

2021 MEETING SCHEDULE OVERVIEW

Monday April 19

9:00 am – 9:10 am	Welcoming Comments and Introduction of Keynote Speaker
9:10 am – 10:10 am	Keynote Presentation
10:10 am – 10:30 am	Break
10:30 am to 1:00 pm	Workshops

Wednesday April 21

1:00 pm – 3:00 pm	Symposia
3:00 pm – 3:20 pm	Break
3:20 pm – 5:20 pm	Concurrent Oral Presentation Sessions

Friday April 23

9:00 am – 11:00 am	Symposia
11:00 am – 11:20 am	Break
11:20 am – 12:40 pm	Concurrent Oral Presentation Sessions

Tuesday April 27

1:00 pm – 2:00 pm	Concurrent Oral Presentation Sessions
2:00 pm – 2:20 pm	Break
2:20 pm – 4:00 pm	Poster Session and Sponsor Exhibits

Thursday April 29

9:00 am – 10:30 am	Concluding Plenary Session
10:30 am – 10:50 am	Break
10:50 am – 11:20 am	Awards Ceremony and Business Meeting
11:20 am – 11:50 am	2022 Chapter Meeting Announcement and Field Trip Preview
11:50 am – 12:00 pm	Concluding Remarks

All times are eastern daylight time

KEYNOTE PRESENTATION – MONDAY APRIL 19, 2021

Jennifer L. Windus

Ohio Natural Areas & Preserves Association

Ohio Invasive Plants Council

INSPIRING CONSERVATION AND RESTORATION: BRIDGING THE GAP WITH NON-PROFIT AND GOVERNMENT PARTNERS

Abstract: Achieving conservation and restoration for rare species and high-quality natural areas in Ohio has been particularly challenging in the past 20 years. With budget cuts in state natural resources agencies, it is more critical than ever for non-profit organizations to partner with numerous stakeholders. The Ohio Invasive Plants Council represents many statewide partners including metro parks, academia, state and federal government, non-profits, the nursery industry, and interested public. Since 2005, OIPC has brought these diverse groups together to improve awareness of invasive plants and their effects on ecosystems, as well as develop a scientifically-based invasive plant list. The Ohio Natural Areas & Preserves Association was formed in 2012 in an effort to save the ODNR Division of Natural Areas & Preserves after severe budget cuts. Since then, the organization has built a significant member and volunteer base to assist with stewardship on natural areas throughout the state. This presentation will focus on positive examples of non-profits working with government agencies to accomplish conservation projects related to land protection, rare species recovery, natural areas management, and invasive plant awareness. Through these partnerships, we can go beyond the ecological benefits of restoration to promote and inspire hope for the future of our natural landscapes.

Biography: Jennifer Windus is retired from the Ohio Department of Natural Resources, having worked for the Division of Natural Areas & Preserves (DNAP) for 18 years and the Division of Wildlife (DOW) for 13 years. She established and coordinated DNAP's Research & Monitoring Program which involved monitoring and restoration of rare plants and plant communities, coordination of research on nature preserves, and oversight of preserve management in Ohio. She also coordinated land management, prescribed fire, and invasive plant management for the DOW. Since she retired in June 2014, she has been involved with four non-profit organizations including OIPC and ONAPA, as well as the Ohio Prescribed Fire Council and Crane Hollow, Inc. All four non-profits involve building partnerships and working with volunteers statewide in Ohio. She received a B.S. in Forest Biology from SUNY College of Environmental Science & Forestry in 1981 and a M.S. in Environmental Biology from Ohio State University in 1993.



WORKSHOPS – MONDAY APRIL 19, 2021

A Field Perspective of Integrating Data Review Into Ecological Restoration: a Workshop on Best Practices for Conducting Data Review During Restoration Monitoring

Time: 10:30 am to 1:00 pm

Instructors: Palmer, Craig, Rob Sutter, and Cynthia Collier. CSRA, a GDIT Company, Alexandria, Virginia. CP Email: craig.j.palmer@gdit.com; RS Email: robert.sutter@gdit.com; CC Email: cynthia.collier@gdit.com

Data review checks are an essential component to any monitoring program to provide assurance that the data conforms with a project's data quality acceptance criteria. Reliable data are needed for ecological restoration projects to accurately assess ecosystem conditions, track progress toward restoration goals, determine the effectiveness of restoration practices, make sound decisions, and provide evidence of restoration success. Field practitioners have an essential role in ensuring data quality, from collection and review of data sheets to the compiled database. We will share an approach and best practices to integrate data review into the monitoring of restoration projects. The session will focus on internal data reviews for assessing, documenting, improving, and ensuring the quality of field-collected observational ecological data. Participants will be invited to engage in creative exercises demonstrating the concepts and applications of data review procedures and will gain an understanding of data review best practices relevant to restoration project monitoring. A compendium of the presentations, exercises, and recommended resources will be made available to all participants. Guidance presented in this workshop is based on the results of interagency collaboration and published resources, including the recently released U.S. EPA document *Application of Quality Assurance and Quality Control Principles to Ecological Restoration Project Monitoring*. Funding for this session is provided by the U.S. EPA Great Lakes National Program Office and the Great Lakes Restoration Initiative.

Landing a Job: Résumés, Cover Letters, and Interviews for Students and Early Professionals

Time: 10:30 am to 1:00 pm

Instructors: May, Chris¹, Todd Aschenbach², and Jessica Miller³. ¹The Nature Conservancy, Lansing, Michigan; ²Grand Valley State University, Allendale, Michigan; ³Environmental Consulting and Technology, Inc., Northfield, Ohio. CM Email: cmay@tnc.org; TA Email: aschenbt@gvsu.edu; JM Email: jhickey11@gmail.com

A résumé, cover letter, and job interview are opportunities for a student or early professional to make a strong first impression with a potential employer, highlighting communication skills, experience, and qualities that will benefit the employer. However, job applicants may not put the time and effort into application materials that need to stand out to a hiring manager reviewing dozens of applications for a single position. Through a combination of brief presentations, a question and answer period, and opportunities for participants to get individualized feedback on résumé and cover letter materials, we will provide guidance on important details to include in your résumé and cover letter, common mistakes to avoid, and advice on making a strong first impression during a job interview. The workshop instructors are established professionals who have decades of experience reviewing application materials and hiring and managing staff.

SYMPOSIA – APRIL 21, 2021

An Unexpected Opportunity: Managing for Habitat on Rights-of-way and Energy and Transportation Lands

Organizers Caldwell, Iris and Caroline Hernandez. University of Illinois-Chicago,, Illinois, Chicago. IC Email: iriscald@uic.edu; CH Email: cah272@uic.edu

Presenters and Panelists: Caldwell, Iris. University of Illinois-Chicago, Chicago, Illinois. Joel Hunt. Ohio Department of Transportation, Columbus, Ohio. Timothy Lohner. American Electric Power, Columbus, Ohio. Michael Retterer, Pheasants Forever, Columbus, Ohio. Roy Van Houten. Davey Tree Expert Company, Bethesda, Maryland.

The Rights-of-Way as Habitat Working Group engages more than 400 organizations in the United States and Canada from across the energy and transportation sectors, conservation community, agricultural industry, academia, and federal and state governments to promote habitat on energy and transportation rights-of-way (ROW) and related lands. Given the extensive network of roads, railroads, and utility corridors that crisscross the country, ROWs present an especially valuable opportunity to restore early successional habitat and connect favorable landscapes, but to also provide islands of beneficial vegetation for pollinators and other wildlife amidst intensive agriculture and landscaped suburbia. The symposium will explore the often unexpected or overlooked ecological conservation and habitat restoration opportunities on working lands such as ROWs, highlighting a number collaborative achievements from the Rights-of-Way as Habitat Working Group as well as several unique perspectives and case studies from Working Group participants that are actively using energy and transportation lands to restore native habitat.

Time	Presenters	Title
1:00 – 1:05 pm	Caldwell, Iris	Symposium Introduction
1:05 – 1:25 pm	Caldwell, Iris	Rights-of-way as Habitat Working Group: collaborative approaches to promoting habitat on energy and transportation lands
1:25 – 1:45 pm	Van Houten, Roy	Including integrated habitat management in the right-of-way integrated vegetation management process for corporate and ecological win-wins
1:45 – 2:05 pm	Lohner, Tim	American Electric Power electric utility right-of-way regional seed mix pilot projects
2:05 – 2:25 pm	Hunt, Joel	Utilizing highway rights-of-way to restore ecological resources
2:25 – 3:00 pm		Question and answer session

SYMPOSIA – APRIL 21, 2021

Fore to Forest for Fins and Feathers: A Primer on Restoring Former Golf Courses

Organizer: Grieser, Jennifer. Cleveland Metroparks, Cleveland, Ohio. Email: jmg2@clevelandmetroparks.com

Presenters: Dietsch, Grace. Five Rivers MetroParks, Dayton, Ohio. Jennifer Grieser. Cleveland Metroparks, Cleveland, Ohio. Mike Johnson. Summit Metro Parks, Akron, Ohio. Paul Pira. Gauga Park District, Chardon, Ohio.

Due to waning membership and participation more golf courses are closing every year than new courses are opening. Increasingly these courses are purchased specifically to preserve green space and prevent development. Often these parcels are the last undeveloped green space in a community and offer significant opportunity to provide more equitable access to natural areas. In this symposium, several land managers representing different park districts will describe their work to overhaul past impacts of golf courses and maximize ecosystem services through restoration while educating and informing the public throughout the process. The overall goal of the symposium is to share different approaches to restoration at three different golf courses in Ohio. These examples will touch on a variety of restoration tools and methods to establish meadows, reforest fairways, combat invasive species, restore streams, and create wetlands. Symposium presenters will also discuss monitoring and surveys methods used to evaluate progress and determine adaptive management needs.

Time	Presenters	Title
1:00 – 1:15 pm	Grieser, Jennifer	Overview of golf course restorations in the Midwest
1:15 – 1:40 pm	Pira, Paul	Orchard Hills and Veteran’s Legacy Woods Restoration: lessons learned and new opportunities
1:40 – 2:05 pm	Johnson, Mike	Valley View Restoration – 100 Years in the making.
2:05 – 2:30 pm	Dietsch, Grace	Larch Tree Golf Course and its contribution to the Great Miami Mitigation Bank Conservation Area
2:30 – 3:00 pm		Panel discussion and question and answer session

CONCURRENT ORAL PRESENTATION SESSIONS - APRIL 21, 2021

Restoration in Practice. 3:20 pm – 5:20 pm. Moderator: **Insert Moderator**

3:20 – 3:40	Zinnen, Jack* , M. Daab, & J.W. Matthews	The strategic importance of seed production areas for ecological restoration: a case in east-central Illinois
3:40 – 4:00	Barak, Rebecca & Z. Ma	Understanding prairie restoration managers' seed mix design process
4:00 – 4:20	Koppen, Josh. & Diana Sette	Introduction to permaculture and how it can support ecological restoration
4:20 – 4:40	Grieser, Kevin A. & S. Hoehne	Managed succession as a restoration strategy
4:40 – 5:00	Sutter, Robert , C.J. Palmer, C. Collier, & L.J. Blume	Learning from errors: ensuring quality data from the field
5:00 – 5:20	Fox, Matthew	Inspecting restoration equipment from a contractors' view: how I learned to love cleaning my own equipment

Forest and Savanna Restoration. 3:20 – 5:20 pm. Moderator: **Insert Moderator**

3:20 – 3:40	Bassett, Tyler , L.A. Brudvig, R. Grundel, & N.B. Pavlovic	A regional scale assessment of oak savanna restoration: the impacts of prescribed fire and thinning on ground layer diversity and composition in the southern Great Lakes Basin
3:40 – 4:00	Sakas, Alexis L.	Oak Openings innovation
4:00 – 4:20	Flower, Charles E. , C.C. Pinchot, S. Matthews, & A. Fotis	Survival and growth of planted seedlings in degraded urban riparian forests in central Ohio
4:20 – 4:40	Wagner, Alexa* & K. Stuble	Understory dynamics in response to forest management
4:40 – 5:00	Trimbath, R.J & Jacqueline B. Courteau	Using trillium (<i>Trillium grandiflorum</i>) populations to monitor deer impacts and track management effectiveness
5:00 – 5:20	Carrino-Kyker, Sarah R. , K. Stuble, E.M. Galloway, & D.J. Burke	Soil microbial amendments influence re-establishment of native wildflowers in forests with a history of agricultural land use

CONCURRENT ORAL PRESENTATION SESSIONS - APRIL 21, 2021

Wetland Restoration. 3:20 – 4:40 pm Moderator: **Insert Moderator**

3:20 – 3:40	Kriska, David J. & B. Piazza	Coastal wetland restoration at Ohio's largest <i>Phragmites</i> marsh-the Mentor Marsh State Nature Preserve
3:40 – 4:00	Michaels, Helen J. & E. Forstater	Environmental factors associated with growth and invasion of flowering rush (<i>Butomus umbellatus</i>) in Lake Erie diked wetlands
4:00 – 4:20	Snowden, Greg	A tale of two cattails: reduction in cover of two non-native invasive plant species at a central-Ohio wetland mitigation bank
4:40– 5:00	Charles, Brian M.* , J.W. Matthews, G. Pociask, & M.H. Chase	Can functional leaf traits be used for monitoring wetland restoration? A comparison between common monitoring measures and functional leaf traits

SYMPOSIA – APRIL 23, 2021

Future Challenges for Ecological Restoration in the Midwest

Organizers: Lenhart, Christian¹ and Peter C. Smiley Jr.² Building on lessons from the past to forge a new future. ¹University of Minnesota, St. Paul, Minnesota. ²USDA Agricultural Research Service, Columbus, Ohio. CL email: lenh0010@umn.edu; PS email: rocky.smiley@ars.usda.gov

Presenters: Lenhart, Christian. University of Minnesota, St. Paul, Minnesota. Dan Shaw. Minnesota Board of Water and Soil Resources, St. Paul, Minnesota. John Shuey. The Nature Conservancy Indiana Field Office, Indianapolis, Indiana. Peter C. Smiley Jr. USDA Agricultural Research Service, Columbus, Ohio.

The success of ecological restoration projects in the Midwestern United States depends on anticipation of future environmental conditions under which the target ecosystems structure and function will develop under. Climate change, invasive species, and agricultural land use are environmental challenges that affect restoration efforts across the entire region and understanding their impacts is critical for ensuring the success of current and future restoration efforts. Our symposium will be based on selected content published in our recent book *Ecological Restoration in the Midwest – Past, Present, and Future*. Our objective is to highlight for symposium attendees the issues related to climate change, invasive species, and agricultural land use for ecological restoration in the Midwestern United States. Our symposium will consist of three presentations that will discuss these three pressing environmental challenges and their implications for ecological restoration in the Midwest. Each presentation will either provide examples of how current restoration efforts of forest, wetland, and stream ecosystems are being designed to address these issues and/or strategies that can be used to design restoration efforts that account for the effects of climate change, invasive species, and increasing agricultural land use, which often have correlated effects on the flora and fauna. Specifically, the symposia presenters will discuss: 1) how climate change and altered disturbance regimes influence restoration goals; 2) the management of invasive species and strategies for developing a regional vision for future invasive species prioritization and control; and 3) how incorporating ecological restoration into watershed management and the use of the treatment train theoretical framework can lead to the development of holistic watershed restoration strategies. Additionally, we will attempt to highlight for symposia attendees the interconnected nature of the impacts of climate change, invasive species, and agricultural land use and how the restoration projects can attempt to account for the combined effects of these critical environmental challenges.

Time	Presenters	Title
9:00 – 9:05 am	Lenhart, Christian	Introduction to symposium
9:05 – 9:35 am	Shuey, John	The use of ecological restoration to address climate change related stressors
9:35 – 10:05 am	Shaw, Dan	Invasive species management – the role of partnerships in finding a common vision for Midwestern landscapes
10:05 – 10:35 am	Lenhart, Christian & Peter C. Smiley Jr.	Incorporation of ecological restoration into agricultural watershed management
10:35 – 11:00 am		Question and answer session

SYMPOSIA – APRIL 23, 2021

The Essential Roles of Invertebrates in the Midwest

Organizers: Shuman, Tyler C. and Deanne E. Jensen. Purdue University Fort Wayne, Fort Wayne, Indiana. Email: TC email: shumtc01@pfw.edu; DJ email: zeppde01@pfw.edu

Presenters: Frischie, Stephanie. The Xerces Society for Invertebrate Conservation, Portland, Oregon. Deanne E. Jensen. Purdue University Fort Wayne, Fort Wayne, Indiana. Jacob R. Pecenka. Purdue University, West Lafayette, Indiana. Tyler C. Shuman. Purdue University Fort Wayne, Fort Wayne, Indiana. MaLisa Spring, The Ohio State University, Columbus, Ohio. Chris O. Yoder. Midwest Biodiversity Institute, Columbus, Ohio.

Although the critical ecological functions of invertebrates are undoubtedly widely acknowledged by practitioners of ecological restoration, professional dialogues regarding the consideration and use of invertebrates in restoration projects appear to be lacking. Additionally, bridging the divide between professional knowledge and community awareness can benefit restoration projects and enhance local communities. The Midwest encompasses a myriad of aquatic and terrestrial ecosystems ranging from prairies to streams to the Great Lakes. As a result of their ubiquitous presence in Midwest ecosystems invertebrates represent a diverse resource for improving and assessing ecosystem health, and allowing ample opportunities for public engagement through community outreach and education and citizen science. The goal of this symposium is to highlight the ecological importance of invertebrates and their indispensable roles in ecological restoration to foster greater recognition of the importance of invertebrates as a biotic resource.

Time	Presenters	Title
9:00 – 9:05 am	Jensen, Deanne E. & Tyler C. Shuman	Symposium Introduction
9:05 – 9:25 am	Yoder, Chris O.	The role and use of macroinvertebrates in river and stream bioassessment
9:25 – 9:45 am	Jensen, Deanne E. and Tyler C. Shuman	Interpreting the effects of restoration and conservation practices on macroinvertebrates in channelized headwater streams of agriculturally dominated landscapes
9:45 – 10:05 am	Pecenka, Jacob R.	Adopting integrated pest management in Midwestern agroecosystems to conserve pollinators
10:05 – 10:25 am	Frischie, Stephanie	Invertebrate conservation, advocacy, outreach and habitat restoration work of the Xerces Society
10:25 – 10:45 am	Lemon, James	The Ohio Dragonfly Survey: citizen science, 21 st century technologies, people, bugs, and numbers
10:45 – 11:00 am		Question and answer session

CONCURRENT ORAL PRESENTATION SESSIONS - APRIL 23, 2021

Tallgrass Prairie Restoration. 11:20 am – 12:20 pm . Moderator: **Insert Moderator**

11:20 – 11:40	Docherty, Kathryn M. , J.E. Evans, & Z.J. Whitacre	Prebiotic and probiotic approaches to shifting soil microbial communities in new prairie restorations
11:40 – 12:00	Whitacre, Zachary J.* , C.Blake, J.LM. Gutknect, & K.M. Docherty	Using microbially-focused restoration practices to decrease CO2 emissions in reclaimed prairies
12:00 – 12:20	Brokaw, Julia* , Z. Portman, & D. Cariveau	Impacts of prescribed burns on the nesting communities of ground-nesting bees in tallgrass prairies

Renewing the Spirit. 11:20 am – 12:40 pm. Moderator: **Insert Moderator**

11:20 – 11:40	Courteau, Jacqueline B.	Nature journaling to (re)connect to nature and restore the spirit
11:40 – 12:00	May, Christopher A. & M.R. Liberati	Exploring unifying quality of life benefits from restoration of agricultural, urban, and coastal landscapes in Michigan
12:00 – 12:20	Hiser, Elizabeth & Kevin Grieser	Start with schools: stream restoration & STEM –a perfect match
12:20 – 12:40	Christensen, Tory, Sean Wickhem, & Travis Moe	Bringing ecological restoration to the city: hay, pollinators, and youth outreach

Restoration of Ecosystem Services. 11:20 am – 12:20 pm. Moderator: **Insert Moderator**

11:20 -11:40	Bender, Laura* & C. Lenhart	Dissolved phosphorus dynamics within the agricultural landscape
11:40 – 12:00	Lenhart, Christian F. , N. Alsadi, & B. Gordon	Design and management of treatment wetlands for phosphorus removal via plant harvest
12:00 – 12:20	Zaiger, Katherine L.	Rain garden revival: urban bioretention operations & maintenance from a restoration perspective

*Student presentations are denoted with an * following the name of the presenter*

CONCURRENT ORAL PRESENTATION SESSIONS - APRIL 27, 2021

Forest Restoration. 1:00 pm – 2:00 pm. Moderator: **Insert Moderator**

1:00 – 1:20	Knight, Kathleen S., Charles E. Flower, C. Pinchot, C. Marks, J. Slavicek, P. Schaberg, G. Swanson, K. Lehtoma, N. Hayes-Plazolles, T. Fox, C. Voise, & D. Lesser	Breeding disease-tolerant trees to restore the American elm
1:20 – 1:40	Knight, Kathleen S., C.E. Flower, T. Hutchinson, A. Royo, R. Long², R. Kappler, B. Hoven, M. Higham, K. Costilow, T. Fox, K. Lehtoma, J. Zick, E. Melnik, & J. Wigal	Long-term monitoring of impacts of emerald ash borer to inform forest restoration and management
1:40 – 2:00	Kappler, Rachel H., C. Blashka, D. Burke, E. Hall, C. Pike, & J. Koch	Great Lakes Basin Forest Health Collaborative: what its all about.

Landscape Restoration. 1:00 pm – 2:00 pm Moderator: **Insert Moderator**

1:00 – 1:20	Feggestad, Aaron	Deer Grove Forest Preserve (northeast Illinois) landscape-scale ecosystem restoration
1:20 – 1:40	Tungesvick, Kevin M.	Plant community mapping and terrestrial vascular plant inventory of Griffy Lake Nature Preserve, Bloomington, Indiana
1:40 – 2:00	Power, Simon C.,J. Bakker, & G.M. Davies	To be doomed or not to be doomed –can restoration efforts support ecosystem resilience in the sagebrush-steppe?

Stream Restoration. 1:00 pm – 2:00 pm. Moderator: **Insert Moderator**

1:00 – 1:20	Quiram, Gina & W.A. Johnson	Promoting successful stream restoration in the Midwest Great Lakes
1:20 – 1:40	Hoehne, Suzanne & K. Greiser	Should a stream channel really be there? The idea of stage 0 restoration
1:40 – 2:00	Smiley Jr., Peter C. & K.E. Scott	Snake community responses to planting grass filter strips adjacent to channelized agricultural headwater streams

*Student presentations are denoted with an * following the name of the presenter*

POSTER SESSION – APRIL 27, 2021

2:20 pm – 4:00 pm

Poster#	Presenters	Title
1	Byrd, S. L., Livia Raulinaitis , & H. Latteman	Renewing the spirit of restoration through the environmental professionals training program
2	Palmer, Craig J. , L. Walters, R. Sutter, C. Collier, E. Benjamin, & L.J. Blume	Quality assurance best practices for ecological restoration data review
3	Simons, Jenn K.* & J.A. Harrington	Five years of bison: the effects of grazing at Nachusa Grasslands
4	Rushing, Naomi S.*	Latitude of seed source impacts fitness and flowering phenology in translocated plant populations
5	Reuschling, Madeline F.* & M. Davies	The effect of fuel moisture content on flammability of goldenrod
6	Michaels, Helen J. , R. Walsh, & M. Day	Nectar resource quality of Oak Savanna pollinator habitats
7	DeJong, Leanna N.* , E.M. Toman, & S. Matthews.	Impacts of amur honeysuckle (<i>Lonicera maackii</i>) removal on avian assemblage composition
8	Trosset, Carol	The value of an acre of restored suburban woodland
9	Dickinson, C.S., Elisha R. Bly* , & Kathryn M. Flinn	Eighty-six years of compositional and structural change in an old-growth forest
10	Block, Jeremy A.* , G.M Davies, R. Williams, B. Wenner, S. Power, & W. Novais Pereira	PyroGoat: evaluating the restoration benefits of prescribed burning and conservation grazing by goats on the understory and mid-story in highly degraded eastern oak forest
11	Novais, Wanderson* , G.M. Davies, J. Block, S. Power, & B. Wenner	Prescribed burning and conservation grazing to restore an Oak Forest: management costs and benefit
12	Harbol, Samuel* , K. Mueller, & K. Stuble	Effects of forest management on tree growth in a post-agricultural, secondary forest in northeast Ohio
13	Schiafo, Rory B.* , A. Wagner, & K. Stuble	Land-use history drives understory plant community composition in post-agricultural forest
14	Jones, Rebekah A.* , S.M. Moledor, T.A. Ruggles, C.A. Davis, & C.B. Blackwood	Boosting tree survivorship: Reclaiming mined land in Northeast Ohio

Student presentations are denoted with an * following the name of the presenter

Poster Presentations Continued

Poster#	Presenters	Title
15	Huddas, S.A., John P. Deslippe , & J. B. Sonnenburg	Brandenburg Park Shoreline Restoration
16	McCarthy, Ryan L.* , J. Ballas, A. Keesling, I. Knowles, K. Mattingly, D. Tomashefski.	Vanguards of restoration: tracking first year survivorship and growth of native tree and shrubs planted after <i>Lonicera maackii</i> and <i>Pyrus calleryana</i> removal.
17	Gaffney, Katie* , J. Ballas, A. Keesling, K. Mattingly, R. McCarthy, D. Tomashefski, L. Rance, & G. Gutierrez	Herbaceous community benefits from removal of woody invasive species
18	Mitchell, Randall J. & J.M. Hartman.	Restoration of a remnant peatland in northeastern Ohio - the Bath Tamarack Bog
19	Davis, Charles D* & G.M. Davies	Modeling potential fire behavior in Atlantic European heathlands and moorlands in response to varying fuel management strategies

*Student presentations are denoted with an * following the name of the presenter*

CONCLUDING PLENARY SESSION – APRIL 29, 2021

ENSURING THE HEALTH OF OHIO'S GREATEST NATURAL RESOURCE – ECOLOGICAL RESTORATION OF LAKE ERIE

Lake Erie is the oldest, warmest, shallowest, and smallest (by water volume) of the five Great Lakes and its adjacent land use is predominately urban and agriculture. This unique Great Lake is considered Ohio's greatest natural resource due to its ecological, cultural, and economic importance. Lake Erie is famous for its death in the 1960s and its subsequent rebirth in the 1970s. Eutrophication and algae blooms resulting from agricultural pollution again threaten the health of Lake Erie. Our objective for this plenary session is to highlight the current science and practice related to the restoration of Lake Erie and how the integration of science and practice can ensure its future sustainability.

9:00 – 9:05 am: May, Christopher A.* ***Introduction***. The Nature Conservancy, Lansing, Michigan. Email: cmay@tnc.org

9:05 – 9:35 am: Bridgeman, Thomas*. ***Lake Erie Insights: Impairment and Restoration***. Lake Erie Center, University of Toledo, Toledo, Ohio. Email: Thomas.Bridgeman@utoledo.edu

Lake Erie is the most biologically productive of the Great Lakes, earning it the title of "Walleye Capital of the World". However, the same nutrients, phosphorus and nitrogen, that are responsible for Lake Erie's excellent fisheries can lead to Harmful Algal Blooms (HABs) when they occur in excessive concentrations. HABs caused by cyanobacteria have increased over the past few decades, producing toxins that threaten shoreline drinking water systems and unsightly green scum that deters fishing and recreation. My presentation will discuss current research into many aspects of HABs, from causes such as agricultural practices and increasing rain events to effects of HABs such as public health risks.

9:35 – 10:05 am: Brennan, Amy*. ***Restoring Lake Erie – One Drop at a Time***. The Nature Conservancy in Ohio, Cleveland, Ohio. Email: abrennan@tnc.org

Restoring Lake Erie is a daunting challenge, but what does it mean and how do we begin? Lake Erie has had her share of trials and tribulations, from burning rivers to being declared dead in the 1960s to our current harmful algae blooms and hypoxic zone. Today a wide range of partners are working together to restore Lake Erie through the implementation of improved agricultural practices, elimination of combined sewer overflows, and restoration of wetlands, floodplains and rivers. My presentation will highlight restoration activities, the science driving these decisions, and the activities we still need to complete to restore our Great Lake!

10:05 – 10:30 am: ***Panel Discussion***. Both speakers will take questions from the audience and further discuss their views related to science and practice of the restoration of Lake Erie.