ASK A MASTER GARDENER



PIXABAY

uestion: I have been hearing you should avoid cleaning up fall leaves and spent plant stems to help bees, but it looks so untidy. I clean up mine and always see plenty of honeybees. So why should I leave them?

nswer: The familiar European honeybees you are seeing are actually non-native. The practices you are hearing about are to support native bees and beneficial insects that overwinter in leaf litter and plant stems.

As gardeners and land managers, though it seems we hear often about some newly introduced insect pest, insects overall are in decline. While we may want to rejoice, this decline includes many beneficial insects (including pollinators).

As gardeners, we understand the important role bees play in our gardens. But many do not yet understand the ubiquitous honeybees that first come to mind are only a small part of the pollinator landscape. And honeybees are actually a species introduced from Europe. Though our gardens may buzz with honeybees, our practices may unwittingly be creating food and habitat deserts for the native bees and pollinators in the areas we live in.

Over time, plants and animals in natural ecosystems



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have evolved special relationships with each other. Some plants put out toxins to repel insects. But often they also need insects for pollination. Certain insects have developed a tolerance for specific plant toxins (think Monarch butterflies and milkweed), or evolved mouth parts for reaching the nectar in specific flowers.

These adaptations create balances that support both plants and insects. In a healthy habitat, a wide variety of plants and insects thrive alongside each other. Diversity makes the ecosystem less vulnerable to the effect of diseases or other threats.

Our home gardens initially were organized for beauty alone. For a long time, we have been drawn to exotics, plants and cultivars from all around the world. The purpose of such gardens was to dazzle the senses. In addition, we surrounded our flower beds with non-native turf grasses, managed to perfection with fertilizer, herbicides and pesticides.

As our understanding changed, and we learned the importance of bees, many



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Bumblebees overwinter in leaf litter and plant stems.

of us began to add lavender, beebalm and other flowers to attract honeybees. We have begun to be more thoughtful about the chemicals we use in our gardens. Now it is time to add some new understanding to our practice and tolerance for a bit of "messiness".

Due to loss of habitat through urban expansion, forest

management, agricultural practices, and our love of exotics in landscaping, we have unwittingly created food deserts for native insects that dwell in diverse stands of native trees and their understory. Birds depend on these insects as well, most raising their young on caterpillars, an insect especially targeted by home gardeners.

Honeybees, as we know, are facing some serious disease threats. As our native bees have declined, we are more and more dependent on cultivated hives of bees for crop production. But what if we began to see our home gardens not just as places of beauty, but also as tiny ecosystems? Could we weave together the larger more continuous habitat necessary to support diverse populations of beneficial native insects?

According to the Oregon Bee Project, Oregon has about 700 species of native bees. Some are now endangered. Our native bumblebees, able to forage in cooler weather, are critical for early blooming plants and crops. If we tuck native plants into our flowerbeds, particularly species that bloom in the cooler seasons of early spring and late fall such as manzanita, red-flowering currant, Douglas aster, common yarrow and goldenrod, we can support native bees.

Some of these plants may not have the showy looks of some of our favorites, but they are not without appeal. And some are indeed lovely.

Dandelions (a now widespread European native) provide food for early foraging honeybees.

What if we allowed our lawn to become less manicured and reliant on chemicals which

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often affect beneficial insects along with the targeted pests?

Many native bees are solitary or nest in the ground. Queens overwinter in pithy plant stems and leaf litter, as do some pollinator moths. Their eggs often develop in spent plant stems during the growing season. In tolerating a bit of messiness by leaving some spent flower stalks until the weather has consistently warmed up, or providing some areas of piled leaves (which make wonderful mulch and compost) we provide overwintering habitat for these beneficial insects.

One clutch of chickadees requires 6,000 caterpillars to raise. What if we became more tolerant of holes chewed in a few leaves?

As home gardeners, we have control over our practices. If enough of us made some of these small shifts, became tolerant of a bit of messiness, maybe we could make a difference.

Last week, while I savored some rare sun, a sleepy bee landed on my jacket and circled for a moment. Bees are



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Holes made in raspberry canes by carpenter bees for overwintering.

waking up. I was tempted to clean up my garden. But today, chilly rain falls again. I think I will leave the leaf litter and weary stalks in place just a bit longer.

If you want to learn more about practices you can adopt in your own garden visit oregonbeeproject.org/garden.

Contact the Douglas County Master Gardeners at douglasmg@oregonstate.edu or 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the OSU Extension Service.