

Callery pear

(*Pyrus calleryana*)

Homeowners Fact Sheet

Tips for identifying, controlling, and monitoring Callery pear on your property

Background

Callery pear (*Pyrus calleryana*) is a tree that is native to Asia. It has been introduced to the United States many times since the early 1900s, first as a rootstock for common pear and then for ornamental use in landscape borders and along city streets. Callery pear has several cultivars or varieties that are also invasive because they are able to breed with other cultivars. Callery pear threatens woodlands, savannas, prairies, and areas of full sun and well-drained soils.

Why Should You Care?

Callery pear displaces native shrubs and trees in regional habitats that are important to native animals for food and shelter. Birds eat its fruit and spread its seeds over long distances and the trees also spread through root suckers especially when top growth has been injured or removed. Infestations have been reported at Morton Arboretum, Midewin National Tallgrass Prairie, and in natural areas throughout DuPage County. Callery pear and its cultivars are still widely sold and planted throughout northeastern Illinois.



White Callery pear blossoms in spring. (Photo taken from Virginia Tech vTree website.)



Rounded leaf with serrated edges. (Photo taken from Virginia Tech vTree website.)



Pear bud and twig. (Photo taken from Virginia Tech vTree website.)



In late spring the tree produces small fruits that turn from green to brown. (Photo taken from Virginia Tech vTree website.)

Identification

- Perennial tree that loses its leaves in autumn.
- Trees produce white flowers with five petals in March and April. Usually one of the first trees to bloom in spring. Flowers appear before the leaves.
- Leaves are alternate, 2-3 inches wide, heart-shaped to round, margins wavy with fine teeth
- Leaves stay green late in autumn and then turn scarlet or purple in late October/early November.
- Tree trunks single then branching; tree grows 30-50 feet tall with crowns 20-30 feet wide
- Fruits are round, half inch wide, and change color from green to brown as they mature.
- Trees are weak-wooded and prone to storm and ice damage; many cultivars have narrow branching angles that can exacerbate the problem.

Some Suggested Prevention and Control Methods

Do not plant Callery pear or any cultivars including 'Aristocrat', 'Autumn Blaze', 'Bradford' (the commonly planted Bradford pear), 'Capital', 'Chanticleer' (also known as 'Cleveland Select'), 'Fauriei,' 'Jaczam,' 'Jilzam,' 'New Bradford,' 'Redspire,' and 'Whitehouse.' Replace these pear trees with recommended native and non-invasive alternatives.

Mechanical Small infestations of seedlings and shallow-rooted plants can be hand-pulled when the soil is moist, but take care to remove the entire plant including all the root portions to prevent regrowth. Always wear gloves and long sleeves to protect your skin from poison ivy and barbed or spined plants.

Chemical

Foliar application 2% glyphosate or 1.5% triclopyr solution can be applied to leaves and green stems of trees in small thickets during late summer – early autumn. Because this tree holds its leaves late, foliar treatment can be done in late October (weather permitting) with minimal collateral damage to surrounding natives. Apply enough herbicide to wet the leaves, but not have dripping. Make sure the air temperature is above about 65°F (and no higher than 80°F for triclopyr) to ensure absorption of the herbicide. To allow ample drying, applications should be made when rain is unlikely for about 12 hours after application and leaves should be dry prior to treatment. Wind speed should be below 8-10 mph to avoid off-site drift to non-target plants.

Basal bark application is one of the easier methods available, does not require any cutting, and uses a small amount of herbicide mix. It works best during late winter/early spring (February 15 - April 15). The base of the tree must be free of snow, ice, or water on the bark from recent rainfall before application; precipitation after application has no effect.

Mix a 20% concentration of oil-soluble triclopyr and 80% oil (mineral oil or vegetable oils). Add dye to the mixture to keep track of treated plants. Another option is to use a premixed, ready-to-use triclopyr product designed for basal bark application. Using a handheld or backpack sprayer, apply the mixture in a 12-inch wide band around the entire circumference of the tree base with no "skips." The basal bark method is generally used for trees that are less than 6 inches in diameter, though slightly larger stems may also be treated effectively by thoroughly treating bark up to 24 inches in height. Follow-up foliar application to basal sprouts and root suckers may be necessary.

Combination of chemical and mechanical

Trees that are greater than 6 inches in diameter may need to be cut down and stumps treated with a glyphosate or triclopyr-based herbicides immediately after cutting. We recommend getting professional help with trees of this size!

Follow-up

As Callery pear is removed from the site fill that space with native or non-invasive plants by seeding or planting. Excellent substitutes for Callery pear include common serviceberry (*Amelanchier arborea*), Allegheny serviceberry (*Amelanchier laevis*), cockspur hawthorne (*Crataegus crusgalli*), green hawthorne (*C. viridis*), Pagoda Dogwood (*Cornus alternifolia*), Redbud (*Cercis canadensis*), Blackhaw (*Viburnum prunifolium*), and Sweet Crab Apple (*Malus coronaria*). There are also a variety of cultivars that have been selected for their fall color or absence of thorns: Autumn Brilliance Serviceberry (*Amelanchier x grandiflora* 'Autumn Brilliance'), Princess Diana Serviceberry (*Amelanchier x grandiflora* 'Princess Diana'), Thornless Cockspur Hawthorn (*Crataegus crusgalli* var. *inermis*), and Winter King Hawthorn (*Crataegus viridis* 'Winter King'). For late fall flowering, Common Witchhazel (*Hamamelis virginiana*) is also a very attractive small native understory tree.

Precautions

- Herbicidal contact with desirable plants should always be avoided. If native grasses are intermingled with the Callery pear, triclopyr should be used because it is selective for broad-leaved plants and will not harm grasses.
- Because triclopyr amine is a water-soluble salt that can cause severe eye damage, it is imperative that you wear protective goggles to protect yourself from splashes. Triclopyr ester is soluble in oil or water, is highly volatile, should not be used at temperatures above 80°F, and can be extremely toxic to fish and aquatic invertebrates. It should not be used in or near water sources or wetlands and should only be applied under cool, dry, and low wind conditions. Do not use when the temperature is higher than 85°F
- If using herbicide, be sure to follow all label instructions
- Monitor treated area and treat resprouts!

Equipment & Supplies You May Need

Herbicide (glyphosate or triclopyr)

Rubber gloves and appropriate eye protection

Long pants, long sleeved shirt, socks, closed-toe shoes

Spray bottle or backpack sprayer

Liquid dye (food coloring or Rit dye works)

Patience, persistence, and commitment (this will take years)

Additional Resources

This brochure borrowed heavily from **Plant Invaders of Mid-Atlantic Natural Areas** <http://www.nps.gov/plants/alien/pubs/midatlantic/>

Midwest Invasive Plant Network Control Database

<http://mipncontroldatabase.wisc.edu/>

Northeast Illinois Invasive Plant Partnership www.niipp.net

