

Invasive Plants in Pennsylvania

Burning Bush

Euonymus alatus



Leslie J. Mehrhoff, UConn
www.forestryimages.org

Background:

Burning bush, also commonly known as winged euonymus, was introduced into the United States in 1860 for use as an ornamental shrub. Its attractive, bright red fall foliage and desirable form has made this shrub a popular ornamental and an easy go-to plant used by landscape designers. As a result, it is commonly planted along interstate highways, as hedges and in foundation plantings.

Range:

Native to northeastern Asia, winged euonymus has escaped throughout the Northeast and Midwestern United States.

Description:

Burning bush is a fast-growing, deciduous shrub that may reach five to 15 feet in height. Its green stems usually have prominent, corky wings. Elliptic leaves with finely serrated margins are arranged in opposite formation and turn a brilliant purplish-red to scarlet in the fall. Flowers are small and yellowish-green, becoming fruits that split to expose four red-orange seeds in late fall.



Barry Rice, Sarracenia,
James H. Miller, USDA Forest Service
www.forestryimages.org

Habitat:

Winged euonymus quickly escapes into woodlands, mature forests and open fields. It is highly adaptable to a variety of soil types and pH levels, although it generally doesn't do well in dry areas. It is tolerant of full shade.

Biology and Spread:

This shrub is a prodigious seed producer. Many germinate where they fall, close to the mother plant, creating a dense bed of seedlings. Others are carried by birds, allowing infestations to spread rapidly.

Ecological Threat:

Winged euonymus easily outcompetes native plants with its large, dense silhouette. Lacking pests and tolerant of deep shade, this shrub can force itself into moist forested sites, creating large thickets that displace native herbs and shrubs. This displacement has negative consequences for both aquatic and terrestrial ecosystems.



Leslie J. Mehrhoff, UConn
www.forestryimages.org

How to Control this Species:

Physical

Seedlings, up to two feet tall, can be easily hand-pulled, especially when the soil is moist.

Larger plants must be dug out with a spading fork, pulled with a weed wrench, or cut. The stump must be ground out or the re-growth clipped; be sure to remove a majority of the root system.

Chemical

Glyphosate can be applied as a foliar spray or painted on cut stumps.

Look-A-Likes:

Winged euonymus may be confused with other species of euonymus, including our native strawberry bush (*Euonymus americana*). Saplings of native sweetgum (*Liquidambar styraciflua*) also have winged stems.



Karan A. Rawlins, University of Georgia
www.forestryimages.org

Native Alternatives:

A wide variety of native shrubs provide beauty and wildlife value to the landscape, including:



Red Chokeberry

Dow Gardens
www.forestryimages.org



Witch-hazel

Chris Evans, River to River CWMA
www.forestryimages.org



Common Winterberry

Rob Routledge, Sault College
www.forestryimages.org



Ninebark

Vern Wilkins
www.forestryimages.org



Virginia Sweetspire

James Miller & Ted Bodner, SWSS
www.forestryimages.org

References:

Center for Invasive Species and Ecosystem Health:

<http://www.invasive.org/browse/subinfo.cfm?sub=3023>

U.S. National Park Service: <http://www.nps.gov/plants/alien/pubs/midatlantic/eual.htm>

For More Information:

DCNR Invasive Species Site: <http://www.dcnr.state.pa.us/conservationscience/invasivespecies/index.htm>

DCNR Invasive Exotic Plant Tutorial for Natural Lands Managers:
http://www.dcnr.state.pa.us/forestry/invasivetutorial/winged_euonymus.htm