



Ohio Invasive Plants Council

Newsletter • Summer 2022



PRESIDENT'S CORNER

Summer is upon us, with heat, humidity, and tornadoes! What a challenge it has been so far, even without invasive plants. Plenty of rain has made invasive plants vigorous and prolific, so land managers have been busy trying to keep up with invasive control efforts. Some plants are especially abundant this season, including butterweed, Japanese stiltgrass, poison hemlock, Dame's rocket, and lesser celandine.

Our website will soon have a new section which expands on our alternatives brochure by offering more suggestions for alternatives to invasives. Sometimes when you remove invasive species, native species will re-establish from dormant plants or the seedbank. If the invasives have been established for many years, you may have to re-plant (plants or seeds) with native species. This expansion of the OIPC Alternatives Brochure can serve as a guide to help you determine what natives would be good replacements. We have completed a new, up-to-date OIPC display to be used at events around the state. We showcased it at a recent event with the Franklin County Master Gardeners' *Day of Education* on March 19th in Columbus and it was well-received. We have used it at three other events since then.

We will be having our 2022 Annual Meeting in-person this fall on September 30th at Highbanks Metro Park's Nature Center. We also have a workshop planned for September 1st at the Lowe-Volk Nature Center near Ontario, part of the Crawford County Park District. The registration for this workshop is open and we hope to see a lot of faces there. We decided to postpone our next

research conference until the spring of 2023 to give us more time for planning and in hopes that it can be safely held in-person in Columbus.

As some of you may know, Yahoo discontinued their listserv service. OIPC had an active listserv of over 300 participants. We have set up another listserv with Google Groups, oipc@googlegroups.com. We welcome people to join this group. Through this group you can share and receive timely information about invasive plants and related events in Ohio!

If you are looking for opportunities to help control invasive plants in natural areas, one way is to participate in the Ohio Natural Areas & Preserves Association's Stewardship Projects. See the ONAPA website at www.onapa.org for information on 2022 projects. Many local metro parks and park districts, state and federal agencies may also have opportunities for volunteers to help control invasive plants. Each of us can help to address invasive plant challenges on a local level.

Help us spread the word about invasive plants and visit our website at www.oipc.info frequently! We added some new materials to the website, including an invasive plant focus, or potentially invasive plant, every few months. If you need a plant identified or are looking for more information on invasive plants, contact us through our website and we will respond as soon as possible. If you would like to recommend a plant to be assessed for invasiveness by the OIPC Assessment Team, let us know and we can add it to the list for evaluation. Finally, if you would like to contribute an article to our newsletter about invasive plants, let us know as we are always looking for new material.

Jennifer L. Windus, OIPC President

Sept. 1st, OIPC Workshop: Invasive Plants in Your Backyard

Join us for our first OIPC workshop in quite some time! Hosted by the Crawford Park District.

Where: The Lowe-Volk Nature Center, 2401 State Route 598, Crestline, OH 44827

When: Sept 1st, 10:00am - 3:00pm

Cost: \$20

Registration: [OIPC Workshop Registration](#)

There will be speakers, a presentation on ONAPA's Stewardship Program, a provided lunch, and an outdoor session. View the full agenda on the OIPC website [here!](#)

Registration is limited and closes Aug 28th. To register use the above Eventbrite registration link.

Regulation of the 'Bradford' and Other Callery Pears in Ohio

The Callery pear (*Pyrus calleryana*) is a perfect example of a plant that was introduced into the US for the best of reasons, but escaped from cultivation and invaded natural areas throughout our state. This tree, native to China, was originally imported in the early 1900's as rootstock for the edible pear, *P. communis*, before its ornamental features were recognized. First sold in 1961 as the 'Bradford' cultivar, this ornamental tree was highly prized by gardeners for its abundant white blooms, its fast growth, hardiness and ability to tolerate all types of soil, its glossy foliage, and its rounded tree shape. Initially, this self-incompatible species lacked

fruit, because like many fruit trees, it needed more than one genotype present to initiate fruit set, and all trees were clones of the same 'Bradford' genotype. Over time however, the 'Bradford' was discovered to have one fatal flaw: it did not have a central branching structure, making 15-20 year old trees more susceptible to breakage during heavy wind or ice storms. As gardeners saw their beloved trees self-destruct in their yards, they sought stronger trees with more attractive traits such as fall color. Consequently, additional ornamental selections of the same species were developed, such as 'Cleveland Select', 'Chanticleer', 'Aristocrat', 'Redspire', 'New Bradford' and other cultivars.



The above photo demonstrates the iconic breakage that Callery pear is known for. This type of damage can easily occur during heavy wind and ice or snow events. Photo: Rebekah D. Wallace, University of Georgia, Bugwood.org.

Unfortunately, as different Callery pear cultivars were planted together in residential and commercial areas, they were able to cross-pollinate. Bees and other insects buzzed indiscriminately from flower to flower. Even a single grafted commercial tree can cross with its rootstock if the rootstock begins to flower. The resulting marble-sized fruits are now abundant on each tree – until late winter when these fruits are consumed by birds. Many of these birds, such as introduced European starlings, defecated the seeds along roadsides as they perched on powerlines. Wild Callery pear even started appearing within established forests, likely due to the activity of native bird species, such as American robins, which inhabit forest interiors.

Over the past 20 years, wild Callery pear populations have steadily spread across Ohio, starting in areas

where it was planted widely as an ornamental tree and expanding outward. Callery pear often outcompetes Amur honeysuckle along the edges of roadways or creates dense monocultures in disturbed sites next to construction areas. More likely than not, wild Callery pear can now be found as seedlings or saplings in residential gardens, or within natural areas such as prairies, wetlands, and forests. The trees themselves are very difficult to remove with their deep roots, and must be cut and stump-treated with a herbicide; if not, root sprouting is common, leading to the creation of Callery pear “bushes”. The trees are also resistant to fire and mowing, returning with even greater growth. Land managers of local parks and municipalities now spend thousands of dollars of their limited budgets annually trying to control these invaders.



The white blooms of Callery pear make it stand out in the early spring. At this time it is easiest to recognize its dense monocultures along road edges. Photo: Britt Slattery, US Fish and Wildlife Service, Bugwood.org.

In 2014, Ohio was the first state in the US to recognize *Pyrus calleryana* as an invasive species, when it was added to the Ohio Invasive Plant Council’s (OIPC) list of invasive plants ([OIPC Invasive Assessment Results](#)). This action was largely due to research on the Callery pear conducted in Ohio. In 2005, Dr. Michael Vincent of Miami University was the first to show that the species was spreading across eastern North America, using a herbarium survey. After Ohio botanist Marjie Becus and I literally ran into a Callery pear sapling in the Hazelwood Preserve in southwestern Ohio, my lab began studying the genetic origins of wild populations, leading to a series of papers published since 2007. Since this time, several other states have followed Ohio and now list the Callery pear as

invasive on their non-regulatory lists (AL, AR, GA, KS, KY, MD, MO, NE, OK, PA, SC, TN, WV), on a watchlist (CA, DE, IN, MS, NC, NJ, VA), or otherwise noted as problematic (IL). Ohio took this formally a step further in 2018, when the Ohio Department of Agriculture (ODA) added *P. calleryana* to its list of Regulated Invasive Plant Species. Recognizing the economical impact of this plant and the fact that it was still being widely sold throughout Ohio and elsewhere, the ODA instituted a 5-year phase out period, with the species (and all of its cultivars) banned from commercial sale and distribution in January, 2023. Thus Ohio will become the first US state to regulate *Pyrus calleryana* from commercial sale, and other states are now following suit. For example, South Carolina recently announced that it too will ban the sale and commercial distribution of *P. calleryana* in 2024.

So what can gardeners, landscape designers, and other enthusiasts of the Callery pear do, given that Callery pear cultivars will soon be unavailable for sale in Ohio? Fortunately, non-invasive alternatives are available. For example, OIPC provides alternatives in their new Alternatives pamphlet (www.oipc.info/alternatives) or through the Midwestern Invasive Plant Network (bugwoodcloud.org). Species such as serviceberries (*Amelanchier* spp.) or yellowwood (*Cladrastis kentukea*) are ideal if flowers are desired in early spring, or black tupelo (*Nyssa sylvantica*) if a pyramidal or rounded shape and/or red foliage in late fall is wanted. Other alternatives to consider are Ivory Silk Tree Lilac (*Syringa reticulata* ‘Ivory Silk’), Chinese Fringe Tree (*Chionanthus retusus* ‘Tokyo Tower’), and American Hornbeam (*Carpinus caroliniana*). These species are increasingly available in local nurseries, so if you don’t see them there, just ask.

Although some may argue that regulation of Callery pear is too late – that the cat is “out of the bag” – stopping the sale of the species is critical in limiting its northward march. This is especially important with global climate change as cold tolerance is currently limiting the northward distribution of Callery pear. This regulation should also stop the production of new cultivars in our state and elsewhere, which are directly responsible for increased spread of this invader. And if at least

anything, we can learn from the lesson of the Callery pear while we consider other non-native species being released into our natural environment. With regulation protocol established plants that are determined to be invasive can hopefully be added to the Invasive Plant List and thus regulated before it is too late.

Theresa Culley, University of Cincinnati & OIPC Assessment Team

Alternatives to the Callery Pear Cultivars

Callery pear, *Pyrus calleryana*, has recently been in the news highlighting Ohio as the first state to officially recognize the invasiveness of Callery pear and its cultivars by banning its sale. The Ohio Department of Agriculture law will go into effect for Callery Pear in January 2023 which will be the end of Callery pear's 5-year phase out period.

The ODA Invasive Plant Law states:

"To protect native plant species and thwart the growth of invasive plant species...No person shall sell, offer for sale, propagate, distribute, import, or intentionally cause the dissemination of any invasive plant in the state of Ohio."

Our hope is that more states will follow our lead and recognize the negative impact Callery pear has on our native habitats.

Callery pear makes up a significant portion of the ornamental tree sales and production for Ohio nurseries and with this ban going into effect soon, it is important for nurseries, homeowners, municipalities, and landscape designers to have a good list of alternatives to replace Callery pear in the landscape. The OIPC "Alternatives for Invasive Plants in Ohio: A guide for Landscaping and Habitat Restoration" brochure is an excellent resource with a list of alternative species that will not harm the local environment. The brochure can be found on the OIPC website at www.oipc.info/oipc-and-ohio-material. Here are some species that have similar characteristics to Callery pear that would be good to look for or request from Ohio nurseries.

Nyssa sylvatica 'Green Gable', Green Gable Black Tupelo is a selection made by Alex Neubauer of Hidden Hollow Nursery. It has the classic teardrop canopy of a pear and has incredible deep red fall color. The summer glossy green foliage, the fact that this is a native tree and an excellent nectar source for bees makes this one of my favorites to offer to the public. A few other cultivars of *Nyssa* to consider are 'Wildfire' which has bright red new growth and 'Tupelo Tower', an Ohio selection by Bill Hendricks of Klyn Nurseries. Above photo of *Nyssa sylvatica* by T.Davis Sydnor, The Ohio State University, Bugwood.org.



Amelanchier laevis 'Cumulus', 'Lustre', or 'SnowCloud', Serviceberry, is another native species with abundant white flowers in early spring. This species has a bluish fruit which is an excellent food source for wildlife.



The leaves have brilliant fall colors of oranges and reds. This small tree is common in the nursery industry and does

have some specific needs to consider before planting. It is an excellent small tree if you have tight space restrictions. Photo of *Amelanchier laevis* flowers by Dow Gardens, Dow Gardens, Bugwood.org.

Syringa reticulata 'Ivory Silk' and 'Ivory Tower', Japanese Tree Lilac is a non-native species but it has not shown signs that it has the ability to naturalize and become invasive and it has been in the nursery industry for a long time. This small tree has great summer foliage and large white flowers in July when most other trees have little



interest. Durability and urban tolerance make this a good consideration. Photo of *Syringa reticulata* flowers by Dow Gardens, Dow Gardens, Bugwood.org.

Acer saccharum 'Barrett Cole', Apollo Dwarf Sugar Maple is a native sugar maple with a unique narrowness, dense branching and compact columnar form making it an excellent Callery pear replacement. The dark green foliage withstands summer heat followed by fall colors of yellows and burnt oranges. Though the blooms are insignificant, the overall form and shape make it an excellent choice for landscapes with limited space.

To maintain both a healthy nursery industry and environment, those of us in the industry need to passionately promote alternates to invasive plants. The OIPC Alternatives Brochure is a resource that can be used to find some great recommendations and more suggestions will be coming soon on the OIPC website.

David Listerman, Listerman & Associates, Inc. & OIPC Board

Volunteers Are an Important Part of Habitat Management Programs

The Columbus and Franklin County Metro Parks has over 28,000 acres in seven counties. We manage 20 park areas and over 230 miles of trails. Our goal is to manage our natural resources as



healthy, diverse native communities. Staff alone cannot take care of these treasures in central Ohio. Fortunately, we have a volunteer program that provides many opportunities for the public to contribute to the Metro Parks and give support to our dedicated staff. Volunteers provide support to naturalists, rangers and the natural resource management staff. With the help of volunteers, we have been able to control hundreds of acres of invasive plants! In the past 15 years, Callery pear and its cultivars have become a real problem in many of our park habitats, including the reforestation areas. Although we provide tools for invasive control projects, our volunteers often arrive on site armed with their own favorite tools including loppers, hand saws and even electric saws. Our staff, trained in pesticide application, work with our volunteers as we cut and treat the invasives that include Callery pear, bush honeysuckle, autumn olive and multiflora rose.



We often take our volunteers into some of the more remote parts of our parks. Remnant prairies and sites with rare plants need a gentle touch and our volunteers appreciate exploring the out-of-way places. Getting equipment to these sites can often be a challenge so hand work is required to keep these areas free of invasive plants.

Other projects that volunteers are involved in are prairie seed collections in the fall, where many hands collect many seeds! Prairie seeds are dried and used to restore more prairies in our parks. Volunteers also assist us with wildlife surveys, monitoring birds, butterflies and even bats. Just this past winter, hemlock woolly adelgid, a devastating pest on our native Eastern hemlocks, was discovered at Clear Creek Metro Park and State Nature Preserve. Many volunteers helped staff tag, measure and document infested tree stands. More than 4,000 trees were tagged.

Metro Parks is grateful for the dedication of our volunteers! We encourage agencies to utilize this valuable resource as a way to engage the public and increase capacity to manage land and target invasives!

Carrie Morrow, OIPC Board & Columbus and Franklin County Metro Parks

**SAVE THE DATE:
OIPC ANNUAL MEETING
SEPTEMBER 30th**

OIPC is excited to have the OIPC Annual Meeting this year in person! It will be held at High Banks Metro Park. We hope to see you there. Details and the agenda will be posted on our website soon and registration will begin in late August.

Japanese Hops: An Invasive Vine

Japanese hop or hops, *Humulus japonicus*, is an attractive but rapidly growing vine from the Hemp family, originally from East Asia. Like many invasive plants, it was deliberately introduced to North America as an ornamental species, in the late 1800s, and it is still sold commercially in many places, including Ohio. It is closely related to the more familiar common hops used for beer brewing, but Japanese hops is mostly inedible.

A climbing vine, Japanese hops can grow rapidly, up to about 35 feet in a growing season. Its opposite leaves are toothed with about 5-7 palmate lobes. It has distinctive bracts at the base of the leaf petioles, and both the stems and leaves have hooked hairs.



The image above shows the toothed, palmate leaves of Japanese hops. These leaves look very similar to native hops. Photo Chris Evans, University of Illinois, Bugwood.org

Japanese hops is usually an annual but can occasionally be perennial. It has separate male and female plants which both produce greenish flowers. Male flowers are in panicles, while female flowers are in short spikes. Reproduction is mainly by seeds, which germinate in early spring. Seeds are then mainly dispersed in late summer/early fall by wind and water, but also by wildlife, vehicles and equipment.

Japanese hops is typically found along rivers, lakeshores and floodplains, due to rapid spread by water. It grows best in moist soils with little or partial shade, which is why it is often seen in edge habitats and light gaps. It is now found in most states and

provinces in the eastern half of the United States and Canada. In Ohio, it has mostly been reported in counties near cities (Cuyahoga, Summit, Lucas, Franklin, Hamilton) as well as counties in the northeast and along the Ohio River.

This species is considered harmful due to its rapid growth; it can overtop understory trees, and outcompete native plants. Some people are allergic to the pollen, and the hairs on stems and leaves have been reported to cause dermatitis. Japanese hops is considered invasive or is prohibited in many states, including Connecticut, Massachusetts, Wisconsin, New York, Michigan and Missouri. In Minnesota, it is prohibited and landowners are required to remove it under noxious weed laws.



The photo above shows how dense and large a Japanese hops infestation can become. Because it can grow in wet areas and along rivers, it can spread rapidly and over long distances. Photo: Leslie J. Mehroff, University of Connecticut. Bugwood.org

Japanese hops is responsive to several types of management but long-term management may be more difficult. Small populations may be best managed by physically removing the plants. A recent study by Guyon and Cosgriff in the Journal of Forestry recommended the use of glyphosate for short term control. It does not seem to establish long-term seedbanks, with estimated viability at around three years, but extensive water dispersal can quickly lead to re-establishment. It is unlikely that there will be biocontrol options for Japanese hops, because it is so closely related to an agricultural species, common hops.

If you see this invasive on your own property, consider pulling it out earlier rather than later! Also, it's always a good idea to report occurrences using the GLEDN app to help us understand its distribution throughout Ohio.

Emily Rauschert, Cleveland State University & OIPC Board

ARE YOU REMOVING INVASIVE PLANTS AND REPLACING THEM WITH NATIVES?

OIPC is looking for short articles to add to our newsletter about your experience. We want to share your story to help inspire others to redesign their landscape or remove invasives from their surrounding natural area so that they can also experience the value of removing invasives and replacing them with natives. Please contact us through our website if you are interested.



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Visit: [KrogerCommunityRewards.com](https://www.kroger.com/rewards) sign in or create a new account. Select OIPC and click on “enroll.” The codes for OIPC are:
#23916 Cincinnati Region (includes Dayton and Lima)
#47319 Great Lakes / Columbus region (rest of Ohio)



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The Ohio Invasive Plants Council coordinates statewide efforts and direction to address the threats of invasive species to Ohio’s ecosystems and economy by providing leadership and promoting stewardship, education, research, and information exchange.



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