

Invasive Species Profile: Bradford Pear (*Pyrus calleryana*)

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Native Range: mostly China

U.S. Introduction: 1909, at Harvard's Arnold Arboretum

Life Cycle: perennial, tree

Means of Spreading: small fruits, eaten by birds which pass the seeds

Commercially Available: yes

Control Method: hand-pull seedlings. Chop down mature trees, removing reemerging sucker growth. Mature trees may require herbicide application to the stump immediately after felling the tree. Any branches bearing fruit must be sent to either a landfill or incinerator; bundle fruitless material for regular yard debris curbside pick-up.

Good Alternative Species: Serviceberry trees (*Amelanchier arborea*, *A. canadensis*, *A. laevis*, *A. nantucketensis*, *A. sanguinea*, and *A. spicata*), white fringetree (*Chionanthus virginicus*—the only native temperate fringetree species), flowering dogwood (*Cornus florida*), hawthorns (*Crataegus intricata*, *C. pruinosa*)



Figure 1. Bradford pear fruits ripen in autumn. People find the hard, small pears inedible, but several other animals may consume them and subsequently spread the seeds.

Comments: A question received every March is, “What are those white trees with terribly stinking flowers?” They are this article’s topic, and the best way to understand Bradford pears is to look at their history. Originally known as “Callery pears,” they were imported to America as fast and easy-to-grow ornamentals with white, early spring blossoms. One of the first cultivars, the “Bradford” pear, sported a higher floral profusion than the wild type—and the Bradford’s blossoms were sterile! Its weak wood proved to be this tree’s Achilles’ heel; large, main limbs readily broke during storms. Nurseries developed new Callery tree varieties with harder wood. Unlike the original Bradford pear, these new, stronger-branched cultivars were fertile. The bad news: these strains hybridized with the Bradford, producing the highly fertile, soft-wooded weed trees seen today. Contractors and garden centers ignorant or ignoring the species’ shortcomings further perpetuate Bradford pears abundance through quick sales.

Due to their weak wood and rapid spread, *Pyrus calleryana* is one of the worst trees to have anywhere by anyone. Summer thunderstorms and winter weather—especially heavy snow and ice—wreck havoc on today’s Bradford pears. Major limbs crash down on cars and damage houses. Additionally to property damage, the tree suffers greatly from huge gashes where limbs once extended. Storm damage is a top Bradford pear killer. Even if the tree survives, landowners complain about the tree losing its nearly perfect cone shape. Birds eating the autumn fruits spread viable seed. The seedlings quickly grow into mature trees, which displace slower-growing native saplings. Since Bradford pears favor open areas and no grazing animals or parasites are here keeping these plants in check, they obstruct native tree growth. Preventing native canopy growth in open habitat interferes with succession—the natural reforestation process. Bradford pear takeovers are especially obvious during their late March flowering period, where nearly every white tree in parklands and fields is a pear. How coincidental that these trash trees also blanket the local landfill!

So, if you want your yard to go for the “landfill look” and to play clean-up after storms, Bradford pears are for you. For everyone else, numerous native species offer far better choices (for white blossomed trees, see the “Good Alternative Species” section; plant a mix for an especially enchanting appearance). The natives display showy flowers (which do not stink), boast stronger wood enabling the branches to survive storms intact, and the foliage and fruits provide wildlife with habitat and food.

For more information on Bradford pears:

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

<https://www.invasive.org/alien/pubs/midatlantic/pyca.htm>

<https://mdc.mo.gov/sites/default/files/downloads/callerypearinvasive.pdf>

http://www.mdinvasivesp.org/archived_invaders/archived_invaders_2007_04.html



Figure 2. True garbage trees, blooming Bradford pears cover the county landfill.

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