

Ohio Invasive Plants Council

Newsletter • Spring 2020



PRESIDENT'S CORNER

Spring began with many challenges we could not have anticipated. Our world has changed with schools closed, working from home, restaurants closed, travel

restricted, social distancing, and sheltering at home. The coronavirus outbreak has brought many restrictions which will likely last for months. This has impacted our opportunities to attend events, meetings, and engage in typical social activities including many of the group outdoor activities that we enjoy. Our health is of utmost importance so we must find other ways to interact, enjoy the outdoors, and be safe from this respiratory virus. Once the crisis lessens, we can return to our invasive plant control efforts in larger groups, educational efforts, and larger events. In the meantime, you can still control invasive plants individually or in small groups, hold online and conference call meetings, and spend time outdoors getting rejuvenated.

OIPC held its 2020 Annual Meeting on Friday, February 21st at the Blacklick Woods Metro Park golf course on the east side of Columbus. It was well-attended with almost 100 people and a great group of 7 speakers and 12 sponsors. See our newsletter article for more information and photos from this event.

The OIPC Board is in the final stages of completing its revised 5-year strategic plan for 2020-2024. Refer to a newsletter article in this issue for more information about its contents. Soon our website will expand upon our brochure for replacing invasive plants with desirable alternatives in your landscape or habitat restoration project. We are also working on a new up-to-date OIPC table top display to be used at events.

There are many 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 2020 projects. These projects will be limited to small groups of less than 10 people during the coronavirus situation. Many local metro parks and park districts, state and federal agencies around the state may also have opportunities for volunteers to help control invasive plants. Each of us can address invasive plant challenges on a local level, even during the coronavirus situation.

As always, we look forward to working with any of our partners to plan educational efforts. If you have 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. We may have to cut back on workshops this year for the spring-summer season.

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. 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. Happy spring and stay healthy!

Jennifer L. Windus, OIPC President

OIPC's ANNUAL MEETING ANOTHER BIG SUCCESS!



OIPC held its 2020 Annual Meeting on Friday, February 21st at a new facility at the golf course at Blacklick Woods Metro Park called Eagleview Lodge. It is a beautiful facility with windows on three sides overlooking the golf course. It was somewhat challenging for the speakers using PowerPoint as the room was bright on a sunny day, but we improvised and it worked well. Our long-term partner, Columbus & Franklin County Metro Parks provided the space for our meeting at no charge for which we are extremely appreciative. Close to 100 people attended the meeting.

We are also grateful for 12 sponsors who supported the meeting, including the Stream & Wet lands Foundation, The Nature Conservancy, Davey Group, Resource The Wild Ones, The Parks, Conservationist, Five Rivers Metro Metroparks Toledo, Cleveland Museum of Natural History, Listerman & Associates, Geauga County Master Gardeners, Friends of Crowell-Hilaka, and Bluestem Farm. Some of these sponsors brought



displays to the meeting. Generous partners like these provide critical support to OIPC and will help to fund our activities in 2020.

The meeting had 7 excellent speakers, including Theresa Culley, Eugene Braig, Mark Warman, Sarah Workman, Tziporah Serota, and Olivia Espinoza (see our website for the full agenda and more photos



from the meeting). We also presented the OIPC 2019 Award of Distinction to Dr. David Brandenburg from The Dawes Arboretum (see another article in this

issue about his accomplishments). We were pleased so many people attended this meeting, many of whom were new to our events.

Jennifer Windus, OIPC President

OIPC's AWARD OF DISTINCTION FOR 2019: DAVID BRANDENBURG

Each year since 2013, the Ohio Invasive Plants Council has recognized someone in the state who has been outstanding in the field of invasive plant identification, control, research, education, cooperation with OIPC, contributions to OIPC, or other noteworthy advancement of invasive plant issues in Ohio. For 2019, the Board decided to recognize and thank David Brandenburg who has worked with rare, invasive, and horticultural plants for more than 40 years as a taxonomic botanist in Ohio.

David's long career began studying plants with some of the most distinguished and influential botanists throughout North America. David worked for the ODNR Division of Natural Areas and Preserves as a seasonal botanist, has written numerous articles, contributed to the Flora of North America, published a very thorough *Field Guide to Wildflowers of North America* in 2010, and served as curator of the herbarium at the Brooklyn Botanic Garden in New York. His impressive field guide, all 673 pages, involved travelling thousands of miles all over North

America. He has given hundreds of presentations, guided field trips, and led amazing hands-on workshops on invasive plants and other groups of plants, all organized in detailed taxonomic fashion. He has been instrumental in the development of the OIPC Assessment Protocol and currently serves on



Jennifer Windus (OIPC President) and Shana Byrd (OIPC Vice President) present David Brandenburg with the 2019 OIPC Award of Distinction. *Photo by Karen Seidel*.

the OIPC Assessment Team. He also participated in the development of the relatively new OIPC brochure on invasive plants and their alternatives. He has helped present at several OIPC workshops and conducted many programs at The Dawes Arboretum, where he has worked since December 1990. OIPC is indebted to David for his many hours of contribution on the OIPC Assessment Team, using his unique expertise to help us to determine which plants are truly invasive in Ohio's natural areas. His knowledge and insight have also contributed to an effort in the Midwest leading botanic gardens and arboreta to begin removing potentially invasive plants from their collections, setting an example and raising awareness for the public.

OIPC AWARDS RESEARCH GRANT

OIPC congratulates this year's OIPC research grant recipients, Michaela J. Woods, Daniel L. Clark Jr., Grace Dietsch and Ryan W. McEwan (Miami University). The project involves collecting information about soil, plant, and site disturbance

characteristics in areas where Callery pear has successfully invaded prairie restorations in Montgomery County and to better understand how environmental characteristics influence invasion success. The goal is to develop predictive models to inform management decisions. We greatly appreciate the work of all applicants, who took the time to write proposals about invasive plant concerns in Ohio.

We also thank previous recipients Sarah Workman (2018 recipient, Wright State University) and Tziporah Serota (2017, University of Cincinnati) for their excellent talks at the OIPC Annual Meeting. Sarah's presentation, prepared in collaboration with Dr. John Stireman, was entitled "Colonization of Invasive Amur Honeysuckle (*Lonicera maackii*) by Native Caterpillar Communities in Southwest Ohio." Tziporah, who works with Dr. Theresa Culley, gave a talk entitled "Callery Pear Implications of Seed Germination and Seedling Survival." Look for more updates about previous projects at the next OIPC Annual Meeting!

We encourage students, academics, and land managers to apply for the 2020 grant cycle, which will be due in late fall. We especially encourage applications for projects that focus on OIPC's research questions (www.oipc.info/research) or focus directly on invasive plant management.

Emily Rauschert, OIPC Board and Cleveland State University

OIPC 2020-2024 STRATEGIC PLAN

The OIPC Board of Directors and its Board Advisory Committee continue to work on our next 5-year Strategic Plan for 2020-2024. At our recent Board meeting on March 4th, we discussed a few minor revisions after some feedback from Board members and the Advisory Committee, so we are in the final revision stage. The mission statement remains essentially the same and our three main goals are:

1) Cooperative Policy Development – to develop and maintain plant lists regarding invasive plants and their alternatives, and to promote actions to discourage future introductions of new invasive plants in Ohio.

- **2)** Research and Education to promote awareness of invasive plant issues, facilitate research and information exchange on invasive plants, serve as an educational, advisory, and technical support resource, and provide educational workshops, programs, and materials on invasive plants.
- **3)** Organizational Advancement and Statewide Coordination expand the Council's influence using financial stability, outreach, and increased participation to continue to be a sustainable, strong leader in statewide invasive plant issues.

Each goal has several action items designed to implement and accomplish these goals over the next 5 years, with cooperative partnerships across the state. We expect to finalize the strategic plan in the next few weeks and have it posted on our website.

Jennifer Windus, OIPC President

AMUR CORKTREE A NEW INVASIVE TREE IN OHIO

Amur corktree tree (*Phellodendron amurense*), is a member of the citrus family with compound leaves. It was introduced from eastern Asia into the United States around 1856 and has recently been reported to be demonstrating invasive characteristics. It has documented ability to invade native forest communities and displace many of the



native hardwood species, taking over edge habitats in large thickets or groves. Reports of its invasiveness have been received by most Midwestern state invasive plant associations. It was evaluated by the OIPC Assessment Team in 2018 and received a score of 45, which classifies it as invasive in Ohio. It has been escaping from planted locations, particularly the collections of arboreta in Ohio, such as The Dawes Arboretum.

Amur corktree was introduced for the landscape industry because of its attractive shape, bark and foliage. It has a very distinctive thick outer corky bark with a bright yellow inner bark. This bark is an



The intense bright yellow inner bark of Amur corktree is a very distinguishing feature. This population was removed from Richfield Heritage Preserve in Summit County. *Photo by Jennifer Windus*

important herbal medicine in China and Japan, used as a painkiller and antibiotic. It typically grows 30-45' tall with a short trunk and low horizontal branching. Often as it ages, the lowest branches will touch the ground. Its yellow-bronze fall foliage also makes it attractive as a yard tree. The crushed foliage and fruit smell like turpentine or citrus. Few known pests and easy transplant success has made Amur corktree a more recent popular choice for nurserymen and landscapers to produce and use in urban settings. Since the loss of ash (*Fraxinus*) due to Emerald Ash Borer, Midwest nurseries are trying new varieties of trees to diversify their product line. One of the newer plants to be incorporated into production plans for

urban areas has been the Amur corktree, which now has been clearly documented as invasive once it spreads beyond landscaped areas and into woodlands.

The Amur corktree is dioecious, which means it has separate male and female trees. A male tree produces pollen, while a female tree produces fruit.



Dark purple fruit from female Amur corktree. *Photo by Jennifer Windus*

For this reason, the nursery industry has moved to producing male cultivars such as Phellodendron amurense 'Macho' to limit any fruiting. Female trees produce a significant amount of dark berries (drupes), which can be challenging to clean up from the ground and may be skin irritants for some people. This, of course, does not prevent the male trees from pollinating escaped female trees. Therefore it is not recommended to plant Amur corktrees in your home landscape or native woodland area. We now know this is an invasive tree that should be discontinued from sale and promotion by the nursery industry as soon as possible. This is one to be on the lookout for as it is easily overlooked in woodlands where it can be mistaken for ash or walnut when just looking at the leaves. Its fruit, rugged bark, and inner bark color are very distinctive and they often occur in large groups. Happy searching, then destroy!

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

THE MIGHTY OAK

The oak tree is a symbol of strength, knowledge and longevity in cultures around the world. Globally, there are more than 600 species of oaks trees with over 90 species native to the US. Ohio has 12 species of native oak trees. The official tree of the United States is the oak. Native oak trees can be found at most local nurseries and there is an oak species suitable for nearly every soil type and growing condition.



From tiny acorns grow mighty oaks and there are also hundreds of wildlife species that oak trees support. If you were going to grow one tree to support wildlife, there is no tree better than an oak. More than one hundred vertebrates including squirrel, white-tailed deer, blue jays, rabbits, wood ducks, foxes, black bear, turkey, chipmunks rely heavily on acorns for food. Many species also rely on oaks for shelter, nesting and for hibernation cavities. Oak trees host more than 500 species of caterpillars (Lepidoptera). These caterpillars are then an important food source for birds. Oaks are also the home of dozens of gall-forming insects. The most common are wasps in the Cynipidae family. These insects stimulate irregular tissue growth on leaves or twigs. Insect eggs or larvae inhabit the interior of the gall for protection from predators. Galls on leaves are only a cosmetic problem and rarely will kill a tree. Twig galls are more harmful and in a landscape setting should be pruned. All pruning of oak trees

should occur during dormant months to prevent the spread of the oak wilt fungus. This is especially true in areas where oak wilt it a known problem.









Galls come in many shapes and sizes. Oak trees host dozens of insect species that create interesting galls.

Upper Left: Oak Apple Gall.

Photo by Steven Katovich, Bugwood.org. 5424270.

Upper Right: Horned Gall on the stem of an oak tree. *Photo by Lorraine Graney, Bartlett Tree Experts, Bugwood.org.* 5458400.

Lower Left: A fuzzy Wool Sower Gall.

Photo by Eric R. Day, Virginia Polytechnic Institute and State

University, Bugwood.org. UGA1122022

Lower Right: Gall Wasp on underneath of leaf. *Photo by Steven Katovisc, Bugwood.org. UGA5202056*

Oak trees are divided into 2 families: red oak and The red oak family has leaves with pointed lobes, while the white oak leaves have rounded lobes. Another fascinating tidbit about oaks is that the acorns from the white oak are very sweet and they germinate in the fall to avoid being eaten by wildlife. Red oak acorns have a high concentration of tannins which makes them unpalatable in the fall. They require winter snows and rains to leach the tannins from the acorns which are then a favorite food for wildlife in late winter or early spring. Red oak acorns germinate in the springtime. Because acorns are a highly valued food source for wildlife, on average only 1 in 10,000 acorns will become a mature tree, however an average oak tree will produce over 10 million acorns during its long lifetime.



Acorns are often eaten by acorn weevils. When you see a small hole in an acorn that is the evidence of the weevil. There is some research that indicates that although acorn weevils are native, lack of natural fire regimes may be increasing weevil populations and thus a factor in the decrease in oak saplings.

Photo by David Lee, Bugwood.org.5433067

Oak trees are also closely tied to some culinary favorites. For bourbon and whiskey connoisseurs, all of the barrels used in the distilling process are made from white oaks. The caramel color in bourbon and whiskey comes from the charred barrels as the bourbon and whiskey age. Bourbon barrels can only be used once. Through a marketing cooperative, these barrels are then reused by distilleries to age other spirits and wines. If you happen to be looking for truffles, look no further than oak trees unless you go to the grocery store. Farming truffles in a traditional agricultural sense is not possible. Truffle farmers plant trees such as oaks and the truffles then grow on the oak roots. The strong relationship between truffles and oaks is a well-kept secret between the oak tree and the truffle which cannot be duplicated.

Many people believe that oaks are slow growing. However they are considered to be moderate to even fast growing. The belief that they are slow growing stems from the fact that they are long-lived, easily living to 300 years or more. Many oaks don't bare acorns until they are at least 50 years old. The oldest oak trees in Ohio are a group of white oak trees in Sugarcreek MetroPark, Bellbrook, OH. The trees are known as the "Three Sisters" and are more than 500 years old. The oldest is thought to be 580

years old. One of the three trees came down in a storm in 2008, but she still lies on her side by her other two sisters.



Prescription fires are a critical restoration process necessary to maintain oak dominated forests. Periodic fires increase the sunlight needed for oak germination and fire reduces encroachment of species such as maple. Here, Metroparks Toledo is doing a prescribed burn to maintain an oak woodland in the globally rare Oak Openings Region of Northwest Ohio. *Photo courtesy of Metropaks Toledo*.

Despite all of the great attributes of oak trees, the sad fact is oak populations are decreasing. Over 70 species in the world are listed as endangered. In the US, large portions of oak ecosystems have been destroyed due to urban development, agriculture and unsustainable logging operations. Also ecological changes such as fire suppression, growing mammal populations with increased acorn consumption and sapling browse, and introduced pests and diseases are degrading oak-dominated forests. So, the next time you see a squirrel, thank him or her for doing their part of planting the next generation of mighty oak trees.

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

LaRae Sprow, OIPC Board & Metroparks Toledo

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!

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

#47319 Great Lakes / Columbus region (rest of Ohio)

OIPC Thanks You for Your Support!

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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