



## BEVERLY SHORES

ENVIRONMENTAL RESTORATION GROUP  
PROMOTING & PROTECTING ECOLOGICAL HARMONY

# Burning Bush

Terry Bonace

Burning bush (*Euonymus alatus*)—also called winged burning bush, winged wahoo, and winged euonymus—is named after the flaming bush that appears to Moses in the book of Exodus, such is the brightness of its fall color. The shrub is easy to grow and tolerant of a wide range of soil and sun conditions, though the spectacular fall color only develops when plants receive full sun. Unfortunately, there is a price for this beautiful autumn color. Burning bush is fast becoming another non-native plant pest in Beverly Shores and surrounding areas. Spread by birds eating the fruit, escaped burning bush can quickly crowd out native woodland shrub species. These woodland invaders, when mature, drop so many seeds that the young plants sprouting below are sometimes referred to as the “seed shadow.” Burning bush is not a favorite of deer so the combination of dropped seeds and selective browsing of other species by deer leads to the growth of dense thickets.



Burning Bush

The Indiana Invasive Species Council, the Indiana Department of Natural Resources Division of Nature Preserves, and the Invasive Plant Atlas of the United States are among the organizations that include burning bush on their lists of invasive exotic plants of concern in natural areas. Dr. Noel Pavlovic, a Research Ecologist for the Lake Michigan Ecological Research Station of the Great Lakes Science Center, U.S. Geological Survey in Chesterton, told me that one of the worst populations of burning bush in the Indiana Dunes National Lakeshore occurs along Tremont Road between Highways 12 and 20. In Beverly Shores, you can see large escaped populations in many locations, including on Myrtle between Underwood and Wells. I have pulled dozens of plants, some quite large, from my own property on the west side of town and from the Shirley Heinze Land Trust property on the northeast corner of Broadway and East Atwater. I have come nowhere near eliminating them in these areas.

Burning bush can be readily recognized by the corky "wing" that occurs on the stems. The 'wing' is a growth that extends from the stems laterally like ridges. The leaves are paired and dark green and the fruit and flowers are green and inconspicuous. Burning bush is a cousin of that other scourge, oriental bittersweet. Both belong to the "staff tree" or bittersweet family and both were introduced into the United States from Asia in the 1860s. Burning bush and bittersweet have fruit enclosed in a capsule that splits open when ripe, revealing the fruit inside. In the case of burning bush, the fruit lacks the fiery orange color of bittersweet berries. Otherwise, the fall color and rounded shape of burning bush, when found in a sunny location, will make it distinctive. Burning bush, from the leaf arrangement, might be confused with wild blueberry but blueberry leaves appear alternately on the stem while burning bush

leaves appear in pairs. There is also a native burning bush or eastern wahoo (*Euonymus atropurpureus*), that grows in the Indiana Dunes region and might be found in the Beverly Shores area but can be distinguished from the invasive burning bush by the lack of winged stems, the presence of leaf stems or "petioles," and a very finely hairy leaf underside.



Burning Bush in Autumn

For control, most sources state the obvious: that the best control is to stop planting the species. Since Pandora has, however, already opened the box, the next best method is to pull small bushes by hand.

I know from experience that in the sandy soils of Beverly Shores small plants readily come up root and all by hand pulling. This is best done with gloves as the winged stems can sometimes be sharp-edged. Otherwise, our old friend glyphosate (Roundup) can be applied to the cut stem or foliage. This is most effective when done in the early summer. As in the use of all herbicides and other pesticides, federal and state law require that you carefully follow all label directions.

Luckily there are many native shrubs that have excellent fall color. Some have been discussed in other articles. These include eastern wahoo, the native cousin of burning bush, red and black chokeberry, highbush blueberry, highbush cranberry, fragrant sumac, and serviceberry. Some of these also have attractive flowers and fruit, and therefore a longer season of interest in your garden.

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