

Invasive Species Management Guide

Asiatic Bittersweet

Asiatic bittersweet (*Celastrus orbiculatus*), also known as Oriental bittersweet or Asian bittersweet (we'll just call it bittersweet) is an invasive species originally from eastern Asia. It is a woody vine which will grow up to sixty feet long and five inches in diameter. This invasive plant disrupts the environment by climbing neighboring trees and shrubs, crowding out those plants' canopies and weighing them down to the extent that they will break. The vines also wrap around tree trunks and may cause them to choke to death. The leaves are ovate and lightly toothed. The flowers are inconspicuous and greenish-yellow. Fruits are initially green then turn red and yellow when mature. The prolific seeds are spread by birds. While it may take several years to fully control a bittersweet infestation, simply cutting the vines before the end of summer suppresses seed production and helps the burdened plant recover.



Vines wrapped around tree



Leaves and immature fruit



Bittersweet fruit

Control

Mechanical Control

Small bittersweet vines can be pulled up by the roots. Pulling larger plants may leave some root material behind, so the area should be inspected in the following years for regeneration. Larger vines can be cut, and if the cutting is performed before the fruit forms, the treatment will suppress seed propagation. Repeated cutting of bittersweet at 1-2 ft. above the soil line exhausts the plant's energy reserves. Repeated cutting (at least 1-3x/year, for multiple years, depending on the size of the plant) at the 1-2 ft. line also weakens the plant to the point that a small to medium sized plant may be easily pulled from the soil. Cut vines that are left hanging in the canopy will eventually deteriorate. Commitment and follow-through are required to achieve control.

Chemical Control. Herbicides may be considered in conjunction with mechanical control. After large vines are cut, glyphosate or triclopyr can be applied to new sprouts from the remaining trunk. This should be done not sooner than eight weeks after the growth has begun. Large vines can also be treated by hacking the stems in places, then applying herbicide to the cuts (being careful to keep the application off of other plants). Herbicide may also be applied to stumps when they are cut; this should be done in late summer/early fall. In most cases, further treatment will be required.