

Protecting our pollinators

By Carol Reed-Jones, copyright 2023. For educational use.

*This material is from the informational back matter in my picture book manuscript, **Bug Park**. Even if a publisher never acquires this book, I hope this information is helpful to students, parents, and teachers.*

Insects are so important in nature. Insects, bats, and even birds such as hummingbirds are pollinators: as they search for plant nectar many of them fly from flower to flower spreading pollen from one plant to another, so that the plants are fertile and produce fruit and seeds. Animals, including us, eat fruit such as apples and cherries, avocados and berries; and seeds such as wheat and rye, sesame and sunflower. Many of these rely upon pollination by insects to grow. How can we help pollinators? First, do all the good things which you may already do: take reusable bags when you shop for food and other things; recycle paper, glass, and cans. These make things better for us and animals, including pollinators.

Ways to help insects:

Here are many suggestions. Just choose one to start with, then see what happens. You may want to follow up with more actions, or tell friends about what you have done.

Provide clean water. Even a shallow dish of water, changed regularly, helps. If it is not shallow, put rocks in to rise above the surface so insects have someplace to land while they drink.

Plant a pollinator garden. Find out which native plants grow in your area. Have a variety which bloom at different times. Find flowers which have colors which pollinators like. Bees are attracted to white, yellow, purple or blue flowers which are shallow-shaped and not too strongly scented. Butterflies like red, pink, orange, purple, and yellow flowers with a large surface on the flower where they can land. Plant them where it isn't too windy, which makes it easier for pollinators.

Create habitat for insects. You can create insect habitat by making places for them to live. Bug hotels are projects which you can make yourself to give insects a home. Some examples are chunks of wood with holes drilled into them for bugs to explore and excavate; or pieces of tree branches or trunks in which woodpeckers have drilled holes; or large chunks of thick tree bark. Many books and articles discuss how to create bug hotels. Two are *Bug Hotel* by Libby Walden; and *Bee Hotel: 30 DIY Insect Home Projects* by Melanie von Orlow.

Avoid using “bug zapper” lights. Allow natural predators such as praying mantises, swallows and bats to catch insects.

Replace white outdoor lights with yellow ones, or put them on a timer so they are not on all night. Insects are drawn to light, and can injure themselves bumping into lights, exhaust themselves flying around the light, or neglect their other necessary activities such as food gathering and pollinating while they circle the lights.

Work to reverse global warming. Take the bus or other mass transit where possible. Ride your bike or walk more places. Why is this important? Insects and other animals are adapted to a specific climate with seasons to which they adjust. When temperatures are significantly hotter or colder, this can harm them, even cause them to die from extreme heat or cold, or cause them to move to somewhere else. When pollinators move away, that means fewer food crops for us and less forage for wildlife.

Plant a climate victory garden. What is a climate victory garden? It has five parts: grow food; cover soils so they don't erode away or lose nutrients; compost; don't use chemicals; encourage biodiversity. This will restore soil health, and help to draw down carbon levels from the atmosphere. Don't have space? Even a pot of wildflowers can make pollinators happy.

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Remove invasive plant species which crowd out beneficial native plants. Read a book about the native plants of your region. Contact your local agricultural extension office for information on which species are native and which are invasive, or see the Ecoregional Planting Guides at the Pollinator Partnership <https://www.pollinator.org/>.

Avoid using pesticides. Pesticides harm insects, including beneficial ones such as bees and other pollinators. It is possible to remove weeds by...weeding them. Use a small spade or a dandelion weeder to dig deep roots rather than spraying the plant.

Try to eat organic foods when you can. Crops which are grown without chemical fertilizers or pesticides are beneficial to all life, including us and insects. You might consider growing a climate victory garden, which is a food garden using organic growing methods such as no pesticides or chemical fertilizers, covering the soil with natural mulch to retain water, and choosing plants pollinators like. Bees are attracted to white, yellow, purple or blue flowers which are shallow-shaped and not too strongly scented. Butterflies are attracted to bright reds and purples and a large surface on the flower where they can land. See Green America's website for more information. [Support Pollinators in your Climate Victory Garden \(greenamerica.org\)](https://www.greenamerica.org/support-pollinators-in-your-climate-victory-garden)

Create habitat for insects. This can mean cultivating native plants in a space where insects can thrive. But even if you can't change the plants around you, you can still create insect habitat. Bug hotels are projects which you can create to give insects a home. Some examples are chunks of wood with holes drilled into them for bugs to explore and excavate; or pieces of tree branches or trunks in which woodpeckers have drilled holes; or large chunks of thick tree bark. Many books and articles discuss how

to create bug hotels. Two are *Bug Hotel* by Libby Walden; and *Bee Hotel: 30 DIY Insect Home Projects* by Melanie von Orlow.

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<https://www.pollinator.org/> The Pollinator Partnership has many resources: how to plant a climate garden, and information on how to enhance carbon absorption by your soil and plants. One resource that is particularly useful is the EcoRegional Planting Guide, which helps you find out which plants are native to your region, and which will help pollinators the most. Their website posts all sorts of information on pollinators and how to help them.

