

Consider Critters

Good gardeners cultivate more than just plants. They encourage a healthy diversity of both flora (plants) and fauna (animals) — especially beneficial insects! Take your students on an exploration to see how many different types of insects you can find in your garden. As students discover and examine ants, ladybugs, butterflies, and other insect types, they will learn to distinguish between helpful and harmful species, challenge their fears and assumptions about insects, and come to recognize the crucial roles these tiny creatures play in the ecosystem as a whole.



Dig Deeper

Insects are invertebrates, with an exoskeleton made of a hard substance called chitin. All insects have antennae, six jointed legs, and bodies divided into three parts: a head, a thorax, and an abdomen. Many garden creatures commonly known as “bugs” are not actually insects. These include spiders (which are arachnids), slugs and snails (which are mollusks), and worms (which are annelids).

Some insects, like aphids and whiteflies, feed on plants and can be harmful to the plants’ survival. Others can be helpful to plants. Predators such as ladybugs and praying mantises eat other harmful insects; pollinators such as bees and butterflies pollinate flowers;



and decomposers such as ants and worms help to break down organic matter and recycle nutrients back into the soil. All insects have a role

to play in the ecosystem, and many serve as a crucial food source for birds and other wildlife.

What You'll Need



- Observation logs
- Colored pencils
- Magnifying bug boxes
- White cloth sheet or poster paper
- Insect field guides



What To Do

TALK ABOUT INSECTS

Ask your students to name some insects that might live in the garden. What makes an animal an insect? Where do insects live? What do they eat? Have your students describe some insects they have seen in their neighborhoods. How can insects harm plants? How can they help plants?

SEARCH FOR INSECTS

Go out to the garden and challenge your students to find as many different types of insects as they can. Encourage them to use their senses. Do they see any insects in the soil, or under the leaves? Do they hear any insects? What are the insects doing? Spread the sheet or poster paper underneath a bush or other large plant and have the students gently shake the branches. What insects are they able to catch on the sheet?

EXAMINE INSECTS

Help students gently place insects into the bug boxes so that they can examine them up close. Encourage them to record descriptions in their observation logs, and make sketches. Use field guides to identify the different types of insects you find. Which are harmful to the garden? Which are helpful? Make sure to release all insects before returning to the classroom.

Plant to Person



Some insects exhibit harmful behaviors (destroying plants), while others exhibit helpful behaviors (pollinating plants, improving the soil, controlling other species).

People can also exhibit different behaviors in the garden. Careless actions (stepping on a plant) can harm your plants, while nurturing actions (watering, mulching) can help your plants grow.

Ask students if they can think of ways their behaviors have positive or negative consequences outside the garden. How does their behavior affect their families, friends, school, and community? How can they make positive changes to their behavior?

Take Action

Challenge your students to create a short field guide to the insect life in their own neighborhoods, including descriptions of at least five different types of insects.

Remind students to include lots of scientific detail in their entries. What does each insect look like? Where does it live? What does it eat?

What plants and environmental conditions would bring more beneficial insects to the students' neighborhoods? Ask students to list some ways they could help to create these conditions.

