

## *Asian/Oriental bittersweet*

*Celastrus orbiculatus*

**Background:** Asian bittersweet was introduced to the American landscape in the early 1700's for its colorful fruits that can be used for home decoration during the winter months. The vine is commonly collected, wrapped into a



wreath, and placed on the front door to chase away the dreariness of winter. At first glance, this would seem like a viable way to encourage people to channel their inner Weed Warrior and cut back the vine. But it turns out that this is a very bad idea, as making wreaths and hanging the vine will, in fact, spread the seeds all the way home. Bittersweet can tolerate sun or shade conditions, making it a threat to the forest interior as well as the forest edge and to landscaped areas.

The invasive vine will twine up young tree saplings, strangling, and eventually killing them. Vines growing up large trees will block sunlight from the host tree's leaves and add weight to the canopy, thus allowing for an increased likelihood that the tree will blow down onto your house or car with heavy winds. Vines growing along the ground will smother herbaceous plants and prevent native tree seedlings from establishing.

**Identification:** Asian bittersweet is a perennial vine. Leaves are alternating along the stem with tiny teeth around the edges. Older leaves will be generally round in outline with a blunt tip. Younger leaves at the ends of the stems will be more elliptical in shape and have long, tapering, sharp tips. The vine is most easily identifiable in late summer through early winter when the plant is in fruit. The fruits on female plants are yellow-orange on the outside with a red, fleshy center. If you happen to yank a tiny plant from its safe soil-anchored haven, you will find that the plant has unique orange-tinted roots. There is an American bittersweet that looks very similar to the Asian bittersweet, but is rarely seen. The American bittersweet will only have fruit at the terminal end of the stem while the Asian bittersweet will have an abundance of fruit all along the stem in the leaf axils. I have not seen the American bittersweet out in the wild in 10 years of forest surveying. Either the Asian bittersweet has completely out-competed the native into oblivion or the two are suspected to be hybridizing.

**Control:** Never buy and plant this vine. If Asian bittersweet moves into that area on its own, plants along the ground can be hand-pulled and disposed of as trash. Vine stems growing up trees should be cut at the ground as well as higher up along the stem (as high as possible) in order to remove a portion of the stem, creating a "window" in the stem. This process will kill the vine by separating the leaves twining up the tree from the roots. Be careful not to damage the bark of the host tree during removal. Do not attempt to pull vines from the tree's canopy, as limbs may be weakened and more likely to fall on your head. This is a tough competitor - vigilance for a few years will be required in order to weaken the plant's extensive root system. If possible, concentrated systemic herbicide, such as Roundup®, can be painted on the cut vine as long as it is applied by a paintbrush immediately after cutting takes place (within the first 2 minutes).

Some lovely native vine alternatives include:

Virginia creeper (*Parthenocissus quinquefolia*), American wisteria (*Wisteria frutescens*), trumpet honeysuckle (*Lonicera sempervirens*), and virgin's bower (*Clematis virginiana*).