BRANDYWINE CONSERVANCY

Preserving Our Land & Water

ORIENTAL BITTERSWEET

(Celastrus orbiculatus)

Oriental bittersweet is a vigorously growing vine that excessively **shades and suffocates other vegetation** and displaces the native species, American bittersweet (Celastrus scandens). Due to the vine's weight on other plants, trees and shrubs can be damaged or killed.

IDENTIFY

ORIENTAL BITTERSWEET | Chris Evans, Illinois Wildlife Action Plan, Bugwood.org

CHARACTERISTICS

Oriental bittersweet is a perennial woody vine. Its leaves are simple, alternately arranged on the stem, round and glossy, and have fine-toothed margins. Plants are dioecious (separate male and female plants) with female plants fruiting and producing clusters of small greenish flowers. Fruits and seeds consist of yellow three-valved globular capsules that split open and reveal three red-orange fleshy fruits each containing one or two seeds. It reproduces primarily, and prolifically, by seeds, often dispersed by birds. It can also spread by root suckering.

ORIENTAL BITTERSWEET INVASION
Nancy Loewenstein, Auburn University, Bugwood.org

Roots are bright orange in color. Often used in floral arrangements because of the attractive fruit, it is still widely planted and maintained as an ornamental vine, further promoting its spread.

WHERE FROM

Oriental bittersweet is native to eastern Asia, Korea, China and Japan. Introduced to the United States in the 1860s as an ornamental plant, it is often associated with historical home sites where it was planted and later escaped.

ORIENTAL BITTERSWEET FRUITS
Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

WHERE FOUND

Present in Pennsylvania and a number of other states, oriental bittersweet can be found in woodlands, fields, and hedgerows, and along woodland edges and coastal areas. It is tolerant of shade but prefers open, sunny sites and is often found in locations suffering from land disturbance

ORIENTAL BITTERSWEET FOLIAGE
Brandywine Conservancy

CONTROL

MANUAL METHOD

For smaller vines, hand-pull entire plant, including all root portions. Rooted portions of climbing vines will remain alive and should be pulled even when vine is cut and an herbicide is applied.

CHEMICAL METHOD

Cutting and herbicide treatment in combination is most effective. Apply glyphosate (e.g., *Roundup* or *Rodeo*) or triclopyr (e.g., *Turflon*) to newly cut or mowed stems. If intermingled with native grasses, *Turflon* is preferred as it targets broad-leafed plants, not harming grasses. Use a paint brush or a plastic spray bottle to apply herbicide, minimizing contact with desirable plants. Multiple treatments are generally required. For dense low patches, cut the entire patch to the ground early in the growing season, and one month later apply 1–2% solution of *Turflon* using a backpack sprayer. For climbing vines, cut each vine about 2 inches above the ground and again about 4 feet up and immediately apply a 25% solution of *Roundup* or *Turflon* mixed with water to the cut surface of the stem (not the root). For large populations, consider a foliar application of herbicide. If *Roundup* is used, be aware this is a non-selective herbicide and care should be taken to avoid contacting non-targeted species. The ideal time to spray is during the plant's dormant season, October–November.

REMEMBER

When removing, **be careful** not to remove or destroy desirable species.

Avoid eradicating plants when fruits are present as seeds may spread. Bag and dispose of plants, fruits and seeds properly.

(*Read and follow all herbicide labels carefully before use.*)

SOURCES
U.S. Dept. of the Interior. National Park Service, Plant Conservation Alliance (www.nps.gov/plants/)
U.S. Dept. of Agriculture, National Agricultural Library (www.invasivespeciesinfo.gov)
The Nature Conservancy (www.tnc.org)
Pennsylvania Dept. of Conservation of Natural Resources (www.dcnr.state.pa.us)