



Fall 2020



### **Bittersweet – the tree killer**

Oriental Bittersweet (*Celastrus orbiculatus*) is a woody perennial vine native to East Asia. Introduced to the U.S. in the mid 1800's, it is now found in all New England and most East Coast states. It is designated as an invasive plant by the CT Invasive Plants Council; prohibited by state statute from sale, purchase, transplanting and cultivation. As with many invasive species it has a high reproductive rate, long-range seed dispersal, ability to root-sucker and a rapid growth rate.

Because this vine is such a vigorous grower, the vine easily strangles and smothers trees and shrub stems. Bittersweet is extremely destructive to trees. The vine will wind around the trunk of a tree, effectively girdling and killing it. The added weight of the vine causes a tree to blow over and uproot in wind storms and heavy snowfalls.

Any time May through September works well for hand-pulling tiny saplings and small vines, taking care to remove the roots to prevent resprouting. The CT Invasive Plant Working Group (CIPWG) will tell you

### **Where do our Pollinators Go in Winter?** by Holly Kocet

Not unlike migrating birds, some butterflies, (i.e. Monarch and Painted Lady) travel to warmer climates in fall, sensing shorter days and cooler temperatures. **But the vast majority of butterflies** (125 species in CT) **remain here for the winter.** They will seek shelter until the weather warms again in spring. How they do this depends on the species. For example, the Coral Hairstreak overwinters as an egg while the Juvenal's Duskywing spends the winter as a caterpillar. Many butterflies, including the Pine Elfin and Black Swallowtail, overwinter in a cocoon-like chrysalis. Most moths, valued as nighttime pollinators, also overwinter as either caterpillars or in cocoons. The adorable Wooley Bear caterpillar is one such moth, burying himself beneath leaves for protection from the cold. And the Mourning Cloak actually overwinters as a mature butterfly! Leaf cover is absolutely critical for the survival of all these creatures. Justin Wheeler of the Xerces Society agrees: "One of the most valuable things you can do to support pollinators and other invertebrates is to provide them with the winter cover they need." That is why it can't be repeated often enough: "Leave the Leaves".



**Wooley Bear caterpillar and Mourning Cloak butterfly**

Oak, willow and cherry are especially important trees to have in your yard. According to Doug Tallamy, Professor at the University of Delaware, these trees top the list for their ability to support butterflies and moths. Not only important as day and nighttime pollinators, moths are food for bats, martins, whippoorwills and flycatchers. Their caterpillars are an enormously important food source for many animal species, especially baby birds. Please leave the leaves... under trees.

**Leaf clean up in fall should be kept to a minimum.** It is really unnecessary to remove every leaf from a lawn. Research has shown that lawns actually benefit from a thin layer of leaves. Rich with nutrients, leaves feed the soil. And, contrary to common practice, leaves in gardens and foundation plantings should not be cleaned out in the fall. These are also areas where butterflies and other beneficial insects are likely to hibernate. Without this cover they will die. Keeping leaves under shrubs and even perennials is free mulch and also important for protecting roots from desiccation, especially the freezing and thawing that occurs in late winter. (Continued bottom on page 2)

that early detection is key to controlling any invasive plant species.

The best way to control the spread of bittersweet is by cutting the vine before it fruits. The exception is in spring when there is a flush of new growth. Often vines go unnoticed until fall and cutting is indicated to preserve a tree. When bittersweet is cut, the rooted portion of the vine remains viable. It is important to cut the vine high enough above ground. This forces resprouting to occur off the main stem rather than from the root area. Annual cutting over several growing seasons will be necessary until the root system is completely exhausted. Care should be taken with small trees when “unwrapping” the vine to prevent damaging tree bark. It is not recommended to pull the cut vines out of tree tops, risking further damage to small branches.

While small vines with fruits can be bagged for disposal in trash, CIPWG warns against transporting bittersweet with berries by truck or trailer to local landfill/transfer centers. This is how bittersweet seeds are dispersed to new location(s). Neither should vines be placed in your compost or brush piles. It is best to leave cut vines where they lay or make a designated pile near to the infestation. Bittersweet does not take root from cut vines. However, monitoring for new seedlings is very important since seeds are often scattered with activity in removing the

## Tammy's Garden Event

Since gardens are a symbol of rebirth and continuity, Protect Our Pollinators viewed a pollinator garden as the perfect way to commemorate Tammy Hazen, a long-time Newtown employee who succumbed to breast cancer in 2015. And since October is Breast Cancer Awareness Month, an event was held recently at the site of that garden, known as Tammy's Garden, in the courtyard of the town Municipal Building.

Protect Our Pollinators had wanted to establish this garden since Tammy's death. However, such a large project seemed to be financially out of reach. As time went on and pollinators gained public interest and support, two Newtown foundations offered funds to establish a garden which did become a reality in the fall of 2019.

In total 19 beds were planted with 8 new trees, 486 native shrubs and perennials, and 540 flowering spring bulbs. This ambitious project was designed by Sarah Middleleer, who donated her expertise, and was planted by many volunteers over the course of 5 days along with much appreciated help from Parks and Recreation personnel. Despite compacted soils and a hot, dry summer, the garden has thrived with help from volunteers who have regularly weeded and watered garden beds.

This garden is part of a larger effort to provide habitat for pollinators at Fairfield Hills. Important are pollinator-friendly plants at the Fruit Trail, the Victory Garden, and the High Meadow.

The event held on October 2 brought together two very important causes. Despite a light drizzling rain, a theme emerged as we were reminded that positive outcomes for both health and environmental concerns are possible through our actions.

Another good outcome. A donor offered to provide funds for permanent signage for this landmark garden. Many thanks to the generosity of others who have made this garden a reality. – Mary Wilson



Sarah Middleleer and Mary Wilson at Tammy's Garden Event.

## Where Pollinators Go (continued)

Shredding leaves does not provide the same cover for our pollinators and beneficial insects as when they are left whole. Also shredding destroys eggs, caterpillars, and chrysalis along with the leaves. Hairstreak butterflies intentionally lay their eggs on oak leaves so their caterpillars will have a ready source of food when they hatch in spring.





vines. Seeds remain in the soil for a year or more.

Remember, one of the “telling” features of invasive plants is that they leaf out earlier than our native species and they remain green and retain their leaves longer in fall. This is a competitive advantage invasives have over native plants. Lucky for us, this characteristic enables us to recognize an invasive plant like bittersweet when the plant is young and especially this time of year. For more information on oriental bittersweet and other invasive plants, go to [cipwg.uconn.edu](http://cipwg.uconn.edu). 🐝



Photos courtesy of bugwood.org

Other butterflies and moths actually create chrysalis and cocoons that mimic leaves to protect their offspring. To preserve these creatures, leaves in gardens and along lawn edges should be left whole. It's best if leaves are left permanently but if you must remove some leaves in spring, waiting until later in the season gives pollinators a chance to emerge. Leaf piles should be allowed to break down naturally.

Which brings me to the subject of **Leaf blowers. Ugh! One of the worse contraptions ever invented.** They spoil gorgeous fall weekends with endless rumblings, contribute to air pollution, and blow the living daylight out of everything. Fatal to insects and harmful to other wildlife species, this activity is also unhealthy to us when dust and pathogens are stirred up.

Most of our over 300 species of native bees overwinter as larvae. Many do so in the ground but a few overwinter in holes of trees or logs. When not presenting a danger, leaving a dead tree or log will help provide for these cavity-nesters. There are many bee species that also utilize hollow plant stalks and brambles (blackberry and raspberry canes). **To preserve these valuable pollinators, garden cleanup and cutting back stalks should be delayed until late spring.** Then, leaving 2-3 feet of stalk gives bees a chance to emerge from hibernation. These stalks can also serve to support emerging plants as they grow taller and can even help keep animals out of your garden.

Bumble Bees live in colonies with a queen. At summer's end, all but the mated queens die and the nests are abandoned. Each queen finds an appropriate place to burrow just an inch or two below the surface where she hibernates over winter. Two inches of leaf layer offers her better protection from the elements than bare ground. **A queen that does not survive winter is a colony lost.** We know bumble bee populations like many pollinators and beneficial insects are in decline. Bumble bees are hugely important for pollination. Along with solitary bees, they pollinate all of native plants, trees and shrubs and many agricultural crops. According to Heather Holm, well-known author and naturalist, bumble bees are by far the most efficient and effective pollinators, covering a variety of plants that bloom from early spring through fall.

While only the Ruby-throated hummingbird is an “accredited” avian pollinator, we cannot forget other birds who not only enrich our lives with beauty and song but as part of the food web, eat many insects and caterpillars. **Leaving grasses and seed heads on plants will provide an important food source for wintering birds when other food is scarce.** CT Audubon will tell you that when temperatures drop, an available food source for birds could mean the difference between life and death. Seeds provide energy needed to keep warm on frigid nights.

More and more of us are planting native plants that provide floral resources for our pollinators while active in spring, summer and fall. Much of the credit goes to the efforts of the grassroots movement: Pollinator Pathway Northeast and to land trusts, Audubon's, garden clubs and other environmentally-minded individuals and organizations. But I hope people will also remember to provide shelter for pollinators





during the cold-weather months. It all starts with the leaves and preserving natural areas in your yard.

**Where do our pollinators go in winter? Most stay right here.** 🐝

### Re-Imagine Your Lawn by Dottie Evans

Cold days are coming and change is in the air. Under the fallen leaves our grass has stopped growing so we're putting away the mower. As we drag out the snow-blower or call the plow guy, let's pause to think about next year in the garden. And what we might do about our lawn.

The fact is, North American lawns cover 63,000 square miles of the country (the size of Texas) and by default we are the caretakers. It's an expensive, lockstep ritual of spring fertilizing, mowing, weeding, grub and crab grass control, all of it culminating in one cacophonous tornado of leaf blowers. Does anyone even use rakes anymore?

The faithful maintenance of lawns is an American pre-occupation as sacred as motherhood and apple pie. But the ecological reality is not so benevolent. Basically, a lawn is a barren monoculture where nary a weed nor a blade of grass is allowed to grow, bloom, or set seed. Lawns are of little use to native wildlife, foraging birds, or pollinators and they may even be lethal to wild creatures or detrimental to pets and children if we use pesticides, insecticides, or herbicides.

Maybe you've noticed there are fewer butterflies, particularly the beautiful monarchs. Or you are worried about the decline of bees to pollinate flowers for fruits and vegetables. Ever wonder where the fireflies from our childhood have gone? Or notice that the only species regularly attracted to huge expanses of mowed green lawn are robins, Canada geese, and golfers?

Let's face it: Our green environment has changed for the worse. Look at old photographs from 150 years ago. There they are – our storied ancestors gathered outside the house for the family photo. The youngsters are standing knee deep in tall grass and after picture-taking is done they might look for four-leaf clovers or weave daisy chains. In those days before mechanized mowing and manicured Great Gatsby style estates, 80 percent of American households didn't think they needed huge lawns to be happy.

We live now in closer proximity to our neighbors. Yes, we worry about ticks but there are ways to discourage them and protect ourselves without spraying. And yes, we do want an open area for grandchildren and dogs to play in. But do we really need to mow everything clear to the property lines?

Could we designate a No-Mow Zone? Is there room for a mini-meadow? If not, could we set aside a modest 50-foot wide preserve and watch what happens? Then look for milkweed to sprout and clover to hum with bees. Watch for butterflies drawing nectar, dragonflies swooping, and fireflies blinking on warm June nights. Welcome the buzzing of cicadas in August and the chirping of crickets and katydids in September. Let this be a gift of nature that we give ourselves.



A lawn is a barren monoculture.



Provide a mini-meadow



Designate a No-Mow Zone

