

**Scientific Name:** *Euonymus alatus*

**Common Name:** Winged Burning Bush

*Updated: 5/5/2016*

**A. Priority: D**

**A. Description** – Winged burning bush is a rounded shrub that grows to 8.2 feet tall. Leaves are opposite and elliptical 1.5-3 inches long with finely toothed margins. They are dark green above and slightly paler below; in fall they turn a bright red giving it its common name. The branches typically have prominent, corky wings, although stem wings are reduced to ridges or absent on some plants. Flowers are an inconspicuous yellow-green, occurring in clusters of three in late spring. The fruit is a dehiscent capsule containing up to 4 seeds that are enclosed in an aril.

**B. Damage and threats** – Burning bush threatens a variety of habitats including forests, coastal scrublands and prairies. It is tolerant of moist soils, and can occur in wetlands. Burning bush replaces native shrubs in some woodland habitats and alters the structure of natural plant communities. It can form dense thickets, displacing many native woody and herbaceous plant species.

**C. Management Options**

**Mechanical Control:** Pulling seedlings and small plants provides effective control of small infestations of Burning Bush. It is easiest to pull when the soil is moist; remove the root crown and as much of the roots as possible. If portions of the root crown are left, they may be able to resprout. Pull steadily and slowly to minimize soil disturbance and tamp down the soil afterwards. Larger plants can also be removed with a spade. The disturbed soil should be tamped down thoroughly and covered with leaves if they are available.

**Chemical Control:** Use of a systematic herbicide is the best option to control Winged Burning Bush. We recommend using aquatic formulations of herbicides in this region to limit potentially unwanted effects to the surrounding environment. More details provided in the management techniques below.

- a. Foliar Spray** – This method involves spraying a dilute herbicide directly onto the plants leaves. Application needs to occur when foliage is present, sometime between full leaf and the onset of fall for full effectiveness. Caution should be taken when applying herbicide with this method as non-target plants can easily be killed by drift or overspray. Application should cover at least 80% of the leaves.  
To treat Burning Bush, use a 2-4% solution of aquatic triclopyr in water with a 0.5% non-ionic surfactant and apply directly to leaves until just before runoff. Air temperatures must be above 65 degrees and winds should be lower than 5 mph.
- b. Cut Stump** – This method involves cutting the stump as close to the ground as possible (no more than 5in.) and immediately applying a systematic herbicide. It is best to use this method between summer and fall, but it may be used as long as the ground is not frozen. To treat using this method, apply a 50% formulation of aquatic

glyphosate or triclopyr directly to the cut stump.

#### **D. Recommended Management Strategy**

- a.** We recommend treating this species via the cut stump strategy as described above. Smaller infestations and resprouts can be hand pulled as necessary. Resprouts should be foliar sprayed if there is no risk of harm to nearby non-target species.
- b.** Repeat applications should be conducted at least yearly to ensure control and minimize spread.

#### **E. Additional and Updated Information**

For additional information including photographs and the most up to date control recommendations please visit [www.wachng.org/Plants](http://www.wachng.org/Plants).