

Overwintering Winter Habitat for Bees

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With the importance of protecting pollinators, a fall recommendation is to leave gardens messy over winter. We might hear leave the leaves or wait until spring to cut the tops of herbaceous plants back. How does this help pollinators?

When the subject of pollinators comes up, honeybees may come to mind. Honeybees, who are from Europe, are important pollinators but there are over 4000 species of native bees in North America who play an important role in pollination.

Native bees include different types of bumble bees, sweat bees, leafcutter bees, carder bees, carpenter bees, mason bees and digger bees. Like many other insects, they undergo complete metamorphosis from egg to larvae to pupae to adult.

Many overwinter in these stages in nests in soil or inside pithy or hollow stems. Bees use a variety of materials to build their nests. Some line their nest with a waxy material they produce themselves. Others use pieces of leaves or mud to form cells to lay eggs in.

Leaving gardens a little messy over winter provides added protection for bees overwintering in soil and it leaves plant stems in place that bees may already be nesting inside of for winter.

A deep layer of leaves left on lawns is not recommended. They can mat down and suffocate turfgrass. Leaving leaves in flower or shrub beds is fine. Bees are more likely to nest in these areas compared to a lawn.

On waiting until spring to cut herbaceous plants back, this adds winter interest to gardens and helps trap snow for increased soil moisture along with protecting pollinator nests. If a plant is unsightly during winter, opt to cut it back to 8 to 24 inches tall. This will still protect nesting bees found in lower stems.

If plants are cut back to 8 to 12 inches tall, new growth next spring will hide these stems and they won't need to be removed at that time. This allows later emerging pollinators to complete their life cycle from pupae to adult.

A common question asked is won't leaving plants over winter protect harmful insects as well as pollinators? This is true however the majority of insects are not harmful and many are beneficial. If a plant had a damaging insect during the growing season, cut those plants back after a fall freeze.

If you plant a garden as a pollinator habitat, having plants blooming all season is important. It's equally important to provide a water source like a shallow bowl filled with marbles and water, plants for pollinator larvae like milkweeds for Monarch caterpillars, and nesting or overwintering sites.

When it comes to bees, these include some bare soil areas along with plant stems left over winter. Avoid too deep of a mulch layer and avoid using landscape fabrics with rock mulch in shrub or garden beds.

While there are many types of pollinators, bees are the most important. The reasons are they spend much of their life collecting pollen as a protein source to feed their young. This protein is collected with specialized brushes or pockets on their legs or body.

Bees also have electrostatic hairs that attract a lot of pollen grains. And they tend to focus on one type of flower when they feed and are more likely to transfer pollen between the same flower types. Plants need pollen grains from their own type for pollination to be successful.