then provide smaller berries for birds and rodents to eat! Bees are also an important food group for insectivores (animals that eat insects), so some get eaten as a part of the food chain. Next time you see a bee, give it a thank you wave!

Room with a view

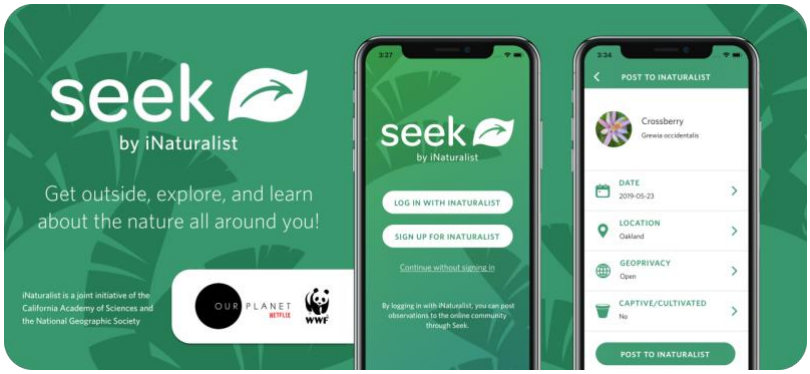
Explore this Honey Bee Live Webcam – there could be 50,000+ worker bees coming and go bringing pollen to the hive! See if you can notice the difference between the bees with pollen and the bees without. All of the bees in this video are female, and they're all sisters!

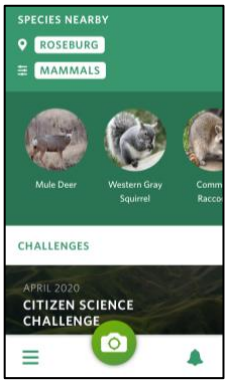
If you're looking for more ways to learn about Oregon's bees, then check out these Bee Trading Cards!

CITIZEN SCIENCE CHALLENGE!

Just like we learned in the bird activity, citizen science is a way for young scientists like you to collect data on a species and share it with scientists around the world. Citizen science is very important for conservation and protecting species from dying out (going extinct). While eBird is just for birds, there's another app for all the rest of the species out there, mammals, insects, plants etc. So, this is a great place to learn about the bees and other **pollinators** in your watershed!

With the help of an adult, download the Seek App from iNaturalist and begin exploring the species in your area! If you are under 13, make sure an adult helps you create a special youth scientist account. You can just take a picture of a species, post it to Seek, and they will help you identify the species and share that data in a global citizen science project! In case you didn't know, April is Citizen Science Month!





Thanks for conducting science with me for this Home Explorer activity from Umpqua Watersheds Education Program. Join me for new activities posted every week!

- Ms. Robyn