

Ohio Invasive Plants Council

Newsletter • Winter 2019



PRESIDENT'S CORNER

As another year closed, we are thankful for all our partners across the state that support our activities and cooperate to spread the word about invasive plants. We have

had a successful year with three workshops, several presentations for organizations and events, and we worked closely with ODA on the new list of banned invasive plants.

In the coming year, we look forward to our next research conference on February 13th in Columbus. As with previous conferences, we will have a variety of speakers, posters, and the OIPC Annual Meeting (during lunch). Other focuses for this year will be development of a revised 5-year strategic plan and a new OIPC tabletop display. We also hope to add a new section to our website which expands on our alternatives brochure by offering more suggestions for alternatives to invasives when replacing them in your landscaping or habitat restoration.

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 more information on 2019 projects. Many local metro parks, park districts, state, and federal agencies throughout Ohio may also have opportunities for volunteers to help control invasive plants. Each one of us can help to address invasive plant challenges on a local level!

As always, we look forward to working with any of our partners to plan educational efforts. If you have any upcoming events where OIPC may

participate by providing a speaker, please let us know (see our website to contact any of our Board members). If you would like to host an OIPC workshop, please let us know as we try to conduct 2-3 workshops each year.

Help us spread the word about invasive plants and visit our website at www.oipc.info frequently! If you need a plant identified or are looking for more information, contact us through our website and we will respond as soon as possible.

Jennifer L. Windus, OIPC President

2019 OIPC RESEARCH CONFERENCE, FEB 13th "Better Together: Connecting Invasive Plant Management and Research"

OIPC is pleased to announce a Research Conference entitled "Better Together: Connecting Invasive Plant Management and Research", which will take place February 13, 2019 in Columbus at Nationwide and Ohio Farm Bureau 4-H Center. This



conference will share new research on invasive plants, management and impacts. We will also hear rapid updates from natural resource managers about ongoing projects in Ohio, to facilitate interaction among land managers, scientists,

the green industry, and the public concerning the ecology and management of invasive plants in natural ecosystems.

Our keynote speaker, Dr. Karin Kettenring, is an Associate Professor in the Department of Watershed Sciences at Utah State University, and an expert on wetland invasive plants and restoration ecology. She will present, "Wetland plant invaders: mechanisms and management." The conference also includes poster presentations by researchers, land managers, and horticulturalists from both the public and private sectors.

Cost of the conference is \$35 which includes lunch and a light breakfast. Visit the OIPC website for registration and to see the full conference agenda. OIPC Conference Registration

Call for Conference Partners:

OIPC is seeking conference sponsors. More than 250 people, including land managers, researchers, and growers, are anticipated to attend this conference, which will include several other invited speakers, poster presentations and a sponsor exhibit area. Those donating \$100 or more will be listed as sponsors on the program and will have their name or logo projected before and between the presentations. Sponsors at the \$250 level will receive either half of a display table, or be listed as co-sponsor of a coffee break. Sponsors of \$500 can display their information on a full table or be listed as a co-sponsor of the lunch. In addition, sponsors at the \$100 - \$249 level will receive a complimentary registration, sponsors at the \$250 - \$499 level will receive two complimentary registrations, and sponsors at the \$500 level will receive three complimentary registrations. Sponsorship and registration can be completed at www.oipc.info

Please contact Dr. Emily Rauschert, Conference Chair, for sponsorship information: e.rauschert@csuohio.edu, 216-687-3623.

JAPANESE HONEYSUCKLE (Lonicera japonica): A Spreading, Climbing, and Crushing Invasion

Japanese honeysuckle (*Lonicera japonica*) is a prohibited invasive vine that commonly occurs along roadsides, fences, disturbed woods, and edge habitats in nearly every Ohio county. It was reportedly introduced to the United States from East Asia as early as 1806 for use as an ornamental plant. The plant gained in popularity for landscape use because of its abundant, fragrant blooms and rapid growth. Because engineers and land managers recognized the usefulness of this species it was widely planted along roadsides, utility corridors, and managed areas. Vigorous growth, wide habitat adaptability, and prolific seed production made this plant an opportunistic invader of vulnerable habitats throughout the Eastern United States.

Thickets of semi-evergreen honeysuckle vines shade and choke understory plants leading to a loss of native diversity and impaired ecosystem services. Infestations of Japanese honeysuckle diminish plant growth and limit seed germination by outcompeting native communities for space, light, water, and nutrients. Trailing vines grow along the surface of the ground spreading in multiple directions as much as 30 feet each year. Vines root at frequently-occurring nodes. Once rooted, nodes can behave as independent plants sending out runners of their



Trailing vine nodes rooting at the soil surface. Photo Gary Conley

own. Vines also climb and twine around shrubs, trees, and other vines often forming a dense thicket around, within, and over top other vegetation. Climbing vines develop thicker woody stems covered by a shreddy pale brown bark.



Tangled thickets of climbing Japanese honeysuckle vines. Photo Gary Conley

While there are no effective natural enemies or biological agents to control Japanese honeysuckle, there are options for management. One of the most effective approaches to controlling this invasive plant is to prevent its occurrence. Regularly monitoring for rouge invaders can prevent this plant from becoming established or spreading. Property owners and land managers can learn to recognize habitats that are most vulnerable to invasion and supplement the plant diversity with alternative native vine species such as trumpet honeysuckle (Lonicera sempervirens), Virginia creeper (Parthenocissus quinquefolia), crossvine (Bignonia virgin's-bower (Clematis capreolata), and virginiana). Planting native species within vulnerable habitats, decreases the likelihood of invasive species getting a foothold.

Management of infestations can be quite difficult and troublesome. However, eradication is possible with patience and diligence. With more than a decade of managing this species in Ohio, I have achieved success in eradication, control, and prevention. The greatest lesson learned from this experience is that control methodologies for established patches typically require multiple

strategies continued over multiple seasons. Apart from the preventative and cultural measures already suggested, mechanical and chemical options remain the only viable solutions.

Mechanical removal is highly suggested to reduce the potential ecological impacts caused by the physical presence of honeysuckle as well as reducing the amount of chemicals needed for additional control. Vines covering the ground can be removed by pulling, grubbing, or using the rake-and-roll methodology. 1 prefer the rake-and-roll methodology for dense groundcover. Honeysuckle vines are raked into a windrow, exposing the root nodes scattered across the soil surface. Nodes can then be hand-pulled or grubbed as the windrow is advanced across the patch, though many nodes will inevitably remain. Windrows and pulled vines should





Before (above) and after (below) of a 4 year honeysuckle project in Athens County where the rake-and-roll technique was used for control. Photo Gary Conley

be removed or destroyed to prevent re-rooting. Mechanical removal must be followed up by additional efforts which I refer to as "noding". "Noding" is the removal of missed nodes in subsequent seasons by either additional mechanical means or spot-spraying with chemical herbicides until the infestation is eradicated. Treatment of aerial thickets can be more challenging but are manageable. Climbing vines can be pulled down when practical but are more commonly cut near the base and then treated with chemical herbicides and retreated during subsequent seasons to achieve success. Eradication projects that seek to use chemical control methods, should include some research to determine the most effective chemical control depending on site conditions.

Gary Conley, OIPC Board & GreenReach, LLC

CLEMATIS & TRUMPET HONEYSUCKLE: Two Native Alternative Vines

Native Clematis

There is no time better than the present to put on a hat and gloves to resist the winter blues with a brisk walk through your local parks and nature



preserves. It is in the beauty of the winter landscape that you may find yourself captivated by one of our Ohio native clematis species.

There are three native species—the most common virgin's-bower (*Clematis virginiana*), the less prevalent

leather-flower or vasevine (*Clematis viorna*) and the rare, likely extirpated, purple virgin's-bower (*Clematis occidentalis*). All three have similar ornate foliage on semi-woody vines that use their twisting

stems for support and the feathery seed heads that appear from fall through much of winter that can brighten your winter walks.

Lacking petals, it is the spreading white sepals and conspicuous stamens and pistils that are the eyecatching color of the virgin's-bower blooms appearing as one large flush late summer. The leather-flower's thick, purple, nodding bell-shaped



blooms seem to trickle in and out from late springsummer. Both attract insects with their rich nectar and pollen source.

Wondering if clematis will grow in your landscape or naturalized area? Both prefer full sun to partial shade while leather-flower works best in small spaces with medium to moist soils. Virgin's-bower has a wide tolerance of soil moisture and with robust growth it could ramble across the ground as an alternative ground cover or be easily trained up a fence to add interest.

Be aware! The popular sweet autumn clematis (*Clematis terniflora*) is a listed non-native, invasive species in several states across the Southern and Eastern United States. It can be differentiated by its smooth-edged leaf versus the toothed leaf margin of our native virgin's-bower.

Michele Banker, Marianist Environmental Education Center & OIPC Board Secretary

Native Trumpet Honeysuckle

In search of a vine to replace the invasive Japanese honeysuckle? Look no further than its native cousin, trumpet honeysuckle (*Lonicera sempervirens*). This deciduous twining vine is quite vigorous in growth and produces beautiful, trumpet-shaped flowers that are yellow-orange to scarlet in color. Whether you provide a lattice for it to climb or allow it to create an attractive sprawling



groundcover, this striking native is sure to draw in wildlife to your home landscape. Flowering profusely from early to mid-spring, you can expect to attract visitors such as the ruby-throated hummingbird, as well as bees and butterflies. Furthermore, trumpet honeysuckle is a host plant for the spring azure butterfly, and its bright red fruits are a food source for many bird species. This native honeysuckle flowers best in full sun and can easily be grown in well-drained, medium moisture soil. The Dawes Arboretum will have a limited amount of trumpet honeysuckle for sale at its annual Spring Plant Sale on May 18, 2019.

Carrie Brown, The Dawes Arboretum

OIPC Assists Friends of Crowell Hilaka in Summit County

A unique partnership began early in 2017 when OIPC began assisting the Friends of Crowell Hilaka (FoCH) and the Richfield Joint Recreational District (RJRD) evaluate the extent of invasive plants on the Richfield Heritage Preserve (RHP) in Summit County.

Beth Sanderson, Vice President of FoCH, contacted OIPC through our listserve, asking for assistance with invasive plants on their new preserve in Richfield. I contacted Beth directly, visited the preserve with a small group from FoCH and RJRD in 2017, and agreed



to assist them with an evaluation of invasive plant distribution on their 336-acre preserve. Richfield Heritage Preserve is owned by the citizens of Richfield and managed by the RJRD Board. Crowell Hilaka was a former Girl Scout camp for 80 years. Previously the southern portion of the

property was the estate of inventor, James Kirby who purchased the property from the pioneer Oviatt family, who once lived off the land. The Neil family operated a fruit farm on the northern half of the property back in the 1900's. OIPC partnered with Heather Stehle, Executive Director of Crane Hollow, Inc., to form the RHP Invasive Species Task Force, in cooperation with FoCH. This task force includes Eddie Dengg (former OIPC Board member), Dr. Emily Rauschert (Cleveland State University & current OIPC Board member), Dr. Randy Mitchell (University of

Akron), as well as several FoCH Board members. The task force met several times this spring and developed an outline for a RHP Invasive Species Management Plan.



Two objectives of the management plan are to identify high-quality

natural areas in the preserve and map invasive plants in the high-quality natural areas, where the focus will be removal. Since there is an overwhelming amount of invasive plants on the property, the goal of the management plan is to focus on removal of invasive plants in the best areas first, then on the lower quality areas in the northern portion. OIPC partnered with the Ohio Natural Areas & Preserves Association

(ONAPA) and spent several days this summer mapping six (6) high-quality natural areas, mostly located in the southern end of the preserve, and then mapping invasive plants, with their relative abundance, in these 6 areas. This important information will be used to complete the Invasive Species Management Plan for FoCH and RJRD in the next few months. This is a great example of how partnerships can cooperate to accomplish seemingly overwhelming tasks, particularly when the partners depend on volunteers to complete the tedious work of removing invasive plants. OIPC partnered with ONAPA, Crane Hollow, FoCH, and the RJRD for this important effort to control invasive plants on the new public natural area in Summit County.

Jennifer Windus, OIPC President

For more information about the Richfield Heritage Preserve:

Explore Ohio's Hidden Treasure, Richfield Heritage Preserve, formally known as Crowell Hilaka! www.friendsofcrowellhilaka.org

CALLERY PEAR ON THE MOVE INTO FOREST INTERIORS

It is not difficult to catch a sighting of a Callery Pear (Pyrus calleryana) in any urban setting in the Midwest United States. Popularized by horticulturists and nurseries since the early 1900s for its white spring blooms, tolerance of harsh environments, and aesthetically pleasing fire-red leaves in the fall, P. calleryana was a welcome addition to many residential communities. At the time, the trees were unable to spread because they consisted of a single self-incompatible cultivar, the 'Bradford'. More recently, however, P. calleryana has not only obtained an unsavory reputation among the general population for its brittle tree structure, but also for its aggressive tendency to invade open areas, such as fields near roadways. This invasive behavior appeared as hardier cultivars were introduced into the landscape, enabling crossfertilization when different cultivars were planted near one other.

While *P. calleryana* has typically invaded open areas for some time, an unsettling trend is now occurring in which seedlings and young trees have been spotted in increasing frequency in forested areas. These small seedlings and saplings resemble black cherry (*Prunus serotina*) but often have lobed leaves when young and more prominent leaf serrations. Many of these forests are already under pressure from other invasive species and thus *P. calleryana* has the potential to exacerbate the decline of the already damaged sites. Therefore, it is imperative to determine the root causes of this change in invasion behavior of the pear, so effective control methods can be developed.



Callery pear sapling growing in the shaded interior of a forest at the Benedict Nature Preserve near Cincinnati, OH. Photo Theresa Culley.

Thus far in research in the Culley Lab at the University of Cincinnati, I have gathered ecological data (soil moisture, temperature, soil light depth, and intensity) and genetic data from seedlings from two forested areas near Cincinnati. with an overall goal of 4 populations of 40 samples each for a total of 200 samples. Genetic analysis for each of these

populations involves (1) identifying the cultivar parentage of each plant and (2) quantifying the level of genetic variation present in the interior forest populations relative to those in open sites. Our initial thought was that these forest invaders consisted of a certain cultivar cross that was more prone to survive in forest understories. However, my results thus far indicate that wild pears appearing in forest interiors consist of F1 hybrids resulting from crosspollination from a number of different cultivars planted nearby - including 'Aristocrat', 'Bradford', and 'Chanticleer' (which is the same as 'Cleveland Select'). It also appears that the change in the niche of the Callery pear may be related to dispersal of its fruits by birds - specifically American Robins which seek forest interiors, in contrast to the more

common European Starlings which tend to perch on electrical lines along roadways.

In a related project, I also examined the germination and survival of *P. calleryana* seeds. In this study, which will shortly appear in *Castanea*, I found that



Callery pear sapling with young lobed leaves near Cincinnati, OH. Photo Theresa Culley

seeds of *P. calleryana* stored for 11 years continued to have relatively high seed viability (52%, 45%, and 87% for 'Aristocrat,' 'Cleveland Select,' and 'Bradford', respectively) and limited survival (27%, 14%, and 0% for 'Aristocrat,' 'Cleveland Select,' and 'Bradford', respectively). This suggests that seeds may persist in the soil for many years (depending on the cultivar parent), creating an underground seedbank that may further complicate the removal of invasive populations in infested sites. Now that wild Callery pears are spreading into interior forests, it is increasingly important to remove them as quickly as possible to prevent the establishment of a seedbank in those sites.

Tziporah Serota, University of Cincinnati & 2018 OIPC Grant Recipient

ODA INVASIVE PLANT RULES Help Us Spread the Word about These New Rules!

New invasive plant rules went into effect in early January: the Ohio Department of Agriculture (ODA) has declared 38 plant species as invasive - these species cannot be sold, propagated, distributed, or imported in Ohio. ODA has formed an Invasive Plant Advisory Committee to determine how species will be added to this list. Approximately half of the species on the list were on the market, so keep a lookout for these species and be sure to report any violations to ODA, if you see any of them for sale. Of particular note is the European wand loosestrife, which had a one-year phase-out period. This variety, Lythrum virgatum, can no longer be sold after January 2019.

ODA's 11 nursery inspectors are responsible for ensuring these species are no longer for sale, but they can use help from gardeners around the state who may be looking for plants to buy. Particularly look for Asian bush honeysuckles (3 species and their cultivars), Japanese honeysuckle, cattails, flowering rush, oriental bittersweet, and autumn-olive which may still be for sale. Check our website for a full list of the 38 species which can no longer be sold in Ohio. While you are on the lookout, encourage your local nurseries to use alternatives to invasive plants to replace them. Many of these are recommended in the new OIPC alternatives brochure.

Jennifer L. Windus, OIPC President

2 EASY WAYS TO SUPPORT OIPC!



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OIPC is an eligible non-profit in the charitable program

AmazonSmile! Amazon's foundation donates 0.5% of qualifying purchases to an organization you select. Use this address to go directly to the page that benefits OIPC; smile.amazon.com/OIPC or start at smile.amazon.com and you will be prompted to select a charity. There is no cost to you since Amazon makes the donation on your behalf. Save the link and use it every time you shop with Amazon!

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Visit: KrogerCommunityRewards.com

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)

OIPC Thanks You for Your Support!

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