



Ohio Invasive Plants Council

Newsletter August 2014

PRESIDENT'S CORNER:

On June 5, 2014, Governor Kasich signed SB 192, which grants the Director of Agriculture exclusive authority to regulate invasive plant species in Ohio. The previous month the Ohio Senate concurred with the version of the bill as amended by the House (see the May 2014 OIPC newsletter for this final text of SB 192). The next step is for rules to be drafted that would implement this law. It is our understanding that the Plant Health Division of the Ohio Department of Agriculture will be the lead office for drafting the rules as well as implementation and enforcement. OIPC plans to participate fully in this rule-making process, as it is the final rules that will determine the real impact of SB 192. Of particular importance is the process by which non-native plants will be assessed to determine whether they are or are not 'invasive.' OIPC has already developed the Ohio Invasive Plant Assessment Protocol, and this year a second set of plants is being evaluated by the Assessment Team under the leadership of **Dr. Theresa Culley**. Since the OIPC Assessment is a science-based, objective protocol that was developed in light of best practices in other states, we think it should be considered as a model for state rules under SB 192. If you are an OIPC member who is interested in contributing to the rule-making process, please contact me.



Dave Gorchov

I would like to thank Crane Hollow Preserve and the Dawes Arboretum for their recent donations, continuing their support of OIPC. If your group or organization is interested in supporting OIPC, please contact me.

I also want to thank OIPC Board member **Judy Holtvogt** for her ongoing efforts in improving and updating our website, www.oipc.info. This website now includes the outcomes of the 2013 assessments of non-native plant species by the Ohio Invasive Plant Assessment Team, including the score sheet for each species, and the references providing the evidence to support the scoring. The website also lists the Schedule of Plants to be Assessed, in addition to links on best management practices and upcoming events and activities. We will be recognizing financial supporters on our improved website, including logos and links to the supporting organizations.

I am pleased to welcome our newest Board member, **Adam McClanahan**. Adam is a field representative for a large, Oregon-based, bare-root nursery, and has been involved in consulting and plant procurement for projects including Oak Hill Park in Wooster and the rebuilding of the Secret Arboretum at Ohio State. As one of two Board members representing the green industry, he is a Certified Ohio Nurseryman and a member of the Grower's Committee of the Ohio Nursery and Landscape Association.

I encourage OIPC members to submit nominations for our Award of Distinction, to be awarded at our next Annual Meeting in February, 2015. See the item on page 5 in this newsletter describing this award and the nomination process.

David L. Gorchov, Miami University, President, OIPC

EVALUATING INVASIVE SHRUB COVER DURING FLOODPLAIN RESTORATION AT THE WILDS CONSERVATION CENTER

Although *The Wilds* conservation center is a flourishing 10,000 acre wildlife preserve today, the

legacy of surface mining is still evident as we look at the landscape. Many of the species that were planted during the process of reclamation were non-native invasive species meant to provide soil erosion control and vegetative cover. While the goal of protecting water from sediment was largely met, the consequence was the spread of the notoriously invasive shrub, autumn olive (*Elaeagnus umbellata*) and other invasive weeds. Over time, this shrub has impacted the preserve's grasslands, forests, wetland and riparian habitats, reducing biodiversity and function of these systems. Given the loss of our region's wetland, stream and riparian corridors, *The Wilds* has volunteered to host a stream and riparian restoration project that will preserve these habitats within one of our main watersheds. Nearly 19,000 feet of stream and 82 acres of connected riparian buffer are being improved, with habitats including bottomland hardwood forest, shrubland, forest and seasonal wetlands.

Before enhancements began, the Restoration Ecology program researchers established a series of studies to establish pre-restoration conditions, including the presence of invasive woody shrubs. Understanding this will give insight to the process of recovery and conversion to native riparian habitat. The initial results showed that two habitats, forest and shrubland, were host to the majority of the woody invasive species present, whereas significantly less invasive shrubs were located in the seasonal wetland or floodplains. Areas within the stream buffer had woody invasive coverage ranging from 0 to 85%, which is likely attributed to varying degrees of soil saturation and the species tolerance to wet conditions. One implication for restoration planning is that the ability to seasonally inundate areas invaded by woody species could provide a measure of control. However, the practical application of that management technique is quite limited! The primary method of removal involves mechanical clearing with a hydraulic forestry mower, followed by foliar herbicide application for small re-sprouts. Students in *The Wilds* Scholar Intern program conducted an initial follow up vegetation survey and saw a dramatic decrease in the amount of invasive shrub cover and low incidence of re-sprouts. The next phase of

evaluation will include an assessment of low concentrations of glyphosate to achieve full control. Along with evaluating vegetation, we will continue to monitor additional environmental conditions throughout the process of restoration to ensure that these ecosystems increasingly become a healthy habitat corridor for years to come.
Shana Byrd, OIPC Board Secretary and Director of Restoration Ecology, The Wilds



The areas sampled for woody invasive shrubs at *the Wilds* by Apprentices **Win Fox** and **Andy Bowden** and Intern **Ben Evick** during a stream restoration project. Fill colors signify ranges of percent woody invasive coverage, and outlines signify habitat type.



The Wilds; area after invasive removal

SUCCESSFUL OIPC WORKSHOP AT HOCKING HILLS STATE PARK IN MAY

The Ohio Invasive Plants Council partnered with Crane Hollow, Inc., Columbus & Franklin County Metro Parks, and ODNR Divisions of Parks & Recreation and Natural Areas & Preserves to hold

an invasive plants workshop at Hocking Hills State Park on Wednesday, May 21st. The morning session featured 4 speakers: **Jennifer Windus** of ONDR, Division of Wildlife (invasive plants of the Hocking Hills region), **Carrie Morrow** of Columbus & Franklin County Metro Parks (habitat restoration after invasive plant removal), **Kathy Smith** of OSU Extension (tracking invasive plants with a phone app), and **Jeff Johnson** of ONDR, Div. of Parks and Recreation (control options for invasive plants). The workshop was attended by more than 30 people. Refreshments were provided by Crane Hollow, Inc. Lunch was included at the Hocking Hills State Park dining lodge. After lunch, field trips were held at Crane Hollow Nature Preserve and Cantwell Cliffs, part of Hocking Hills State Park. The workshop was well-received, with a lot of interest in control and restoration techniques. OIPC hopes to hold another similar workshop this fall in a different part of the state.

Jennifer Windus, OIPC Vice President & Ohio Division of Wildlife (retired)

Mary Klunk, OIPC Board Member & Five Rivers Metro Parks

MIDDLE SCHOOL STUDENTS' ECOLOGICAL PROJECT

Dempsey Middle School in Delaware, OH, offered a unique opportunity to students this summer on forest and wetland ecology, with an emphasis on the problem of alien invasive species. Instructor **Paul Olen** organized this pilot program, sought and received a grant from the Wild School Site grant program of ODNr Division of Wildlife for tools, safety equipment and field guides. He recruited guest speakers to instruct individual classes and/or lead field trips. The effects of garlic mustard and bush honeysuckle on forest ecology and health were discussed and demonstrated as well as how invasive species affect native wildlife.

The guest speakers for the summer project were: **Laurie Anderson**, Ohio Wesleyan University; **Chris Roshon**, Preservation Parks of Delaware County; **Joanne Rebbeck**, U.S. Forest Service Research Station; **Dona Rhea**, Delaware Soil and Water

Conservation Service; **Jennifer Windus**, ODNr Division of Wildlife; and **Todd Hutchinson**, U.S. Forest Service Experiment Station.



Paul Olen and students

Paul taught the students identification skills and talked about the edible and medicinal properties of plants during their ventures into the woods on the Dempsey campus. They learned and applied honeysuckle removal techniques using the honeysuckle popper, saws and loppers. The students excitedly shared discoveries of deer, insects and mushrooms. Samples of insects and mushrooms were taken back to the classroom along with a variety of plant samples for identification using the many reference books and microscopes.



Dempsey students doing field work with Paul Olen

The program was offered in two four week sessions for three days a week. Each session had six students and an assistant. The students of the first session enjoyed it so much that they signed up again. This was a great way for informal summer learning to enhance their knowledge of the out-of-doors, improve their science skills and get physical with invasives.

Nora Hiland, OIPC Board member

WHITE-TAILED DEER DISPERSE SEEDS OF BUSH HONEYSUCKLE

The population density of White-tailed deer is significantly higher than historical levels in much of Ohio, the Midwest and eastern U.S. Some effects of these super-abundant deer herds are well known to natural area managers and nature lovers, including reduced abundance of native tree seedlings and spring wildflowers. But recent research is showing that deer also disperse viable seeds of several invasive plants. Amur honeysuckle (*Lonicera maackii*), the most invasive of the bush honeysuckles in western and central Ohio, was known to be dispersed by American Robins, European Starlings, and a few other bird species, thanks to research several years ago by my grad student, **Anne Bartuszevige**. But after reading a study out of Cornell that found deer fecal pellets contained seeds of other species of bush honeysuckle, as well as 40 other invasive plant species, I wondered whether Ohio deer were dispersing Amur honeysuckle. My grad student **Steve Castellano** provided honeysuckle fruit to some captive deer, returned to collect the fecal pellets, and found intact honeysuckle seeds, of which 68% were still alive. This motivated a subsequent grad student, **Pete Guiden**, to focus on deer dispersal of honeysuckle for his Masters thesis. At a site near our Oxford, Ohio campus, where honeysuckle and deer are abundant, Pete found that deer browse on branches of honeysuckle in the late fall, when they bear ripe fruits, with a slight tendency to prefer branches with fruits over those where he had removed the fruits. Pete also found that honeysuckle seedlings germinated from 31% of deer fecal pellet groups collected in December and January. Pete estimated how far deer disperse honeysuckle seeds by combining late fall hourly location data for deer collared with GPS receivers (provided by Clay Nielsen, and Eric Schaubert of Southern Illinois University) with gut passage time data from the deer diet literature. Based on these data, Pete projected that the greatest proportion of seeds would be defecated about 300 meters (1000 feet) from where the deer ate the honeysuckle fruits, but about 7% of seeds would be dispersed

more than one kilometer, with 7.9 kilometers being the maximum dispersal distance. These estimates are for does, as the Southern Illinois dataset included only one buck. That buck, however, ranged more widely than the does, and was projected to disperse seeds further on average. Pete also tested whether honeysuckle seedlings germinated from deer pellets from an area where honeysuckle has only recently arrived, and is still very sparse, in northern Darke County. No honeysuckle germinated from those pellets, so we can't say deer (rather than birds) are responsible for the advancing fronts of honeysuckle invasion. But in landscapes with honeysuckle, deer can move seeds around, from sites where this invasive shrub is common to sites where it is absent or has been eradicated. One more reason to consider management of deer herds along with invasive plants.

Some other ways that deer and invasive plants interact in deciduous forest will be topics covered in a special session at October's Natural Areas Conference in Dayton.

David L. Gorchoy, Miami University, President, OIPC



Seedlings of Amur honeysuckle germinating from deer fecal pellets

Photo by Pete Guiden, Miami University

OPPORTUNITIES TO BECOME INVOLVED WITH OHIO INVASIVE PLANTS COUNCIL

CALL FOR NOMINATIONS for AWARD OF DISTINCTION, 2014

The Ohio Invasive Plants Council solicits nominations for the Award of Distinction that we will award at our Annual Meeting in February, 2015. The Award is intended to recognize a person who has made extraordinary contributions to education, management, control, or research related to the problem of invasive plant species in the state of Ohio. Individuals of any profession or affiliation are eligible, including individuals in the public employees, private, and non-profit sectors. Organizations and groups are also eligible for nomination, but only if an individual within that group is identified as the appropriate person to receive the Award on behalf of the group.

This Award is intended not only to bring deserved recognition to individuals and groups that have made, or are making, valuable contributions to the awareness, understanding, or control of invasive plants, but also to bring attention to the activities of that individual or group, so that these activities are more broadly adopted or emulated, or that others are inspired by them to make contributions of their own.

Nominations should be sent to me by e-mail or post, by November 1, 2014. You can use the form which will be posted on our website, www.oipc.info, or simply send me the contact information for the nominee and your description of why you think the nominee is deserving of the Award of Distinction. Include, as relevant, specific actions and contributions, groups or other entities benefited, dates and locations, key collaborators. Contact me if you have any questions regarding the Award or nomination process.

David L. Gorchov, President, OIPC Board, GorchoDL@miamioh.edu Dept. of Biology, Miami University, Oxford, OH 45056

SUPPORT and SUSTAIN

At this time OIPC has no formal membership fee structure, but donations are always welcome. Your contribution will help support our outreach efforts, as well as enable us to research sources with

valuable information needed to assess species using our Invasive Plant Assessment Protocol. Groups or organizations contributing \$100 or more in the current year will be recognized on a Financial Supporters page on our website, with your logo and a link to your group's webpage.

Your donation is tax-deductible because OIPC is a 501(c)3 organization. Checks can be made out to OIPC and sent to OIPC Treasurer **Keith Manbeck**, Box 38, New Knoxville, OH 45871. Let him know if you need a receipt for tax purposes.

RESEARCH GRANT PROPOSALS DUE NOVEMBER 1, 2014

Proposals for student research grants are due November 1, 2014. Proposals on any invasive plant topic will be accepted, but the Research Work Group is especially interested in proposals that address questions that have been developed by the assessment team in their quest to assess invasive plants in Ohio, or help provide some information that could influence management decisions. See the OIPC web site at www.oipc.info for additional information.

CONTRIBUTE to OIPC every time you shop at Kroger

OIPC has joined the Kroger Community Rewards program. This means that Kroger makes a quarterly donation to OIPC in proportion to our members' expenditures at their stores. To participate, use your existing Kroger Plus Card or get a new card at any Kroger store. With your card number at hand, either create an account or sign in to your existing account at www.kroger.com/communityrewards. To designate OIPC as the recipient organization, enter NPO number 23916, or select Ohio Invasive Plants Council from the list of organizations. After you confirm that OIPC appears on the right side of your information page, every swipe of your card will generate some revenue for OIPC to use for education, outreach, and assessment! Thanks!