Pyrus calleryana 'Bradford': 'Bradford' Callery Pear

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Introduction

`Bradford' is the original introduction of Callery Pear and has an inferior branching habit when compared to other cultivars which have since been developed. It has many vertical limbs with embedded bark packed closely on the trunk and grows about 40 feet high by 30 to 45 feet wide but the crown is dense and the branches long and not tapered, making it quite susceptible to wind and ice damage and other breakage. However, it does put on a gorgeous, early spring display of pure white blossoms, and the small, red/brown fruits which follow will attract quite a number of birds who find them delicious. Fruit set may be increased by planting two or more cultivars of Callery Pear together. Fall color is incredible, ranging from red and orange to dark maroon.

General Information

Scientific name: Pyrus calleryana
Pronunciation: PIE-rus kal-ler-ee-AY-nuh
Common name(s): 'Bradford' Callery Pear
Family: Rosaceae

Figure 1. Young Pyrus calleryana 'Bradford': 'Bradford' Callery Pear

USDA hardiness zones: 5A through 9A (Fig. 2)

Origin: not native to North America

Invasive potential: little invasive potential

Uses: container or planter; street without sidewalk; screen; shade; specimen; parking lot island < 100 sq
ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; urban tolerant; highway median

**Availability:** not native to North America

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**Figure 2. Range**

**Description**

**Height:** 30 to 40 feet

**Spread:** 30 to 40 feet

**Crown uniformity:** symmetrical

**Crown shape:** oval, round

**Crown density:** dense

**Growth rate:** fast

**Texture:** medium

**Foliage**

- **Leaf arrangement:** alternate (Fig. 3)
- **Leaf type:** simple
- **Leaf margin:** serrate, crenate

**Flower**

- **Flower color:** white/cream/gray
- **Flower characteristics:** very showy

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**Leaf shape:** ovate

**Leaf venation:** pinnate, reticulate

**Leaf type and persistence:** deciduous

**Leaf blade length:** less than 2 inches, 2 to 4 inches

**Leaf color:** green

**Fall color:** yellow, red, orange, purple

**Fall characteristic:** showy
Fruit

Fruit shape: round
Fruit length: less than .5 inch
Fruit covering: dry or hard
Fruit color: tan, brown
Fruit characteristics: attracts birds; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; not showy; typically multi-trunked; thorns
Pruning requirement: needed for strong structure
Breakage: susceptible to breakage
Current year twig color: brown
Current year twig thickness: thick
Wood specific gravity: unknown

Culture

Light requirement: full sun
Soil tolerances: clay; sand; loam; alkaline; acidic; occasionally wet; well-drained
Drought tolerance: high
Aerosol salt tolerance: moderate

Other

Roots: not a problem
Winter interest: no
Outstanding tree: no
Ozone sensitivity: tolerant
Verticillium wilt susceptibility: resistant
Pest resistance: resistant to pests/diseases

Use and Management

The major problem with the `Bradford' Callery Pear has been too many upright branches growing too closely together on the trunk. Prune the trees early in their life to space lateral branches along a central trunk. This is not easy and a skilled pruning crew is needed to build a stronger tree. Even following pruning by a skilled crew, trees often look misshappen with most of the lower foliage removed and the lower portions of the multiple trunks showing. This tree probably was not meant to be pruned, but without pruning has a short life, thus `Bradford' Pear defines a Catch-22.

Callery Pear trees are shallow-rooted and will tolerate most soil types including clay and alkaline, are pest- and pollution-resistant, and tolerate soil compaction, drought and wet soil well. `Bradford' is the most fireblight-resistant cultivar of the Callery Pears. Unfortunately, as `Bradford' and some of the other cultivars approach 20 years old, they begin to fall apart in ice and snow storms due to inferior, tight branch structure. But they are certainly beautiful and grow extremely well in urban soil until then and probably will continue to be planted because of their urban toughness. As you plan downtown street tree plantings, remember that in downtown sites many other trees succumb before this one due to a variety of reasons, but the Callery Pears seem to hang on pretty well despite the problems with branch attachments and multiple trunks.
`Autumn Blaze' has wonderful fall color earlier than other cultivars.

**Pests**

Aphids cause distorted growth and deposits of honeydew.

Scales can be seen on `Bradford' but usually they are not serious.

Several borers may attack pear. Keep trees healthy to prevent attacks.

**Diseases**

Slightly susceptible to fireblight when grown in the south but the damage is usually only noticed at branch tips. `Bradford' shows the best resistance to fire blight in tests conducted in the southeast of all Callery Pear cultivars tested.

Tips of fire blight-infected branches appear scorched and burnt. The leaves droop, turn brown, but remain hanging on the tree. The bacteria wash down the branch and form cankers. Bark inside the canker often shreds and peels. When a canker girdles a branch, that branch dies. The Callery Pears are resistant, but not immune to this disease and some cultivars are apparently more resistant than others. Prune out infected branches well below the infected area.