Callery Pear (Pyrus calleryana): Now becoming an unwelcomed tree

by Gary Carlin

The callery pear tree is named after the scholar and French priest, Joseph-Marie Callery, who during his time in China sent specimens to Europe in the 1850s. The tree is native to both China and Vietnam, and is an extremely hardy ornamental tree that is tolerant of most conditions. In the early spring, the tree lights up with white flower clusters before the leaves appear. The fruits of this tree are small (1/2-inch diameter) and do not become edible to birds generally until after the first frost (when they soften). Unfortunately, the tree has a smell that has been described as "rotting fish" or worse.

When the tree came to the U.S., scientist thought they might be able to cross breed this species with orchard pears to produce a hybrid that was immune to fireblight. However, from many a failed plan comes something else, and that was the production of the "Bradford" cultivar. Starting in the 1960's it was planted widely in the New York City area. What made the tree ideal was its fast growth, tolerance of pollution and soil compaction, and its ability survive in high salt concentrations produced from winter road salts. Interestingly, the Bradford cultivar is produced asexually by cuttings and grafting so all trees are genetically identical.

The Bradford cultivar was ideal for small spaces as the branches do not angle down but stay close to the tree trunk to form tight angles. Unfortunately, strong winds and snow and ice build up caused many limbs to break and fall – which is not ideal for parking lots, city streets, or parks. Therefore, NYC no longer plants the Bradford. Cultivars with stronger branch structures such as "Aristocrat", "Chanticleer", "Redspire" and "Whitehouse" and now planted; and the Callery Pear is Manhattan's second most common tree.

Pear wood is prized by woodworkers and carvers for its texture. It has been used to make furniture, woodwind instruments, violin and guitar fretboards, piano keys, tobacco pipes, and veneer. It is also an aromatic wood that is used to smoke meat and tobacco. Because it does not warp, it is the wood of choice for an architect's ruler and T-square. It was also common in kitchen utensils such as large spoons and stirrers, as the wood will not impart any flavor, color, or smell to the food or splinter from prolonged exposure to liquids or heat.

What is interesting is that a cultivar cannot self or cross pollinate with another tree of the same cultivar (self-incompatible). Fertile seeds can only be produced between two different cultivars. And these "hybrid cultivars" (or wild plants, often called Bradfords) are usually significantly different from either parent cultivar and often have thorns. One of the problems associated with the Callery Pear is that it is an extremely aggressive invasive species that chokes out the native species. Even if an area has no Callery pear trees, birds can carry the seeds of these wild plants and disperse them great distances. Now many cities are beginning to ban the planting of the trees and are trying to educate the public as to the potential danger. Currently, the Callery pear is found in the wild in almost 30 states.