## Invasive Species Profile: Winged Burning Bush (Euonymus alatus)

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Native Range: Japan and northeastern Asia U.S. Introduction: ~1860 Life Cycle: woody perennial Means of Spreading: seeds Commercially Available: yes Control Method: hand-pull seedlings and saplings; remove bushes with a Weed Wrench; kill large specimens by constantly cutting away new growth Good Alternative Species: winterberry (*llex verticillata*), northern highbush blueberry (*Vaccinium corymbosum*), red chokeberry (*Aronia arbutifolia*), Virginia sweetspire (*ltea virginica*)

## Comments:

Winged burning bush was brought to the United States in the mid-nineteenth century as an ornamental shrub, especially for the way its dense foliage turns magenta-red in the fall. Throughout the rest of the year, it looks like a non-descript deciduous shrub except for the two to four *alatus* (thin ridges made from cork that give the branches a "winged" appearance) frequently lining the branches. This species goes by many common names, including winged euonymus, cork bush, or simply "burning bush." "Compactus" is a popular cultivar.

Given its recognizable autumnal display, low price tag, extreme hardiness, and pest resistance, burning bush became an overused choice for residential, commercial, and roadside landscaping projects. Its resilience, coupled with its fecundity, landed this species onto the noxious weed list. New Hampshire and Massachusetts already ban burning bush's sale. In Northern Virginia, Invasive Management Area (IMA) and Early Detection-Rapid Response (EDRR) volunteers see burning bush's range expanding through the parks. Both birds and elemental forces, such as water flow, disperse the seeds. In fact, when folks on IMA and EDRR patrols encounter the saplings, they can often follow the seedling trail uphill to the mother bush or patch. With so many late autumn fruits sprouting near the parental shrub, dense burning bush thickets soon develop and continue widening. This heavy, weedy undergrowth, reaching over 10 feet tall, displaces native plants. Their shallow roots do little to significantly suppress erosion. Without any local animals chomping on the shrubs except for the few birds spreading seeds, burning bush is ecologically worthless.

The good news about burning bush is that it is easily controlled. The near-surface roots make most specimens trouble-free to pull either by hand or with hand tools. Those too large to excise will die after several consecutive rounds of harsh, completely defoliating trims. IMA volunteers already conducted successful workdays targeting burning bush thickets at Royal Lake Park; site leaders continue monitoring these sites and pull seedlings germinating from the soil's seed bank.

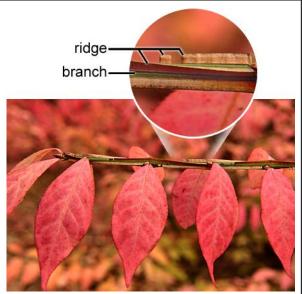


Figure 1. Winged burning bush's leaves are opposite each other on the branch. This image shows the beige cork ridges protruding from the green branches.



Figure 2. A beneficial native alternative to burning bush, red chokeberry's leaves blaze in the fall to match its brilliant berries. These fruits last into the winter until eaten by cedar waxwings, robins, and other birds.



Figure 3. Winged burning bush blooms with small, greenish yellow flowers (A) in the spring. The fruits ripen into scarlet berries (B) and are most conspicuous after the leaves drop. These fruits produce countless seedlings (C) that mature into dense thickets (D), easily spotted in autumn by the red foliage.

You can help stem burning bush's spread, too! Contact me about joining a future IMA workday and partake in this and other weeds' eradication. Even from home, you can help get burning bush under wraps by skipping it the next time you shop for shrubbery. If you already have burning bush, consider replacing it with a wonderful native alternative. Choose winterberry for jazzy red berries from September lasting into winter. For scarlet foliage, try chokeberries or blueberries. North America's only and sparsely-foliated *Euonymus* species, *E. americanus*, sports showy fruits leading to its common names, hearts-a-burstin' and strawberry bush. To achieve truly eye-catching fall coloration, Virginia sweetspire's calico foliage is a show-stopper!

Learn more about burning bush at:

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http://www.fs.fed.us/database/feis/plants/shrub/euoala/all.html
http://www.invasive.org/browse/subinfo.cfm?sub=3023
http://www.dcr.virginia.gov/natural-heritage/document/fseual.pdf
http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_010293.pdf
http://www.ecolandscaping.org/04/invasive-plants/winged-euonymus-an-exotic-invasive-plant-
fact-sheet/

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