# THE MAGIC WORLD OF BEES

## Bee knowledgeable

Do you like strawberries? Chocolate? Cherries? Then you ought to love bees. Bees pollinate most of our fruit, nut, grain, herb and vegetable crops. By transferring pollen from one plant to another, bees fertilize the flowers so fruits and vegetables can grow. In fact, bees are responsible for pollinating a third of all the foods we eat!

Sadly, though, world bee populations are declining. They face habitat loss, pesticide use, diseases and parasites. And humans are not the only ones affected by the loss of bees. Other animals depend on plants which rely on pollination by bees.



The good reput? You can help seer, right in your own community

- & Never harm a bee and leave hives undisturbed.
- Plant flowers and fruit trees. Bees like visiting gardens where there are many different types of plants to gather pollen and nectar from.
- Plant flowers that bloom at different times of the year. That way, you will attract different types of bees.
- Bees have good colour vision! They especially like blue, purple, violet, white and yellow Alowers.
- & Build a bee bath. Gathering all that pollen makes bees thirsty! Find out how at spca.bc.ca/crafts.
- Avoid using pesticides. Pesticides can kill other insects like bees unintentionally.
- Leave some weeds! Bees are attracted to weeds like dandelions and buttercups.
- Make a bee nest. You can create simple homes for native bees such as the blue orchard mason bee. Check out spca.bc.ca/crafts for step-by-step instructions.
- Tell others about the importance of bees.

### Bee aware

Many people needlessly fear bees, thinking they will sting. But bees are gentle animals who rarely sting unless they feel threatened. People are more commonly stung by wasps, who tend to be more aggressive.

### Bee ID

A quick way to tell the difference between bees and wasps? Bees have hairy bodies, while wasps appear smooth and shiny.

Honey bee



Hornet (a type of wasp)

Yellow jacket
(a type of wasp)

## Build a Bee Bomb

The world needs bees — and you can help. How? By building a bee bomb!

Bee bombs, or seed bombs, are a super fun way to add wildflowers where you live — giving bees places to pollinate. All plant-eating animals (that's us!) need pollination to grow the food we eat. So bees are very important!

Next, build your bee bombs.

1. Mix five-parts clay with three-parts compost or soil and one-part flower seeds.

Clay. This protects the seeds, stopping animals from eating them before they have the chance to sprout. You can buy a container of clay or use fresh, plain clay cat litter if you have it.

Compost or soil. This helps the seeds sprout Either will do!

Seeds. Use native wildflower seeds. You can even get special "bee blends"

packets of seeds specially designed to attract bees.

**2.** Add a few drops of water (not too much!) to help it stick together.

3. Knead the whole lump into a big ball, making sure the seeds are evenly mixed so you don't end up with too many in one spot. Then pull off small pieces to roll and shape into your golf ball-sized "bombs."

finally, throw and grow.

This is the fun part!

Once they've had a few hours to dry, choose where to "drop" your bombs. Keep in mind that wildflowers grow best in places where they get both sunlight and rain. Toss them in your backyard or launch them into an open meadow, ditch or at the forest's edge (leave other people's gardens and public parks off limits). Gather friends and aim at a chosen spot to see who can get the closest! Or simply pop them in your own garden's flowerpots where you can check on them as much as you like.

Your bee bombs will need sunlight and plenty of water to sprout. It could be many weeks before anything blooms. But when it happens, expect the bees to come a-buzzin!



e share our province with so many amazing animals – and not just the kinds with fur or scales or feathers! B.C. is home to more than 35,000 different types of insects. And, though no one knows for sure, there are probably more than 1,000 different types of spiders living here too. That's a ton of bugs!

Each bug plays an important role in the ecosystem. Some, such as ladybugs and orbweavers, help defend plants by eating the insects who feed on them. Others, such as moths and bumblebees, help fertilize plants through pollination. You might not consider yourself much of a bug person, but believe us – the world needs insects and spiders! Life on earth as we know it couldn't exist without them.

PHOTO: LAURIE SCHRETLAN

### Wildlife rescuers needed!

Let's be honest: bugs are not very popular animals.

Although we depend on them, many people just don't like them – and are even a bit afraid of them.

While we might find them a little scary, most bugs are actually harmless to humans. Sadly, though, some people go out of their way to harm bugs by squishing them or destroying their homes. If we as animal lovers don't care about insects and spiders, who will?

Volunteer to be a wildlife rescuer at home and at school! (A wildlife rescuer, you ask? What does wildlife rescue have to do with bugs? Well, bugs are animals who live in the wild, which makes them wildlife. And they sometimes need rescuing!) Being a wildlife rescuer means helping to keep insects and spiders safe.

The praying mantis, originally from Europe, was introduced in the 1930s to help protect crops from grasshoppers. B.C. has a native mantis, the ground mantis, who is under threat from habitat loss.

Hummingbird moths

feed much like
hummingbirds,
hovering in
front of a
flower to
sip nectar
from it.
They're
strong
HSOINION ANDOSE
rapid wingbeat.

Dragonflies and their ancestors are some of the most ancient of insects. Dragonfly fossil records date back to more than 300 million years ago. They're older than dinosaurs!





Bugs up close

When you're out on a nature walk, it's easy to be distracted by the bigger animals - the squirrel burying a nut or the chickadee flitting from

branch to branch. But there are plenty of bugs to see, too. Grab a pair of binoculars or a magnifying glass, and get out and explore. A whole new tiny world will open up to you!

Ladybug

PHOTO: MIKE GABELMANN

PHOTO: NORM NG

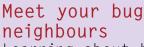
Wildlife rescue basics

When bugs come inside your kitchen or your classroom, make it your job to gently trap them and return them outdoors. All you'll need is a cup and a thick piece of paper (and perhaps a bit of courage, too!).

- 1. Place the cup over the bug.
- 2. Slide the piece of paper gently underneath the bug.
- 3. Carry the bug trapped between the paper and the cup to a safe place outside. Release the bug close to the ground.

Part of keeping bugs safe means respecting their homes too. Insects and spiders make their homes all around us. Constructing a web or digging a burrow is a lot of work. So, the next time you see someone destroying a web or stomping on an anthill for fun, ask them politely to stop!

Small jumping spiders don't wait in a web for their meal to come to them. Instead, they hunt by leaping onto their unsuspecting prey.



Learning about bugs can help us understand them better and respect them more. And guess what? Insects and spiders are actually quite fascinating! Here are just a few you might catch a glimpse of in your own backyard.

Male June beetles have large antennae that fan out to detect the scent of any females nearby.





