

Monday, February 23, 2015

Bradford Pear

Pyrus calleryana

A native of Asia, *Pyrus calleryana* was first introduced to the U.S. in 1916 as rootstock for cultivated pears. Around 1950, interest from the horticultural trade began to grow and a non-spiny seedling was selected and named “Bradford” pear. The Bradford pear, also referred to as Callery pear, is a medium-sized deciduous tree well suited for urban planting. Its abundant spring flowers – borne on an attractive tear-dropped shape – combined with its ability to tolerate a wide range of soil conditions made the Bradford pear the second most popular tree in America by the 1980’s.



At the time, the Bradford pear was thought to have no impact on the natural environment because it was a hybrid that could only produce sterile fruit. Its popularity led to the development of several other cultivars that included the Aristocrat, Cleveland, Chanticleer, and Respire.



By the late 1990’s it had become apparent that these new cultivars were able to cross-pollinate as pear trees began popping-up along roads, rights-of-way and old fields. With birds and other wildlife readily dispersing the now viable fruit, the Bradford pear gained new attention as an aggressive invader.

These “wild” pear trees are highly competitive, which allows them to invade natural areas. Once established, they form dense thickets that produce root sprouts that push out native plants intolerant of the deep shade. Once established, these new stands can subsequently interbreed, producing more viable seed and furthering expansion and dispersal of the wild stand of the species. A study conducted in 2005 on the spread and distribution of Bradford pear reported the species to have established stands outside of cultivation in over 152 counties in 25 states in the United States. The following consequences can occur as a result of this interbreeding:

- Ecological damage caused by displacing native plant communities
- Increased economic costs due to vegetation management problems near transportation corridors or under power line right-of-ways.
- Potential threat to electrical and transportation services from falling branches or toppled trees because of these notoriously fast-growing, weak-wooded tree



In the landscape setting, the Bradford pear and its many cultivar cousins exhibit several problems. The growth habit of the tree's crown is problematic because it lacks a central leader, resulting in many weak structural supports. Combined with its brittle wood, the main branches have a tendency to split during wind and ice storms, leaving ugly wounds or decimating the tree altogether. The Bradford pear is a short-lived tree with an average life span of only 20 years and requires aggressive pruning to combat its

poor branch development. For these reasons and the impact on natural areas, Bradford pears have been placed on Delaware's "Do Not Plant List."

If you have pear trees planted in your landscaping it is recommended that they be removed as they begin to deteriorate or become unhealthy and replaced with native trees or shrubs. Several native species such as Allegheny serviceberry and white fringe tree offer springtime blooms.