Invasive Species Profile: Winter Creeper (Euonymus fortunei)

By Greg Sykes (greg@grsykes.com)

Native Range: eastern continental Asia, Japan, and

Philippines

U.S. Introduction: 1907

Life Cycle: perennial, woody vine

Means of Spreading: rapid vine growth; berries, eaten by

birds that pass the seeds

Commercially Available: yes

Control Method: hand-pull vines, taking care to extract the entire root. Cut climbing vines from ground level to ~3 feet up the tree; do not damage the tree. Herbicidal treatments may be used for large infestations.

<u>Good Alternative Species:</u> Strawberry *Euonymus* or hearts-a-burstin' (*E. americanus*). Shade and partial shade-loving Fairfax native ground covers with evergreen leaves include creeping *Phlox* (*P. stolonifera*), golden ragwort (*Senecio aureus*), green-and-golds (*Chrysogonum virginianum*), and partridgeberry (*Mitchella repens*). For fast-growing vines, consider crossvine (*Bignonia capreolata*) or Virginia creeper (*Parthenocissus quinquefolia*).

<u>Comments:</u> Eradicating non-native invasive evergreens, such as <u>English ivy</u> (*Hedera helix*), <u>Chinese *Pachysandra*</u> (*P. terminalis*), and <u>periwinkle</u> (*Vinca major* and *V. major*), can occur year-round. Hitting invasive evergreens is often easiest in the winter—as long as the ground is thawed—because their foliage contrasts against tawny leaf litter and dormant native plants.



Figure 1. Winter creeper's foliage remains green year-round, and new growth is seen in this April photograph.

One such target is winter creeper (*Euonymus fortunei*, with subspecies var. *colorata* and var. *radicans*, also called var. *vegetus*). It was first brought to the United States over a hundred years ago as a hardy, shade-tolerant evergreen groundcover. Furthermore, it thrives in poor soil. For decades, winter creeper sporadically escaped cultivation in south-central Canada, the U.S. Midwest and southeastern states. This weed ultimately entrenched itself in these regions—including parks surrounding Royal Lake, preferring forests with recently disturbed ground. Extreme cold and oceans prevent it from spreading North or East, and Texas root rot (an extremely destructive endemic fungus that attacks many host plants) keeps winter creeper at bay in the Southwest.

Though unrelated to English ivy, winter creeper behaves more like this ivy than its brethren weeds [e.g., the equally invasive winged burning bush (*E. alatus*)]. As a groundcover, winter creeper aggressively smothers and displaces native plants while depleting nutrients from the soil. Though not as aggressive a tree-climber as English ivy, winter creeper's added weight increases the trees' susceptibility to storm and ice damage. In the canopy, it blocks light from the trees' leaves. Whitish flowers develop in mid-summer; fruits appear soon afterwards and ripen in autumn. The mature vine must be climbing before it blossoms.

Unfortunately, winter creeper remains widely available in nurseries under many common names and spellings, including wintercreeper, Fortune's *Euonymus*, and creeping *Euonymus*. Some of the cultivars are "Emerald n' Gold," "Green Lane," "Kewensis," "Harlequin," "Moonshadow," "Silver Queen," and "Variegatus." An easy-to-remember rule of thumb is to avoid the Asian *Euonymus* species, all of which have invasive tendencies. America has only one native *Euonymus*, the strawberry bush (*E. americanus*), which is common throughout Fairfax County. Left unchecked, winter creeper can inflict the same damage on private yards and gardens as it does the woodlands. You can help the health of your yard by ripping

out winter creeper, skipping it at garden centers, and encouraging growth of any of the listed native alternatives.

With autumn's final leaves falling from the trees, Invasive Management Area (IMA) volunteers already started targeting the previously mentioned non-native evergreens for this season. Come out and join us for a workday! Send an e-mail to greg@grsykes.com asking to be on the IMA Volunteer list and you will be kept up to date on our schedule. We also talk about native species encountered, proper land stewardship, habitat restoration strategies, and other topics so it becomes a fun way to learn about the ecosystem while you are helping it.

For more information on winter creeper:

https://www.invasiveplantatlas.org/subject.html?sub=3024 http://www.invasive.org/eastern/midatlantic/eufo.html http://www.fs.fed.us/database/feis/plants/vine/euofor/all.html

* * * *