# Invasive Plants—Foe or No?

Goutweed (Aegopodium podagraria)

Japanese Barberry (Berberis thunbergii)

Invasive seems to be the buzzword among environmental groups. There are invasive insects, fish, birds, plants and mammals. Many invasive plants were introduced deliberately years ago to serve a specific purpose. Multiflora rose (Rosa multiflora) was used as a living fence to keep livestock in the pasture and away from the house. Russian olive and Autumn olive (Eleagnus spp.) were planted to stabilize areas disrupted by flooding or construction and to feed birds. Other introduced ornamentals escaped from cultivation and the management of a garden environment, such as Burning Bush (Euonymus alatus) and Butterfly Bush (Buddleia davidii). As of October 2012, there were 97 plants on the invasive plant list in Connecticut, with 80 of them banned from sale.

What makes a plant invasive and are invasives really that bad? In Connecticut, a plant must meet nine specific criteria to be listed as an invasive. It must be non-indigenous to Connecticut; be naturalized or have the potential to become naturalized, or grow without cultivation in an area where the plant is not indigenous; have the potential for rapid and widespread dispersion and establishment under average conditions; have the potential for excessive dispersion over habitats of varying sizes that are similar or dissimilar to the site of introduction; have the potential to exist in high numbers outside habitats that are intensely managed; occur widely in a region or habitat in the state; have numerous individuals within many populations; be able to out-compete other species in the same natural plant community; and have a rapid growth, high seed production and dissemination and establishment in natural plant communities. In summary, a plant must be brought to Connecticut, not be native, be capable of spreading without human help and have spread in large numbers, pushing out the naturally occurring plants.

Plants are a key part of the food web. They use energy from the sun to create carbohydrates, which are stored in leaves, seeds, and fruit during the growing season. Insects eat the plants and then birds, reptiles, amphibians, fish, and mammals eat the insects as a source of fat and protein. Many insects are specialists and will only eat certain plants. If those plants are not available because an invasive plant has outcompeted native plants, then that insect population declines, as do the animals that depend on those insects for food. Many invasive plants also contain chemicals that repel native insects or are poisonous to native species. Consider the Monarch butterfly and Butterfly Bush (Buddleia davidii). This butterfly may enjoy nectar from blossoms of Butterfly Bush but the Monarch is programmed to lay its eggs on milkweed plants (Asclepias spp.) because that's what its caterpillars eat. If there are no milkweed plants available, the butterfly will lay eggs on an alien plant. When the caterpillars hatch, they have nothing to eat and starve to death. That local generation of Monarchs comes to an end for that season. Timing may also be an issue with invasive plants. Many invasives do not blossom or leaf out at the time that native insects need them.

Insects are also the first to suffer and decline when the environment changes. Many times their demise goes unnoticed until recovery is difficult or impossible. If insects don't have the food they need, the population dies off. One way the scientists take a quick measure of the health of the local insect population is the windshield splat test, and you may have noticed, the splats on your windshield are decreasing. You may not appreciate the importance of insects. Most of us notice them when they infringe on our space or damage our plants, but life on this planet would not continue without insects.

Non-native plants have the potential to create monocultures because there are no

natural checks and balances to keep the population under control. Monocultures decrease biodiversity by choking out the native plants. Biodiversity improves resiliency and adds redundancy. Resiliency allows an environment to survive insults such as disease, pests, fire, and drought. Redundancy, more than one plant doing the same job, is nature's insurance policy and helps preserve species if one plant declines.

Controlling invasive plants is easiest when the population is small and not well established. Having an army of citizen scientists willing to shoulder responsibility for the stewardship of our ecosystem is the most effective solution to the problem. Many scientists feel that evolution is the solution. But evolution takes thousands of years and you can't evolve if you go extinct. Short-term adaptation is not a solution and may produce a false sense of security with little bits of improvement. Invasive plants must be identified and removed or controlled. Our native plants should be supported and restored. The public can be educated regarding the financial and health impact of the loss of our biodiversity. We can all pull alien plants, cut them before they seed, paint them with herbicide, or burn them (legally of course). Contact your County Extension Office (in Litchfield at 860-626-6240) to explore control options. Add native plants to your landscape design. There are well over 1,500 to choose from in Connecticut.

*To get more information about the associated problems, identification, and control of invasive plants, contact the Connecticut Invasive Plant Working Group (www.hort.uconn.edu/cipwg), or read Bringing Nature Home by Douglas W. Tallamy. There is a free Outsmart Invasive Species app for smart phones or upload your photo for identification through the website: www.masswoods.net/outsmart. Project Native is located in Housatonic, MA and offers native plant material as well as information on invasive plants and native options. Many Connecticut nurseries offer nursery-propagated native plants. Please learn more. We can all help to preserve the diversity of our environment by supporting and encouraging native plants and wildlife.*

*—Janine LaPlante*


Our very own Hale barn

# News Round Up

**HISTORIC BARNS OF CONNECTICUT**

**The state's newest trail is a project of the Connecticut Trust for Historic Preservation -- it features self-guided tours of historic barns in every region. They are but a sampling of the over 8,400 barns that volunteers identified and photographed for the database at www.connecticutbarns.org. Well-preserved barns of various styles are included -- English, New England, bank and gambrel -- each designed for specific purposes, such as tobacco, carriages, dairy, poultry, potatoes and onions.**

**The Conservancy's Hale Barn at the intersection of Rtes. 182 and 183 is in the database, as are 23 barns in Colebrook. Request a tour map or download the free iPhone App (it also runs on an iPad) at the iTunes App Store by searching for CT BARNS (or go to itunes.apple.com/us/app/ct-barns). You can find nearby barns in the database and get direct routes to any site.**

**STATE HELPS PRESERVE LAND**

**At the end of December 2012, the State awarded more than $9 million to help preserve 2,732 acres in 35 towns across Connecticut. The goal of the Department of Energy and Environmental Protection is to preserve 673,2210 acres by 2023. The total acres protected now stands at 496,182 or 73.7% of the goal. In Litchfield County, money was given to Cornwall ($450,000 for 84.07 acres), Kent/Warren ($500,000 for 253.1 acres), and Norfolk ($284,000 for 311 acres).**

**The Norfolk Land Trust received its award to preserve Camp Iwakta off Grantville Road near Beckley Bog. The property includes wetlands, vernal pools and woodland, and provides habitat for a variety of wildlife.**