

Life in the Leaf Pile
Alison Robey, Kent Land Trust Correspondent

It's leaf season, folks! We've reached that perfect time of year when the hills turn scarlet and gold, when the temperatures are just chilly enough for cozy jackets but just warm enough for a few more gorgeous hikes, when Kent and every other New England small town become briefly famous for a few weeks of leaf-peeping.

Of course, the thing about our trees putting on their annual beauty pageant is that all those leaves suddenly end up clogging up our gutters, burying our trails, and stifling our lawns under slippery brown heaps of debris. The typical list of fall yardwork is thus chock full of tasks aimed at the repeated and never-ending removal of leaves.



Carolina Wren (*Thryothorus ludovicianus*)

While some of those tasks are quite important – definitely keep those gutters clean! – others could be pursued with a bit less vigor. Notwithstanding my personal vendetta against my current neighbors (who spend hours leaf blowing every individual bit of detritus from their driveway each and every day), the mission to have leaf-free grass at the onset of each winter is rather counterproductive.

Though a heavy coating of leaves eventually stifles grass, a sparser leafy layer instead provides lawns with valuable organic nutrients. Decomposers and insects munch down on those leaves and return a free, effortless serving of fertilizer to your grasses over the winter months. Garden beds derive the same benefit from the heaps of free compost provided annually from the treetops.



Hatch Pond

The ground-nesting Ligated Furrow Bee (*Halictus ligatus*)



But from an environmental standpoint, what's even better about leaving the leaves is the habitat they provide. While the crunchy brown heaps might just look like a mess to you, they look like the coziest winter haven imaginable to a whole host of your tiny neighbors.

Many of our local birds deal with the cold season by fleeing south, undertaking thousand-mile migrations to the tropics to wait out the frost and snow. But each winter, the vast majority of our bugs survive instead by sheltering in last year's leaves.

Some of our most charismatic insects, like the stately Swallowtail Butterflies and dreamy Luna Moths, bundle up in dirt-brown cocoons disguised amidst the litter.

Hairstreaks stash their eggs in the crevices of oak leaves, where they wait until warm spring days to emerge and munch down on their first oak-y meal. Fluffy woolly bear caterpillars, bright red ladybugs, and the larvae of our beloved fireflies all tuck into beds of mulch, sheltering from the cold in leafy sleeping bags.

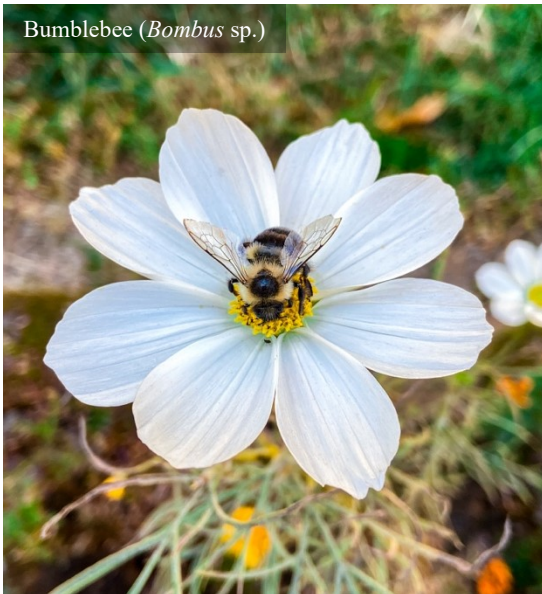
It's a popular strategy. Around three-quarters of wild bees – among them, our adorable bumbles and many of our most important pollinators – are ground nesters who spend their winters burrowed into leaf piles or tucked under the top layers of soil.¹ Many other insects specialize on overwintering in the dead sticks and stems left standing up across garden beds and forest floors from last year's growing season.

Red-banded Hairstreak

(*Calycopis cecrops*)



Bumblebee (*Bombus* sp.)



Each of these species relies on the shelter and insulation of leaf litter to survive the cold winters outdoors. That survival is crucial to making sure our ecosystems can function come spring: these bugs pollinate our flowers, feed our birds, and decompose the forest's waste. In a rural place like Kent, they're often sheltering alongside a host of other four-legged creatures, from garden toads and deer mice to wood turtles and mole salamanders.

And leaf litter is likely becoming a more important factor in overwintering than ever before. Since 2000, Connecticut has lost about 30 days of snow cover per winter.² Though snow itself is obviously quite chilly, exposed ground tends to be much colder

without it. Packed snow acts as an insulator for those sheltering down low, and less snow cover means fewer igloos of warmth to protect the hibernating animals.

Though our winters have also gotten warmer on average, we still spend enough time at freezing temperatures for the extra month of missing insulation to make a big difference. Overwintering animals may well need to compensate for the missing snow blanket with extra layers of leaves.



Luna Moth
(*Actias luna*)

So as the first frosts set in and you prepare your yards for the cold days ahead, remember that the leaves are more than just a fall spectacle or a winter nuisance. They are sustenance, shelter, and warmth for next year's critters. Any leaves that you can avoid shredding and tossing away will become valuable habitat; letting just a thin layer rest in your yard, leaving a heap decomposing in your garden, or creating a pile to rest at the edge of your lawn will mean a warm bed for the bugs and a healthier, more biodiverse spring for both you and your neighborhood ecosystem.



White-Throated Sparrow (*Zonotrichia albicollis*)



Eastern Newt (*Notophthalmus viridescens*)



Woolly Bear caterpillar

(Juvenile of the Isabella Tiger Moth, *Pyrharcia isabella*)



Eastern Chipmunk (*Tamias striatus*)