

Invasive Plants in Pennsylvania

Callery or Bradford Pear

Pyrus calleryana



Photo: Dan Tenaglia, MissouriPlants.com, www.invasive.org

Background:

Callery pear is native to Asia and was brought to Maryland in 1918 as rootstock for cultivated pears. A non-spiny seedling was selected and named "Bradford." This tree became the second most popular tree in America by the 1980s.

Range:

Reports of this tree as invasive in southeast Pennsylvania are starting to surface, but further south in Maryland, Virginia and beyond they have been dealing with this issue for much longer. These trees can also be found throughout the south and Midwest.

Description:

This ornamental, deciduous tree can grow up to 40 feet in height. The shiny green leaves are alternate, simple and two to three inches long. Their margins are wavy with a slightly-toothed margin.



Photo: Chuck Barger, U. of Georgia, www.invasive.org

The overall shape of the tree is often described as tear-dropped or spade-like. The bark is scaly and gray-brown in color. Abundant small, malodorous, white flowers appear in spring before the leaves emerge. Fruits are under half an inch in diameter and green to brown in color.

Habitat:

Typically found along roads, rights-of-way and old fields where they have escaped from landscape plantings. Callery pears will tolerate a wide range of soil conditions and pollution. It prefers full sun but will tolerate partial shade.

Biology and Spread:

The "Bradford" variety of pear was supposed to produce sterile fruits, but more recent cultivars were created to resist splitting by wind and snow. These trees were able to cross pollinate and produced viable seeds that are spread by wildlife. It also spreads vegetatively.

Ecological Threat:

Naturalized callery pears compete with native early successional trees in old fields and hedgerows.



Photo: Britt Slattery, US Fish and Wildlife Service, www.invasive.org

How to Control this Species:

Manual and Mechanical

Seedlings and shallow-rooted trees can be pulled when soil is moist. Small trees will need to be dug up or pulled out with a Weed Wrench tool to ensure removal of all roots.

If cutting down the tree is not possible, it can be girdled during the spring or summer by cutting through the bark all around the trunk, about six inches above the ground.

Chemical

Cutting the tree, followed by an immediate application of a triclopyr or glyphosate herbicide to the cut stump, is the most practical means of control.

Herbicide can also be applied to a girdled tree if total removal of the tree is not possible.

References:

Center for Invasive Species and Ecosystem Health:

<http://www.invasive.org/browse/subinfo.cfm?sub=10957>

Invasive Exotic Plant Tutorial for Natural Lands Managers:

http://www.dcnr.state.pa.us/forestry/invasivetutorial/gallery_pear.htm

U.S. Forest Service Weed of the Week: http://www.na.fs.fed.us/fhp/invasive_plants/weeds/gallery_pear.pdf

For More Information:

Plant Invaders of Mid-Atlantic Natural Areas, National Park Service:

<http://www.nps.gov/plants/alien/pubs/midatlantic/midatlantic.pdf>

Invasive Plants Field and Reference Guide, U.S. Forest Service:

http://na.fs.fed.us/pubs/misc/ip/ip_field_guide.pdf

USDA PLANTS Database: <http://plants.usda.gov>

Native Alternatives:

There are a variety of native ornamental trees that provide food for wildlife or beauty in landscapes, such as:

Allegheny Serviceberry (*Amelanchier laevis*)



Photo: Dow Gardens, www.forestryimages.org

White Fringetree (*Chionanthus virginicus*)



Photo: Dow Gardens, www.forestryimages.org

Sourwood (*Oxydendrum arboretum*)



Photo: Richard Webb, www.forestryimages.org