



## Management of Destructive Invasive Vines

### Oriental Bittersweet

*Celastrus orbiculatus*

#### Why is Oriental Bittersweet a Concern?

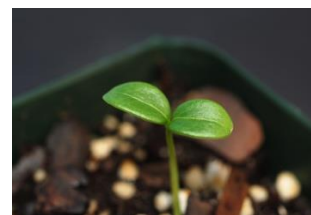
Oriental bittersweet invades open environments, forested areas, beaches and agricultural fields. Left untreated, it can rapidly become the dominant vegetation as it twines and wraps nearby plants, restricting nutrient and water flow. This weakens neighbouring plants, making them more susceptible to wind and ice damage, potentially leading to death. Their vines create dense shade, reducing light for plants lying underneath and vines creeping onto agricultural fields can smother crops. Oriental bittersweet also threatens sensitive animal habitats and other delicate terrains, such as sand dunes and beaches, where plant species are more susceptible to damage. Its bright red fruit appears from August to February, which provides a food source for birds and small mammals and creates a way for the plant's seeds to travel to other regions. Oriental bittersweet is also planted by humans as a decorative plant due to its fast-growing nature and bright red fruit.



#### Control Methods

There are manual, chemical, and mechanical methods to control Oriental bittersweet. The best method of control depends on the intensity of the invasion, the location, time, and resources you have available.

**Manual:** Small infestations of Oriental bittersweet may be controlled by hand-pulling the plant out of the ground. This method must be done precisely to ensure the entire plant and root is removed. Although cutting the plant is useful to remove climbing vines, it is a temporary solution, as it can resprout from remaining stumps and roots. Repeated cutting over many growing seasons is required to control Oriental bittersweet.



**Mechanical:** In medium to large infestations, research by Agriculture and Agri-Food Canada has found cutting the plant and tarping the invaded area can be an effective control method. This will prevent the vine from spreading as it slowly dies underneath the tarp from heat and lack of sunlight. Cut the patch of the plant to the ground, remove trimmings, and secure a large tarp over the area to ensure that sunlight cannot reach the plants. Tarping also helps slow the spread as birds and animals cannot access any potential berries the plant produces. Be sure to cut any shoots that sprout from the tarp edges.

**Chemical:** These treatments can be effective at controlling Oriental bittersweet. Chemical control is most effective if applied directly to cut-down plants. Research by Agriculture and Agri-Food Canada has found cutting the plants in the spring or early summer followed by spot-applications of glyphosate (0.67%) or triclopyr (1.34%) applied in October can successfully control Oriental bittersweet. **Please note: follow the chemical label and provincial regulations when applying any chemical control such as pesticide. If the area you are treating is not suitable for chemical control, then another control method must be used.**



One year after application of glyphosate (a) and triclopyr (b)

## Disposing of Invasive Plants

Plant material that is cut from Oriental bittersweet plants must be disposed through your local waste management facility for incineration to help stop the spread. Check your local guidelines for proper disposal of invasive plant species.

## Prevention

- Avoid buying or growing Oriental bittersweet.
- Avoid moving the soil from areas where Oriental bittersweet is found – seeds and root fragments can be present in the soil and cause it to spread.
- Control Oriental bittersweet infestations before they overtake an area.
- Be informed about a plant before purchasing – check the label for scientific names so you know what you are buying (*Celastrus orbiculatus* is Oriental bittersweet).
- Choose native and non-invasive plants – there are many options available with similar growth habits to Oriental bittersweet. Try planting some of the native species shown below. Northern Bayberry (*Myrica pensylvanica*), Sweet Cicely (*Osmorhiza claytonii*) and Virgin's Bower (*Clematis virginiana*) are great options and native to Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island.



Northern Bayberry  
*Myrica pensylvanica*



Sweet Cicely  
*Osmorhiza claytonii*



Virgin's Bower  
*Clematis virginiana*

### For more information, please contact:

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