Ohio Invasive Plants Council

Newsletter • Winter 2022

PRESIDENT'S CORNER

Winter is here and it is time to switch to invasive plant control efforts that can be conducted during the dormant season. This is still a good season for controlling woody invasive plants, when plants are moving resources downward to their roots, but best control is achieved when temperatures are above freezing. There are many woody invasive plants impacting our natural areas, such as glossy buckthorn, common buckthorn, Japanese barberry, winged burning-bush, autumn-olive, privet, tree-of-heaven, Callery pear, and Asian bush honeysuckles (to name a few).

We hope to have a new section on our website this winter which expands on our alternatives brochure by offering more suggestions for good alternatives that can be used to replace invasive plants. 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. We are also very close to completing a new, up-to-date OIPC display to be used at events around the state, when we can safely attend them again.

Our virtual 2021 Annual Meeting on October 15th was a great success (see article in this issue). The agenda included presentations by myself, Theresa Culley, Bethany Bradley, and five Rapid Updates regarding invasive plant control efforts. A recording of the Annual Meeting is available on the OIPC website.

We hope to have the 2022 Annual Meeting in-person next spring or fall. We also hope to resume our workshops next year, so let us know if you are interested in hosting one for us. We have 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 somewhere in central Ohio.

As some of you may know, Yahoo discontinued their listserv service late last year. OIPC had an active listserv of over 300 participants. We recently set up another listserv with Google Groups, oipc@googlegroups.com. We welcome people to join this group and make it larger!

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 winter projects. Many local metro parks and park districts, state and federal agencies around the state also have opportunities for volunteers to help control invasive plants. Each of us can help to address invasive plant challenges on a local level, even during the COVID pandemic.

Help spread the word about invasive plants and learn more by visiting our website at www.oipc.info. We added some new materials to the website, including a featured invasive plant, or potentially invasive plant, every few months. If you need a plant identified or are looking for more information on invasive plants, just 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

OIPC Annual Meeting Highlights

Thanks to everyone who helped make the OIPC virtual annual meeting a success! The meeting, hosted on Zoom by Cleveland State University, was held on October 15 from 9-12 and was attended by over 170 invasive plant enthusiasts. Jennifer Windus, OIPC president, discussed OIPC's accomplishments this past year, and Dr. Theresa Culley from the University of Cincinnati gave an update about the OIPC invasive plant assessment process and the current status of prohibited invasive plants in Ohio.

A highlight of the meeting was the rapid updates on invasive plant management from land managers across Ohio. Mark Warman from the Cleveland Metroparks gave an update on efforts to mitigate Hydrilla at Mosquito Creek Reservoir. LaRae Sprow, Metroparks Toledo and OIPC Board member, described how to effectively develop an invasive plant management strategy. Emma Crockett and Holly Latterman from the Dawes Arboretum presented their recent work on woody invasives removal and habitat restoration. Chris Roshon from Preservation Parks Delaware County, explained how persistence can lead to success when managing Callery pear. Finally, Shelby Ashcraft from Five Rivers Metropark shared her insights from a forestry mulching project. After all presentations were finished, there was a panel discussion where participants asked many important questions about these techniques and other invasive management efforts in Ohio. Finally, Dr. Bethany Bradley from the University of Massachusetts, gave a talk entitled, "Breaking Down Barriers to Proactive & Consistent Risk Assessments of Invasive Plants."

A recording of the meeting can still be viewed by registering using the following link:

OIPC Annual Meeting 2021 Recording

The password is #OIPC2021.

Emily Rauschert, OIPC Board Research Chair & Cleveland State University

Plants Proposed To Be Added To ODA Invasive Plant List

In January 2018, the Ohio Department of Agriculture (ODA) released a new list of 38 invasive plants which could no longer be sold, distributed, or propagated in Ohio. Two of them had a phase-out period, European wand loosestrife (effective January 2019) and Callery pear (effective January 2023). In September 2018, OIPC recommended 29 more species to be added to the list, including 18 aquatic plants. The ODA Invasive Plant Advisory Committee meets at least once each year to review proposed additions.

OIPC is pleased to report that ODA has proposed to add 8 more terrestrial species to their list and one name change:

Porcelainberry (*Ampelopsis brevipedunculata*)
Japanese knotweed (*Fallopia japonica*)
Lesser celandine (*Ficaria verna*) – scientific name change
Common privet (*Ligustrum vulgare*)
White mulberry (*Morus alba*)
Princess tree (*Paulownia tomentosa*)
Mile-a-minute (*Persicaria perfoliata*)
Reed canary grass (*Phalaris arundinacea*)*
Siberian elm (*Ulmus pumila*)
*does not apply to plants or seeds sold for animal feed

These are all species OIPC had recommended as additions. We hope you will support these additions and let ODA know that these should all be removed from sale, distribution, and propagation.

On December 15, 2021, the ODA Invasive Plant Advisory Committee approved adding the 18 aquatic plants that we recommended in 2018. This means 26 new species total are proposed to be added this year. We are pleased with this exciting news!

Jennifer L. Windus, OIPC Board President

GLOSSY BUCKTHORN: Confusion over Scientific Names & Cultivars

Glossy buckthorn, *Rhamus frangula* or *Frangula alnus,* is one of the most invasive shrubs or small trees in the Midwest. It is found predominantly in northern Ohio, and is beginning to establish in southern Ohio counties also. It prefers wetlands or wet meadows, becoming particularly invasive in bogs, fens, sedge meadows, and swamps. It prefers open environments but does tolerate shade and will grow aggressively in swamp forests. This woody shrub can mature in two years. It produces flowers and fruits throughout the growing season, establishing an extensive seed bank. Land managers find it challenging to control due to the seed bank and extensive root system. It is extremely harmful to migrating birds because of the laxative effects of the berries.

Glossy buckthorn has gray-brown bark and lightly-colored lenticels giving the bark a speckled appearance. Leaves are 1-3 inches long, shiny dark green above, oval-shaped and slightly wavy. The creamy-green flowers are 5-petaled. The purple-black fruit ripens from July to September. Two

Image showing glossy buckthorn leaves and dark purple-black berries. The plant can reach reproduction maturity in two years. Photo by Jennifer L. Windus.

cultivars of glossy buckthorn are available in nurseries. The fine line fernleaf buckthorn cultivar 'Asplenifolia' has been found in bogs and other peatlands in northeastern Ohio. Another cultivar, tallhedge buckthorn or columnar buckthorn 'Columnarus,' is less common in natural areas but has been documented in marshes, fens, and swamps. Both cultivars grow in columnar shape and are often used for hedges. While I have seen the cultivars for sale in nurseries in Ohio labeled as "non-invasive", this is clearly not true. We are now beginning to seeing them in our natural areas more frequently.

Both glossy and common buckthorn (*Rhamnus cathartica)* were introduced to North America from Eurasia as ornamental shrubs for fence rows and wildlife habitat. Introduction of these buckthorns was based on their hardiness and ability to thrive in a variety of soil and light conditions. These species may be confused with Ohio's native buckthorns:

Image of columnar buckthorn that has established in a natural landscape in Ohio. Photo by Jennifer L. Windus

alder-leaved (*Rhamnus alnifolia*), lance-leaved (*R. lanceolata*), and Carolina buckthorns (*R.caroliniana*), which are uncommon or rare in the state.

Glossy buckthorn was initially listed as invasive by ODA in January 2018 with the scientific name of *Frangula alnus* (the most recent scientific name for the species). It ranks as #12 on the OIPC invasive plant list with a score of 61. OIPC highly supports it being on the ODA list and removed from the nursery market. However, there was confusion over the species and its cultivars. ODA is currently proposing removing it from their invasive plant list due to the popular cultivars on the market. While we understand this confusion, we strongly support that glossy buckthorn and its two cultivars remain on the ODA list due to the serious impacts to natural areas in Ohio. While the species is significantly more invasive and aggressive than the cultivars, we are still reporting both cultivars in natural areas, most likely spreading from landscaped locations.

Currently both cultivars are on the ODA list and should not be sold in Ohio. While this may change, if you see either cultivar on the market, it would be good to report it to ODA and let the nursery know that it is an invasive plant in Ohio and should not be sold. The next time that the comment period is open on the current proposals, we hope you will comment and support that this species should be removed from sale, production, and distribution in Ohio.

Jennifer L. WIndus, OIPC President

What's In A Name?

Most of the plants we love – and those we hate – have multiple names. In some cases, keeping track of those names is fairly easy, as with purple loosestrife (*Lythrum salicaria*). This widespread and well-known invader is known to most people informally by a single, well accepted common name and formally by a single, well accepted scientific name. Scientific names, also called binomial Latin names, consist of a capitalized genus and usually lower-case specific epithet, and are always in italics or underlined.

Common names are what most people call a plant in everyday speech, which can lead to confusion. For example, a single species can have multiple common names, which may even be region-specific. If someone from Georgia mentioned bamboo grass, would you know what plant they were talking about? Here in Ohio, *Microstegium vimineum* is usually called Japanese stiltgrass, but in other places it is primarily called Nepalese browntop, Chinese packing grass, or bamboo grass. Another problem is that the same common name can be used for very different species. Take purple loosestrife for example: even with this fairly simple case, a "field of loosestrife" might describe a field of *Lythrum salicaria* but without any other clarification, it could instead be European wand loosestrife (*Lythrum virgatum*) or any of the native loosestrife species such as wing-angle loosestrife (*Lythrum alatum*), fringed loosestrife (*Lysimachia ciliata*), or swamp loosestrife (*Decodon verticillatus*). Talk about confusing!

Scientific names help reduce this ambiguity. Scientific names also serve another important purpose, which is indicating our current understanding of how different species are related to each other. In our loosestrife example above, all five species are in the loosestrife family (*Lythraceae*) and thus have many similarities and a shared evolutionary past, but the three purple-flowered species in the genus *Lythrum* are more closely related and thus have more similarities than they do to either *L. ciliata* or *D. verticillatus*.

The fact that a scientific name reflects our current understanding about species relationships is also the reason those names change sometimes. Although frustrating for anyone who has struggled to learn scientific names, these changes are necessary for the nomenclature to accurately reflect new information about those relationships. Originally, botanists classified species based on morphology alone, but sometimes plants can look similar and still not be very closely related. Advances in DNA sequencing technology allow these relationships to be examined in more detail, sometimes changing our understanding of those relationships. Because of this, sometimes plants need to be moved into a different genus or family, and sometimes genera are combined because species are more closely related than previously thought. Generally speaking, the first named species in a genus gets to keep that genus name, and other plants that don't belong in the same genus are moved to a different genus.

Such changes have occurred recently with some of our most common Ohio invasives, including the spring ephemeral lesser celandine. This species looks a bit like our native buttercups (genus *Ranunculus*), and until recently its accepted scientific name was *Ranunculus ficaria*. However, recent molecular data suggests lesser celandine is not closely related to other *Ranunculus* species and therefore should be in a separate genus, giving it a new scientific name: *Ficaria verna*.

A final important example is glossy buckthorn, the invasive shrub or small tree that has alternatively been referred to as *Frangula alnus* or *Rhamnus frangula*. Glossy buckthorn's scientific name is currently recognized as *Frangula alnus*, although continued scientific debate about this matter has led to ongoing confusion. Here though, the use of various scientific names for glossy buckthorn is not just confusing – it has also had important regulatory implications for invasive species in Ohio. The Ohio Department of Agriculture's list of prohibited invasive plants (here) includes glossy buckthorn under the scientific name, *F. alnus*. However seemingly because of confusion about the name and that this is indeed glossy buckthorn, the species as a whole has now been slated for removal from the list. This is an unfortunate outcome, because any change to the scientific name is just that – a name change. It reflects evolutionary relationships within that group of species, but it says absolutely nothing about the ecological implications of glossy buckthorn invasions, which remain problematic regardless of whether you call it *R. frangula* or *F. alnus* (see the OIPC assessment results for evidence). It also means cultivars of glossy buckthorn, including Fine Line® (labelled as *R. frangula*), will continue to be sold in Ohio, despite growing concern from local land managers of its spread into natural areas.

So, what can be done? First, recognize some name changes are inevitable and perhaps confusing, but they don't change anything about how species interact within ecological communities. Discrepancies are common, and some sources are slower than others to reflect recent name changes. If you want to check for yourself, go to www.itis.gov and search a name to see if it's the currently accepted one. Second, don't be fooled into planting an invasive species on your property because of name confusion! Read the label carefully, but recognize that in some cases scientific names can be outdated. And finally, if you care about the regulation of invasive species in Ohio, please reach out to the Ohio Department of Agriculture, or your local representative, to ensure that glossy buckthorn is put back on the list of prohibited invasive species.

Steve Hovick, OIPC Board & The Ohio State University and Emily Rauschert, OIPC Board & Cleveland State University

NATIVE PLANTS HIGHLIGHTS: Alternatives To Glossy Buckthorn

We have highlighted the invasiveness of glossy buckthorn in this newsletter; so, what plants would be good alternatives to consider when looking for a shrub or small tree with a similar upright form?

Corylus americana, American Hazelnut, can be a good alternative if you are looking for a large shrub that has multiple upright stems. It is a shrub in the Betulaceae family that can reach six to twelve feet in height. The stems tend to sucker so it must be pruned regularly to keep it within a defined space. It produces somewhat showy, yellowish catkins in the late winter. The flower is not significant, but the edible nut has an interesting irregular papery cover. American Hazelnut tolerates shade and has a good yellow to red fall color. It is an especially good shrub

American hazelnut fruit is attractive for wildlife and edible for humans. Photo by Paul Wray, Iowa State University, Bugwood.org

if you are trying to naturalize a part of your landscape. The nuts are loved by squirrels.

Another shrubby alternative is *Viburnum dentatum* or Arrowwood Viburnum. This shrub can grow six to eight feet tall and has lustrous dark green foliage that turns to yellows and reds in the fall. It has white, flat-topped flower clusters that bloom May to June;

Arrowwood Viburnum dark blue berries are attractive and beneficial for migrating birds. Photo by Dow Gardens, Dow Gardens, Bugwood.org

dark blue berries form September to October. The berries are sought out by birds and can be an important food source during fall migration. The Native Americans used the straight stems for arrow shafts. Arrowwood Viburnum attracts butterflies, native pollinators and birds. Other viburnums that could be considered are *Viburnum nudum*, *Viburnum prunifolium* and *Viburnum lentago*.

If you are looking for a small tree to replace a larger glossy buckthorn *Ostrya virginiana*, also known as

Ostrya virginiana has an attractive papery hop-like fruit. Photo by John Ruter, University of Georgia, Bugwood.org

the American Hop Hornbeam, is a good alternative. This small tree has a pyramidal shape that opens in form as it gets older. It can tolerate full sun or partial shade and grows to be twenty to forty feet in height. It has a yellowish fall color. The "hop" portion of the common name comes from the hop-like shape of the fruit and "hornbeam" originated from the use of the wood to make yokes for teams of oxen. The tree is excellent for use in urban settings and in courtyards. It can grow in most soils but does not tolerate salt or standing water.

Mark Shelton, OIPC Board & Willoway Nurseries, Inc.

Metroparks Toledo Engages Students in Conservation Through Whitmer High School Job Training Program

As a Land Steward at Metroparks Toledo, I get to focus much of my time on engaging and working with the public on volunteer conservation activities. One of the groups that I have enjoyed partnering with since 2015 is the Whitmer High School Job Training Program, which is a program for students that have some disability challenges. Some of the goals of the program are to teach students new and valuable skills, engage them in professional activities, and expose them to potential employment opportunities that they may be interested in after graduation from high school.

The program has been focusing on invasive plant removal and landscaping projects at Wildwood Preserve Metropark each year, except for 2020 due to the pandemic. In the fall and spring, the students

come to the park two days a week for about six weeks. The effort these students put forth is monumental and the results that have been achieved are making noticeable, positive impacts in critical wildlife areas. This fall the students worked on removing a particularly aggressive invasive plant called *Euonymus alatus*, more commonly known as burning bush. It is a very popular landscape plant that has a propensity to escape into our natural areas. Our Natural Resources Department began management on *Euonymus* by using cut stump herbicide and basal bark herbicide treatments on most of the large seed-producing shrubs in our

highest quality habitats. We also have used foliar herbicide treatments on smaller shrubs and saplings, but have discovered that the small plants seem to be very resistant to foliar applications. In areas where the mature plants have established, there are literally hundreds of these baby plants that are difficult to kill using foliar methods. Fortunately, since Wildwood exists in the Oak Openings Region of northwest Ohio, the area has very sandy soils which makes it very easy to pull the smaller plants out of the ground. Although this is quite a labor intensive process, it has proven to be the most effective treatment for eliminating these smaller invasive *Euonymus* plants.

Because this hand pulling process is so labor intensive, we are thrilled to have the help these students provide. Hopefully we are teaching them about conservation as well as learning the benefits of hard work. The many hours these students are spending removing invasive plants is giving our native plants more room to flourish and we are noticing results. I always enjoy working with the students and I see such a change in them from the first week to the last. I hope they enjoy it as much as I do, and I think they do.

Julie Weidner, Metroparks Toledo Land Steward

Invasive Workshop At Appalachian Green Teachers Conference

On October 29, 2021, Ohio Invasive Plants Council Vice President, Gary Conley presented a 3-hour invasive species workshop to 16 participants at the Appalachian Green Teachers Conference hosted by Rural Action and Camp Oty'Okwa. The conference was held at the Burr Oak Lodge and Conference Center at Burr Oak State Park in Morgan County, Ohio. The conference was attended by 60 or more educators, naturalists, and others engaged in environmental education throughout Ohio. Mr.


Photo by Joe Brehm, Rural Action Inc.

Conley's presentation focused on hands-on identification of regionally aggressive invasive plants with over 60 specimens collected from the area. Topics related to the ecological impacts and management strategies concerning these invasive plants were discussed in an open forum style as well as opportunities for citizen science that can be shared through environmental education. The

presentation was well-received and the OIPC was mentioned several times to the main conference audience. Nearly 100 OIPC brochures were given out during this event.

Gary Conley, OIPC Board Vice President & GreenReach Native Plant and Seed Nursery

Green Ribbon Initiative Invasive Mapping Workshop

Green Ribbon Initiative (GRI) partners (The Nature Conservancy and Metroparks Toledo) and OIPC held an in-person training workshop at Metroparks Toledo and a virtual workshop to recruit citizen scientists to help with locating and recording 15 invasive species that are not yet well established in the Oak Openings Region of northwest Ohio and southeast Michigan. An invasive plant assessment protocol developed by GRI (influenced highly by the OIPC Invasive Assessment Protocol) was used to help identify 15 priority invasive species for focused mapping efforts. These efforts will inform land managers in the Oak Openings Region about where invasive populations exist so that rapid response management techniques can be used to target high-threat species and hopefully prevent them from extensive establishment. 25 participants attended the Sept 18, 2021 in-person training which started with an indoor presentation on invasive species identification with cut samples on hand for review. The participants were given instruction on how to download and use the Midwest Invasive Species Information Network (MISIN) app. Following the indoor instruction, the participants went outdoors to find some of the targeted species such as oriental bittersweet, porcelainberry, and winged burning bush. The MISIN app was demonstrated to record the individual species populations that were found. On Sept 20, 2021, 25 more people attended a virtual workshop. This workshop was geared toward those that already had some invasive species identification experience. It focused primarily on the 15 species to target and on how to use the MISIN app and website for reporting. The information collected will be utilized on a model that has been created to help inform GRI partners of the most likely areas where these species could be found.

LaRae Sprow, OIPC Board & Metroparks Toledo

Emily Main, Metroparks Toledo, presents training on invasive plant identification to 25 workshop participants. Photo by LaRae Sprow.

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.

2 EASY WAYS TO SUPPORT OIPC!

Kroger Community Rewards

Use your Kroger Plus card to help OIPC grow. For your continued support you must enroll annually so be sure to check if your enrollment has expired.

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)

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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!

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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