WINTER HABITAT FOR BENEFICIAL INSECTS?

By

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A growing number of Georgians are trying to encourage pollinators other beneficial insects in their yards. These actions usually center on planting native and ornamental plants that provide nectar and pollen for a wide range of pollinators and/or serve as host plants for butterfly and moth caterpillars. However, most homeowners are doing little to provide these valuable insects with overwintering habitat such as nesting sites and shelter. Consequently, they are attracting far fewer moths, butterflies, solitary bees and other valuable insects than they could if they were also addressing their other needs such as overwintering habitat. This is a shame because providing places for these insects to spend the winter is actually quite easy.

There are many reasons why this is the case. For example, when we think about pollinators, non-native honeybees, and butterflies come to mind. For example, homeowners typically ignore the fact that according to the US Geological Survey native

bees pollinate 80% of all of the native flowering plant species rooted in North America. Remarkably, there are something like 4,000 native bees are flying about the continent.

In addition, most traditional gardening activities end once Jack Frost makes his first visit to our yards. After that, gardeners direct their efforts toward tidying up their yards and gardens by cutting down dead flowering plants, raking up fallen leaves, and removing dead limbs and branches. We now realize that as far as many native pollinators, are concerned these activities actually do them more harm than good.

Take the firefly, for example, these magical beetles actually spend 95% their lives as larva gobbling up slugs, soft-bodied insects, and snails As adults, they also serve as pollinators flying from flower to flower dining on nectar and pollen. In their larval stage they inhabit rotting logs and leaf litter. When this habitat is lost, the fireflies' magical summer light shows are extinguished.

The ladybug is another beneficial insect that winters in woodpiles, and beneath rotting logs.

Fallen leaves also serve as home for a number of butterflies and moths. Some of these showy moths overwinter in cocoons blanketed by fallen leaves. For example, one of our favorite day-flying moths, the snowberry clearwing (often called a small hummingbird moth), will winter in the leaf litter beneath coral honeysuckle vines.

Adult mourning cloak butterflies often overwinter in woodpiles and under tree bark. Red-banded hairstreaks lay their eggs in fallen leaves beneath wax myrtle and sumac plants. In addition, their young overwinter as caterpillars awaiting spring to finally develop into adults.

One of the best ways to create this habitat is to leave the fallen leaves in your garden in place throughout the winter. Since a heavy blanket of leaves can smother lawns, if you rake them up, use a rake or leaf blower. Do not mulch them.

Pruned and fallen branches can be use to create brush piles. The best brush piles are not tightly packed. This affect can be achieved by placing the largest branches on the bottom of the

pile. This permits pollinators, birds, and other wild animals to find shelter inside the piles. The same is true for logs.

Dead limbs and rotting logs create super habitats for a host of native bees. The dryer limbs can be used by overwintering butterflies and moths. Songbirds will also feed within the piles and use them as shelter on cold winter nights.

Some native bees also construct their nests in rotting logs. In addition, you can "plant" logs at various places around your yard. Hardwood logs will last longer than pine or other softwood logs. Simply bury one end of a short log a few inches into the ground. This will help the log retain moisture. Once you do so it will not take long for long-horned and bark beetles as well as others insects to move in.

If you are worried your neighbors will consider a brush or woodpile an eyesore, locate it in an out-of-the-way location such as in the back corner of your property or behind shrubs.

At the end of the growing season, you can create habitat for stem-nesting bees by not cutting plant stalks down the ground. Instead, leave them standing throughout the winter. If the dead

stems do not contain seed heads full of seeds, cut them back to varying heights. Female bees will use the open stems to deposit their eggs and balls of pollen needed by her young when they hatch. Some bees will also overwinter in the hollow stems.

Seed heads that contain seeds should not be cut until birds have devoured all of the seeds.

In the spring, you will know when bees are using the stalks as nesting sites as the females will plug them with mud, rosin, bits of leaves, and even pebbled.

Shrubs with pithy centers can be pruned throughout the winter. However, try to cut stems of varying diameters to accommodate bees of different sizes.

As you can see, you can often benefit a diverse suite of valuable insects by how you treat fallen leaves, branches, and limbs in the fall. The techniques described here are perfect for folks like me that do not especially enjoy cutting down dead plants, and raking autumn leaves. Perhaps they will appeal to you too.

Photos courtesy of Terry Johnson

BRIEF BIO

Terry is a retired wildlife biologist and the first program manager for the Georgia Department of Natural Resources' Nongame-Endangered Wildlife Program (now called the Wildlife Conservation Section). He presents wildlife-related programs throughout the state. He has authored two books. He also writes a weekly column for the Monroe County Reporter (Monroe Outdoors) as well as a monthly column (Out My backdoor) for the Georgia Wildlife Resources Division. His endeavors have earned him more than 70 awards for wildlife conservation, as well as wildlife photography and writing, including the Garden Club of Georgia's Award of Merit.