

A s the year comes to an end and days turn colder, wildlife seeks protective cover from the elements. This is the time to resist the temptation to "clean up" your yard! Before you rake and bag up all the leaves or send bundles of pruned branches off to the landfill, consider the high value these resources can have for wildlife.





Be mindful when you "clean up" your yard this winter. This sleepy hibernating gray treefrog was discovered in leaf litter during winter maintenance. Please leave your leaves!

Constructing a brush pile is a great way to recycle large tree branches and smaller limbs that have fallen during the year. The myriad nooks and crannies of a brush pile are good places for birds and small mammals to quickly escape predators and hunker-down out of the wind. The eastern red bat has been known to hibernate under large log piles.

Keeping the leaves on the ground and allowing dormant flowering plants and grasses to remain standing, rather than cutting them back, are two other excellent ways to ensure that wildlife has adequate shelter in the coming winter. This habitat component provides thermal cover as well as refuge from precipitation. Some insects lay their eggs in the stems of plants, to develop the following year. Other insects, like beetles, bugs, millipedes, and grasshoppers overwinter as adults under leaves.

A thick leaf layer is key to survival for many species, including salamanders, box turtles, chipmunks, and toads. Four frog species hibernate under leaves: wood frogs, spring peepers, chorus frogs, and gray tree frogs (see photo). Some butterfly and moth species require leaf cover for their eggs, pupae, or adults. For example, caterpillars of the great spangled fritillary spend winter diapause in the leaf layer, while luna moth cocoons are camouflaged to look like the dead material.

Leaf mulch has numerous environmental benefits. It protects soil from displacement during rain events, which greatly reduces the likelihood of erosion and sediment being washed into creeks and streams. Soil is also much less likely to become compacted when it has a blanket of leaf mulch over it to create structural spaces. Leaves help to insulate the soil and minimize extremes of temperature, and they retain moisture for plants' roots.

As leaves gradually disintegrate from the decomposition process of fungi and bacteria, and from insects and other soil organisms that chew, shred, or otherwise fragment the leaves, the result is soft, loamy organic matter that improves soil structure and recycles nutrients back to surrounding plants and trees. This light, fluffy material is what gives a forest floor—or your mulched garden beds—a spongy, springy quality. Protecting the leaf layer and soil condition in your land-scape will provide a good foundation for a healthy habitat that supports many plant and wildlife species year round.

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## **RESOURCES**

- Brush Piles for Wildlife, Va. Department of Forestry: www.dof.virginia.gov/ infopubs/Brush-Piles-for-Wildlife\_pub. pdNative-Shrub-ID-spreads\_2016\_ pub.pdf
- ♦ LeaveTheLeaves, Xerces Society: https://xerces.org/2017/10/06/ leave-the-leaves/