

February 18, 2019

Survivor Tree Seedling Program
National September 11 Memorial & Museum at the World Trade Center
200 Liberty Street, 16th Floor
New York, NY 10281
info@911memorial.org

Dear Board of Directors:

The Indiana Invasive Species Council (www.indianainvasivespecies.org) respectfully requests that you consider choosing a non-invasive tree species for your Survivor Tree Seedling Program. Trees are wonderful symbols of resilience, survival and rebirth, but invasive tree species such as Callery pear are wreaking economic and ecological harm in the United States. For this reason, it is likely that Callery pear will become illegal to plant in many states. Switching to a non-invasive tree species would be a proactive step to keep your program running successfully while demonstrating a commitment to promote our nation's environmental resources, which are the ultimate foundation of societal wealth, health, and resilience.

State conservation departments all over the United States are warning homeowners against planting Callery pear, and the sale and distribution of all cultivars of this tree has already been made illegal in Ohio (https://www.dispatch.com/news/20180107/38-species-of-invasive-plants-now-illegal-to-sell-in-ohio). A Terrestrial Plant Rule prohibiting the sale of ~40 damaging invasive plants is making its way through Indiana's Natural Resource Commission rule-making process (http://www.in.gov/legislative/iac/20181121-IR-312180316PRA.xml.pdf). Given its highly invasive status in Indiana, there is a strong push to place Callery pear on the list of prohibited species. In anticipation of this, nurseries in Indiana are voluntarily beginning to phase out their stock of Callery pear (Figure 1).



Figure 1. Voluntary Callery pear removal by an Indiana nursery (Photo: R. Haggard, Executive Director, Indiana Nursery and Landscape Association).

All of the approximately 20 different cultivars and varieties of Callery pear are invasive, including "Bradford pear," "Aristocrat," "Autumn Blaze," "Redspire," and "Whitehouse." Callery pear has become one of Indiana's worst invasive species, spreading through thousands of acres of natural and managed lands.

Callery pear was not predicted to be invasive, but while each cultivar is self-incompatible, different cultivars are genetically different enough to cross and produce viable seed. The numerous cultivars of Callery pear now on the market have thus removed the self-incompatibility barrier.

Other traits that promote Callery pear invasiveness include rapid growth, ready dispersal of seed by birds and other animals, a persistent soil seed bank, and tolerance for a wide range of environmental conditions. Besides the costs

associated with its invasiveness, the flowers of Callery pear smell badly, the fruit is messy, and the branches of some cultivars, such as "Bradford," are prone to breakage.

Many native tree species provide comparable aesthetics without the many headaches of Callery pear (Table 1). And these species support the songbirds and butterflies that we enjoy for their beauty, pollination services, and ability to control mosquitos and ticks, among other benefits.

Table 1. Native alternatives to Callery pear

Common Name	Latin Name	Flower Color	Fall Leaf Color	Sun	Bloom Time	Attracts
Blackhaw	Viburnum prunifolium	White	Reddish-purple	Part shade	April-May	Birds, native bees
Downy Serviceberry	Amelanchier arborea	White	Yellow to red	Full sun-part shade	March-Apr.	Birds
American Plum	Prunus americana	White	Yellow to red	Full sun-part shade	March-Apr.	Birds
Chokeberry	Aronia melanocarpa	White	Purple/red	Full sun-part shade	May	Birds
Flowering dogwood	Cornus florida	White	Shades of red	Full sun-part shade	April-May	Birds, butterflies
Chokecherry	Prunus virginiana	White	Yellow to orange	Full sun-part shade	April-May	Birds, butterflies
Black gum	Nyssa sylvatica	Greenish white	Scarlet	Full sun-part shade	May-June	Birds
Eastern redbud	Cercis canadensis	Purple/pink	Pale to greenish yellow	Full sun-part shade	April	Butterflies
Yellowwood	Cladrastis kentuckea	White (fragrant)	Yellow	Full sun	May	
Linden tree	Tilia americana	Pale yellow	Pale green to pale yellow	Full sun-part shade	June	Butterflies
Green hawthorn	Crataegus viridis	White	Purple to red	Full sun	May	Birds, butterflies

There are many excellent resources about the drawbacks to Callery pear, and we provide a few here (Table 2).

Table 2 Recommended Callery pear resources

Title (Click title to view article)	Author	Category
Invasive Plant Atlas: Callery pear	Invasive Plant Atlas	Basic facts and map
Callery pear (Not recommended)	The Morton Arboretum	Basic facts
Bradford pear (Pyrus calleryana)	Midwest Invasive Species Network	Basic facts
Invasive Plants in Pennsylvania Callery or Bradford Pear	Pennsylvania Extension	Fact sheet (pdf)
Invasive Species: Callery pear	Missouri Conservation Dept.	Fact sheet (pdf)
Callery pear (Pyrus calleryana) Homeowners Fact Sheet	NIIPP	Fact sheet (pdf)
Plant Invaders of Mid-Atlantic Natural Areas	NPS and USFWS	General InvSp guide (pdf)
Scientists thought they had created the perfect tree but it became a nightmare	The Washington Post	Further reading: Popular science article
The Beginning of a New Invasive Plant: A History of the Ornamental Callery Pear in the United States	T. M. Culley and N.A. Hardiman	Further reading: Academic article

We very much appreciate the spirit of your work and we thank you for considering this information. We welcome you to write us at IISC@purdue.edu to let us know what you think.

Sincerely,

Heather Reynolds

Heather Reynolds

Chair, Indiana Invasive Species Council