

Wilton Conservation Commission e-Newsletter

*i*³: important invasives info

By Jackie Algon, Conservation Commissioner

What is an invasive plant species?

Invasive plants are non-native species many of which were brought to the USA as ornamentals that have 'escaped' from the garden. These plants are typically very adaptable, aggressive growers and have a high reproductive capacity. Their vigor, combined with a lack of natural enemies, often leads to establishment of masses of the species, outcompeting the native species that were there, and in many cases, leading them to extinction in that area (called extirpation).

What effect do invasive plants have on local habitats?

- Crowd out native plant species
- Fracture native habitats
- Reduce biodiversity
- Reduce necessary habitat and forage for animals
- Birds, insects, and amphibians that depend on specific plant species for food are compromised
 - * Each plant species lost results in lost insect species. When the insects lay their eggs on most invasive plants, the larvae that hatch are often unable to develop because they cannot eat the leaves of that plant due to incompatible or toxic chemistries. Their natural plant food sources are gone and they die out. Birds are then affected because their main food source – insects – has disappeared. And this pattern of extirpation repeats, up the food chain.

Why are invasives so pervasive?

- Nothing to keep them in check / no natural predators
- Fast growers – many produce great numbers of seeds; others have wide-ranging root systems
- Dense aggressive growth captures light, water, and nutrients that crowds and shades out native plants



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Special points of interest

- Invasive plant species are brought to the US from other countries
- Invasive plants are adaptable, aggressive, and reproduce at a high rate
- Invasive plants outcompete native species
- Invasive plants effect habitat and can cause extinction
- Many invasive species produce a great number of seeds or have wide-ranging root systems



Euonymus alatus in Fall—Colleen O'Brien

Burning Bush

(Euonymus alatus)

By Jade Hobson, Commissioner

Have you ever wandered the back roads along wooded or uncultivated land in the fall during the height of fall foliage season and been dazzled by great expanses of crimson to bluish red shrubs seemingly everywhere? You are most likely seeing *Euonymus alatus*, commonly called Winged Euonymus, Burning Bush, Wahoo and Winged Spindle tree.

It has joined the invasive species database because it has no known predators. Its many seeds are spread by birds, animals and weather and are easily germinated in a variety of soil types. It grows in sun but is also tolerant of full shade. It is salt tolerant and is often planted along roadsides in the north because of this. It was brought to the US from China in the mid 1800s. *Euonymus alatus* is of no nutritional

“People are drawn to its spectacular fall color, often unaware of its invasive characteristics”



Euonymus alatus in Summer

value to birds or animals and will easily outcompete native plants for space in our landscapes. Unfortunately, it is still sold and planted as an ornamental. People are drawn to its spectacular fall color, often unaware of its invasive characteristics.

It is necessary to educate the public to the dangers of invasive species, warn them not to plant them and to report infestations. *Euonymus alatus* is easily identified by its brilliant fall coloring and also by its winged squarish twigs (illus). Like most plants it is more easily controlled when it is young by hand pulling. If it cannot be pulled by hand a weed wrench can be of assistance. Repeatedly cutting it to the ground to keep it from re-sprouting is another mechanical control. It should always be cut before it flowers and begins producing seed. *Euonymus alatus* may be controlled chemically if necessary.

There are a number of alternative shrubs and small trees that share some of the aesthetic traits of *Euonymus alatus* but none of its invasive qualities such as:

- *Prunus virginiana* (Chokeberry)
- *Itea virginica* (Virginia Sweetspire)
- *Calycanthus floridus* (Sweetshrub or Carolina Allspice)
- *Cotinus coggygia* (Smokebush or Smoketree)
- *Ilex verticillate* (Winterberry)



Japanese barberry Colleen O'Brien

Japanese barberry

(*Berberis thunbergii*)

By Colleen O'Brien, Commissioner

Japanese barberry (*Berberis thunbergii*) was introduced to the US in the late 1800s as an ornamental plant, but it quickly escaped the confines of the garden and began spreading and overtaking native species, creating massive monocultures that alter soil chemistry. Barberry has sharp spiny branches that keep deer away from its tender leaves, leaving the deer to browse on other plants and allowing barberry more room to grow. Barberry can grow just about anywhere, and it does. It prefers the sun, but can grow in wooded areas. Birds love its red berries, contributing to its spread.

Because of its dense foliage, barberry retains moisture and is host to Deer Mice, the larval host of deer ticks. The ticks need the moisture to thrive, which is why barberry shrubs have been named 'tick hotels'. Eliminating this shrub from your landscape significantly reduces the tick population in your yard.

Cutting down the shrub and painting the stumps with herbicide is one method of managing Japanese barberry. Perusing your property for smaller plants and hand-pulling is another, although you need to be sure to get the taproot to be successful. Eliminate this invasive from your landscape and you just might enjoy seeing the reappearance of native plants you didn't even know were missing, like trout-lily or Dutchman's breeches.

Special Points of Interest

- * Japanese barberry came to the US in the 1800s
- * Japanese barberry escapes the garden and takes over native species
- * Japanese barberry has sharp spiny branches
- * Japanese barberry prefers sun but can grow in wooded areas
- * Birds love the berries of the plant contributing to its spread
- * Japanese barberry creates 'tick hotels' as the moisture in the soil attracts mice and deer ticks
- * Eliminating this shrub will significantly reduce the ticks in your yard
- * Ensure removal of the taproot to be successful in its removal
- * Eliminating Japanese barberry will allow the reappearance of native plants

To learn more visit:

- * <https://www.invasivespeciesinfo.gov/subject/control-mechanisms>
- * <https://www.nwf.org/Our-Work/Environmental-Threats/Invasive-Species>
- * <https://portal.ct.gov/DEEP/Invasive-Species/Invasive-Species>
- * <https://ct.audubon.org/conservation/remove-invasive-plants>

What is Environmentally Responsible Eradication?

By Jackie Algon, Commissioner

There are several ways to eradicate invasive species depending on the time of year, the maturity of the plants, the reproductive mechanisms of the plant, and the health and safety of the environment (air, soil, water, and effect on neighboring plants), humans and animals (pets and wildlife, including pollinators).

When soil has been disturbed, replacement native plants should be planted or more invasive species will take advantage of the exposed area.

Methods include:

- Mechanical: hand pull, burn, wrench and drop, cut down
- Biological: organisms (viruses, bacteria, insects, etc.) that will cause disease in the target plant
- Chemical: least preferred option that requires professional assistance

*Detailed information will be provided about eradication in the coming issues of **i³***



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