

Callery Pear, Bradford Pear PYC80
***Pyrus calleryana* Decne.**

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Family: Rosaceae

Plant. Deciduous tree to 60 feet (18 m) in height and boles 2 feet (0.6 m) in diameter, widely planted as an ornamental tree due to its uniform tear-drop crown shape, early spring cover of white blossoms, and brilliant orange to red fall foliage. Leaves ovate and long petioled, alternate and tufted on stubby thorned or non-thorned branchlets.

Abundant (rarely few) small pears in fall and winter spread by birds and possibly other animals with varying fertile seeds. Several commercial sterile varieties can cross pollinate with certain other pear species in close proximity to produce fertile hybrids. Also, fertile varieties commonly used as a rootstock for grafting most pear species and can dominate after grafted crowns are damaged to produce fruit. Major branches radiate from one height on the trunk, often splitting at the juncture after wind and ice storms.

Stem. Twigs initially hairy, stubby, and tipped by a sharp thorn in escaped plants, being longer branched with few thorns in cultured, planted varieties. Terminal and lateral bud scales loose, gray-hairy and elongated to 0.5 inches (15 cm). Twigs reddish brown to gray with scattered or many light dots (lenticels) that elongate with age to form horizontal light lines on branches and boles. Bark of trunks increasingly vertically fissured, becoming cross checked with age. Stems and boles often dappled with gray and green lichens.

Leaves. Alternate, often tufted on short branches. Initially circular and hairy, maturing to glossy and ovate to lanceolate or slightly cordate, 1.5 to 3.5 inches (4 to 9 cm) long and wide, leathery with finely crenate and wavy margins sometimes having a pronounced tip. Dark green above and light green below, becoming brilliantly red, yellow, to maroon in fall. Thin petioles 1 to 2 inches long (2.5 to 5 cm) with thin stipules that shed early.

Flowers. March to May. Large clusters, tufted often from mid-thorn of brilliantly white, five-petaled flowers, 1 inch (2.5 cm) across with many jutting, maroon tipped anthers, appearing before leaves, covering trees to make conspicuous invaders in early spring. Emit an unpleasant odor and can cause allergenic reactions.

Fruit and seeds. June to February. Persistent clusters of small pears (pomes), 0.3 to 0.5 inches (8 to 12 mm) long and wide, green ripening to tan then maroon with numerous surface speckles, dangling on thin, one-inch long stems. Fleshy, tart but edible, containing 2 to 6 maroon seeds and numerous stone cells.

Ecology. Rapid growing, forms thickets and dense stands by root sprouts. Tolerates partial shade and a variety of soils from wet to droughty. Hybridizes with other callery pear varieties and Asian pear (*Pyrus betulifolia* Bunge). Pollinated by insects. Fertility and fruit production vary widely, but close colonies result in more viable fruit. Fruiting starting at 3 years. Spreads by prolific bird- and animal-dispersed seeds. Seeds require 60 to 90 days of cold to germinate that can occur in the fruit. Widely invading over a large range due to cultivars that have been bred for cold hardiness.

Resembles leaves of both common pear (*Pyrus* spp.) that has larger fruit and tallowtree (*Triadica sebifera*) that has dangling spring flowers and clusters of white fruit in fall and winter. **Also resembles** another invasive, common pearl-bush [*Exochorda racemosa* (Lindl.) Rehder] that blooms in early spring with similar bright white flowers that occur in racemes and leaves are elliptic and serrated above the middle.

History and use. Native to China, Korea and Taiwan, the original “Bradford” cultivar was introduced into Maryland in 1908 for breeding resistance to fireblight disease into fruiting pears, although not successful. Since the 1950’s about 20 ornamental cultivars have been developed and are still widely sold and planted. All capable of producing viable seeds although often denied by the nursery industry.