
SUNNYSIDE THYMES

Volume 28, Issue 5

"Helping Others Grow"

May 2019

Space Invaders - Callery Pear

By Phyllis Risch, SMG Member

One, Two, Three Strikes - Yer Out!

Being an invasive plant should be enough to discourage one from adding it to your landscape, right? What if there were three reasons not to plant and even good evidence to remove them? Enough impetus, let's hope.

Pyrus calleryana, frequently referred to as Callery or Bradford pear, is just such a pest.

Joseph Callery discovered the tree in China in 1858 and collected specimens. In 1917 seed was brought to the US for unsuccessful experimentation to produce fire blight resistant pears and for use as root stock for edible pears. The trees were sold as ornamentals beginning in the 1950's.

Pyrus calleryana belongs to the Family Rosaceae. It has an upright conical to rounded shape, typically growing 25 to 45 feet in height with a 13 to 16 foot spread. A deciduous tree, it produces copious, white, five petal blooms in spring. The blooms produce an "aroma" described as smelling like rotting fish! The leaves are oval with a pointed tip; coloration a deep shiny green. Numerous green fruits of approximately 1/2 inch in diameter are produced.

Cultivars that were sterile were produced;

however the trees became invasive due to overplanting, escaping cultivation and it became evident that viable seed can be produced when Callery pears cross pollinate with cultivars such as *P. betulifolia*.



Fruit set on callery pear.
Photo: Rosie Lerner, Purdue
Extension

The fruit ripens at the same time as native fruits such as Serviceberry and Spicebush. Birds preferentially consume the more sugary pear fruits and distribute the seed. The Callery/Bradford pear has become invasive, readily evidenced by stands and hedgerows along roadsides and in forested areas. It competes with native plants such as spicebush, flowering dogwood, oak and hickory.



Callery Pear.
Photo: Purdue Ext.

There is mounting evidence that some species of birds that are consuming the fruit of these pears instead of native fruits have decreased resilience necessary for migration and reduced fecundity. Some species include tanagers, vireos, thrushes and phoebes.

In addition to its invasive nature, the Callery pear has a propensity towards sustaining severe limb damage during wind or ice storms, requiring severe trimming or tree removal in addition to repairing structures damaged by the breaking tree limbs. Cultivars have been developed to address the issue of fragile limb structure.



Extruded cedar apple rust teliohorns. Photo:
Dr. Dave Rosenberger, ret., Cornell University

Continued

An additional issue with the Callery/Bradford pear is that it is a “collaborator” in the distribution of a fungal disease that affects members of the Family Rosaceae such as edible pears, apples and hawthorns.

A fungal disease caused by *Gymnosporangium* known as cedar-apple rust needs two different families of plants to complete the infectious lifecycle. The fungus produces spores that overwinter in species of plants of Family Cupressaceae; junipers. The rains of spring release spores which then infect members of the Family Rosaceae.

Pyrus calleryana, more than just another pretty face.

References:

https://edustore.purdue/newsearch_Advance.Asp
Callery pear product #FNR-523-wv

<https://blogs.cornell.edu/plantpathhv/>

<https://dasnr.okstate.edu>

<https://bugwood.org>

<https://missouribotanicalgarden.org>

<https://invasive.org>