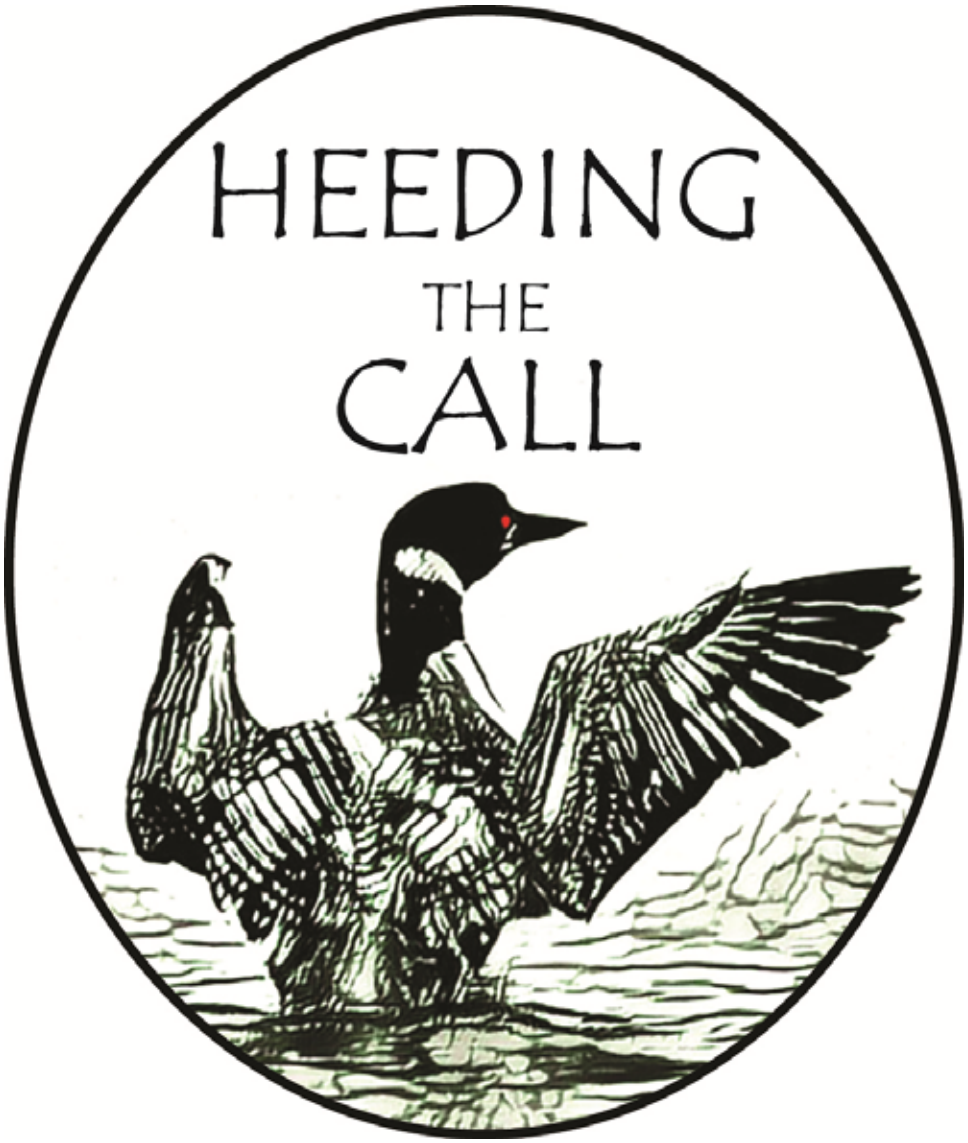

MEETING PROGRAM

TENTH SER MIDWEST-GREAT LAKES CHAPTER MEETING

April 20 to April 22, 2018

Stevens Point, Wisconsin

SER MIDWEST GREAT LAKES SOCIETY FOR ECOLOGICAL RESTORATION

College of Natural Resources
University of Wisconsin-Stevens Point

UW Extension LAKES

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WELCOME

Welcome to Stevens Point and the Tenth Annual Meeting of the Society for Ecological Restoration's Midwest-Great Lakes Chapter. Our meeting goal is to explore how to promote the call to expand restoration efforts and partnerships beyond the typical site scale to larger spatial scales encompassing multiple ecosystem types. Our scientific agenda for this three day meeting features a plenary presentation, two symposia, four workshops, 19 contributed poster presentations, 36 contributed oral presentations, three offsite field trips, and two volunteer work days on a range of topics that reflect our meeting theme and goal. This year's meeting is being held in conjunction with the 40th Annual Wisconsin Lakes Partnership Convention and Water Action Volunteer Symposium. As a result our scientific agenda includes a keynote presentation and 37 contributed oral presentations from the Wisconsin Lakes Convention. Our Meeting Hosts (University of Wisconsin-Stevens Point's (UWSP) College of Natural Resources and Extension Lakes) will offer a special plenary session that will provide an overview of the applied nature of the UWSP College of Natural Resources' Forestry program and how it engages students in ecological restoration in Wisconsin. Additionally, this is the third year we are able to offer meeting attendees continuing education credits. We hope you will enjoy another outstanding chapter meeting.

2018 ANNUAL MEETING COMMITTEE

The Chapter extends its sincere appreciation to the members of the Annual Meeting Committee for their time and effort in coordinating and developing the Tenth Annual Chapter Meeting: *Rocky Smiley (Chairperson), Todd Aschenbach, Mary Damm, Mathew Dornbush, Steve Glass, Chris May, and Jessica Miller.*

ACKNOWLEDGEMENTS

We are very grateful for the generous support provided by our meeting hosts and sponsors that enabled us to hold a sponsorship reception, support student participation, defray food costs, and make our Annual Meeting as environmentally friendly as possible. We greatly appreciate the contributions of the members of the Local Planning Committee *(Eric Olsen (Chairperson), Kim Becken, James Cook, Michael Demchik, Maud LaMarche)* who assisted with planning the meeting and provided onsite help. We thank Maud LaMarche for her help with setting up the online registration page. We thank Martha Holzheuer for her work in enabling us to offer continuing education credits through SER, the Society of American Foresters, and the International Society of Arboriculture and Lara Roketenetz for reviewing the registrations and confirming membership status. We also thank Island Press, SER, Steve Glass, Mike Lemke, Chris Lenhart, and Keith Summerville for their donations in support of our student grant program. We are also thankful for the participation of the meeting presenters, moderators, tour leaders, field trip leaders, volunteers, and attendees at our Tenth Annual Meeting.

SPONSORSHIP RECEPTION

Enjoy drinks and snacks while examining poster presentations, viewing sponsorship exhibits, and socializing with colleagues.

MEETING HOSTS

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WISCONSIN WETLANDS ASSOCIATION

2018 MEETING SCHEDULE OVERVIEW

Friday April 20	
7:30 am - 6:30 pm	Registration (Spruce)
8:00 am - 10:15 am	Wisconsin Lakes Partnership Convention Concurrent Oral Presentation Sessions (Sands/Frontier, Expo 1, Harvest/Trillium, Evergreen, Stonefield/Woodland, Expo 2)
10:15 am - 10:45 am	Break
10:45 am - 11:45 am	Wisconsin Lakes Partnership Convention Concurrent Oral Presentation Sessions (Sands/Frontier, Expo 1, Harvest/Trillium, Evergreen, Stonefield/Woodland, Expo 2)
11:45 am - 1:15 pm	Water Action Volunteer Awards Ceremony, Lunch, and Keynote Presentation (Northwoods Expo)
1:30 pm - 3:30 pm	SER MWGL Symposia (Expo 1, Expo 2)
1:30 pm - 4:00 pm	Wisconsin Lakes Partnership Convention Concurrent Oral Presentation Sessions (Harvest/Trillium, Evergreen)
3:40 pm - 5:20 pm	SER MWGL Concurrent Oral Presentation Sessions (Expo 1, Expo 2, Sands/Frontier, Stonefield/Woodland)
5:30 pm - 7:30 pm	SER MWGL Poster Session & Sponsorship Reception (East Common Hall)

Saturday April 21	
7:00 am - 11:00 am	Registration (Spruce)
8:00 am – 5:30 pm	Posters and Sponsorship Exhibits (East Common Hall)
8:00 am - 10:00 am	Workshops (Expo 1, Expo 2, Sands/Frontier, Evergreen)
10:00 am - 10:20 am	Break
10:20 am - 12:10 pm	Meeting Host Plenary Session (Expo 3a/b)
12:10 pm - 1:50 pm	Lunch, Business Meeting, and Awards Ceremony (Expo 3a/b)
2:00 pm - 3:00 pm	Plenary Presentation (Expo 3a/b)
3:00 pm - 3:30 pm	Break
3:30 pm - 5:30 pm	SER MWGL Concurrent Oral Presentation Sessions (Expo 1, Expo 2, Sands/Frontier, Evergreen)

Sunday April 22	
8:00 am - 3:00 pm	Emmons Creek Savanna Restoration Field Trip
8:30 am - 12:30 pm	Moses and Lost Creek Wetland Restorations Field Trip
9:00 am - 12:00 pm	Tomorrow River Fish Habitat Restoration Field Trip
9:00 am - 12:00 pm	Schmeeckle Reserve Restoration Project Volunteer Work Day
9:00 am - 12:00 pm	Green Circle Trail Invasive Species Management Project Volunteer Work Day

**Additional details related to field trips and volunteer work days are provided in their abstracts below*

**** All times are central daylight times***

WISCONSIN LAKES PARTNERSHIP CONVENTION CONCURRENT ORAL PRESENTATION SESSION 5. FRIDAY APRIL 20, 2018

General Aquatic Invasive Species. 8:00 am – 9:00 am. Room: Sands/Frontier		
8:00 – 8:30	**Erickson, Cathie, Lisa Burns, & Pamela Toshner**	When zebra mussels came into the northwest counties: lessons learned using Wisconsin's Invasive Species Framework
8:30 – 9:00	**Nault, Michelle**	Response actions following the discovery of non-native round gobies in Little Lake Buttes des Morts

Restorative Ecology. 8:00 am – 9:00 am. Room: Expo 2		
8:00 – 8:30	**Casper, Gary**	A frog was in my boot this morning
8:30 – 9:00	**Dennison, Catherine**	Bobcat ecology in northern Wisconsin

Economics/Water Law. 8:00 am – 9:00 am. Room: Stonefield/Woodland		
8:00 – 9:00	**Engleson, Mike**	Annual lake policy update

Research. 8:00 am – 9:00 am. Room: Expo 1		
8:00 – 8:30	**Lewandowski, Eva**	Citizen-based monitoring – studying wildlife on and around our lakes
8:30 – 9:00	**Lager, Thomas**	Trout Unlimited and the Central Sand Hills Ecoregion habitat success

Restoration. 8:00 am – 9:00 am. Room: Harvest/Trillium		
8:00 – 9:00	**Janisch, Tony**	A changing climate in the Lake Superior basin

Watershed Connections/Water Quality. 8:00 am – 9:00 am. Room: Evergreen		
8:00 – 8:30	**Genskow, Ken**	Strengthening partnerships for watershed health
8:30 – 9:00	**Passint, Whitney**	Fox Demo Farms: executing a comprehensive outreach plan

WISCONSIN LAKES PARTNERSHIP CONVENTION CONCURRENT ORAL PRESENTATION SESSION 6. FRIDAY APRIL 20, 2018

General Aquatic Invasive Species. 9:15 am – 10:15 am. Room: Sands/Frontier		
9:15 – 9:45	**Higley, Cathy & Emily Harrington**	Aquatic invasive species prevention and clean boats, clean waters in Vilas County
9:45 – 10:15	**Skawinski, Paul**	Detecting invasive species through a two-state coordinated AIS snapshot day

Restorative Ecology. 9:15 am – 10:15 am. Room: Expo 2		
9:15– 10:15	**White, Paul**	Bats of Wisconsin

Economics/Water Law. 9:15 am – 10:15 am. Room: Stonefield/Woodland		
9:15 – 10:15	**Engleson, Mike (moderator)**	Panel discussion: use and effectiveness of countywide or watershed level economic studies

Research. 9:15 am – 10:15 am. Room: Expo 1		
9:15 – 9:45	**Sheehan, Nancy**	Citizen scientists turning data into decisions
9:45 – 10:15	**Driscoll, Zac**	Volunteer monitoring of emerging contaminants in the Milwaukee River basin

Restoration. 9:15 am – 10:15 am. Room: Harvest/Trillium		
9:15– 10:15	**Kretlow, Amy**	Great Lake restoration blitz – snapshots of success

Watershed Connections/Water Quality. 9:15 am – 10:15 am. Room: Evergreen		
9:15 – 9:35	**Bird, Robert & John Bohonek**	Development of Dodge County Farmers for Healthy Soils and Healthy Water
9:35 – 9:55	**Brewster-Brown, Mariana**	Superior River Watershed Association
9:55 – 10:15	**Marks, Charlie**	Leveraging Green Lake partnerships – implementation of the Big Green Lake Management Plan

WISCONSIN LAKES PARTNERSHIP CONVENTION CONCURRENT ORAL PRESENTATION SESSION 7. FRIDAY APRIL 20, 2018

Aquatic Invasive Species. 10:45 am – 11:45 am. Room: Sand/Frontier		
10:45 – 11:15	**Skawinski, Paul**	Removal of *Phragmites* and restoration with native plants at University of Wisconsin-Stevens Point
11:15 – 11:45	**Boismenue, Stephanie & Thomas Boisvert**	Restorating the ecological landscapes of "high profile" AIS sites in Oneida county

Restorative Ecology. 10:45 am – 11:45 am. Room: Expo 2		
10:45 – 11:15	**Woodford, Jim**	Recovery of bald eagles and ospreys in Wisconsin
11:15 – 11:45	**Matteson, Sumner**	Trumpeter swan population recovery

Economics/Water Law. 10:45 am – 11:45 am. Room: Stonefield/Woodland		
10:45 – 11:45	**Markham, Lynn & Kay Lutze**	Shoreland management

Research. 10:45 am – 11:45 am. Room: Expo 1		
10:45 – 11:15	**Arntsen, Pete, Ray Reser, & Anne Abbott**	Waters at risk: citizen action, public health, and science combine to confront the glacial pace of meaningful changes in a central Sands county
11:15 – 11:45	**Pellett, Gerald**	Sources and fates of nitrate, phosphorus, E.coli, and chloride that impair the Kewaunee, Ahnapee, and E. Twin River watersheds

Restoration. 10:45 am – 11:45 am. Room: Harvest/Trillium		
10:45 – 11:45	**Toshner, Pamela, Patrick Goggin, & Nick Homan**	Healthy lakes with an emphasis on native plantings

Watershed Connections/Water Quality. 10:45 am – 11:45 am. Room: Evergreen		
10:45 – 11:45	**Passint, Whitney**	Round table talk: Developing outreach strategies
	Bird, Robert & John Bohonek	Round table talk: Finding common ground
	Janisch, Tony	Round table talk: Using citizen-collected data for management and decision making
	Marks, Charlie	Round table talk: Green Lake Association – finding and leveraging funds to meet your project goals

KEYNOTE PRESENTATION – FRIDAY APRIL 20, 2018

Stephen Carpenter
University of Wisconsin-Madison Center for Limnology
Madison, Wisconsin

PAST AND FUTURE CHANGE IN THE YAHARA WATERSHED: A SOCIAL-ECOLOGICAL EXPERIMENT

Abstract: The talk will present the Yahara 2070 project (http://Yahara2070.org) to evaluate potential futures of the Yahara watershed near Madison and its four lakes. This innovative project began with public input through interviews and workshops, leading to stories and art about the evolving future of Yahara. Four diverse stories became the basis for computer simulations of changing climate, human population, land use change, hydrology, soil and water biogeochemistry, and limnology of the lakes from 2010 to 2070. Throughout the process the public was engaged through discussions, presentations, workshops, a writing contest, a 30-minute TV special, and social media. The model results showed how human choices determined the natural capital of the watershed: capabilities to generate food, clean water, support biodiverse landscapes, mitigate floods, and so forth (http://wsc.limnology.wisc.edu). One sequel of the project is broad conversations about how best to address severe nitrogen and phosphorus pollution of Yahara's ground- and surface water in the face of climate change and growing demand for land.

Biography: Steve Carpenter is Free-Range Scientist and Emeritus Director and Stephen Alfred Forbes Professor at the Center for Limnology, University of Wisconsin-Madison, U.S.A. Carpenter has led large-scale experiments and long-term studies to understand effects of nutrient inputs, food webs, and contaminants on water quality and fisheries. He served as a co-chair of the Millennium Ecosystem Assessment and President of the Ecological Society of America. Carpenter is a member of the U.S. National Academy of Sciences, a Fellow of the American Academy of Arts and Sciences, a foreign member of the Royal Swedish Academy of Sciences, and the 2011 Laureate of the Stockholm Water Prize. He has advised dozens of graduate students and published 5 books and about 450 scientific articles.

SER MWGL SYMPOSIA FRIDAY April 20, 2018

Symposium #1 (Expo 1): River Floodplain Lake and Wetland Restoration in the Midwest

Organizer: Lemke, Michael J., and Hua Chen. University of Illinois Springfield, Springfield, Illinois. ML email: mlemk1@uis.edu ; HC email: hchen40@uis.edu

Presenters: Benjamin, Gretchen L., The Nature Conservancy, La Crosse Wisconsin. Maria Lemke, The Nature Conservancy, Lewistown, Illinois. William Richardson, U.S. Geological Survey, La Crosse, Wisconsin. Aaron P. Yetter, Prairie Research Institute at the University of Illinois, Havana, Illinois.

The main drivers of aquatic habitat development and succession within the floodplain of river ecosystems are the timing, duration, and magnitude of floodplain inundation. Because rivers are dynamic ecosystems composed of the river, wetlands, and shallow lakes within the floodplain, alteration of ecological drivers presents unique challenges to those who attempt to restore these ecosystems. Yet, the effort to restore these ecosystems brings with it exceptional opportunities to understand river ecology. Our symposium explores the importance of floodplain aquatic habitat restoration at different spatial scales and emphasizes the value of river-lake-wetland connections, floodplain habitat to wildlife, and intensive planning of restoration efforts in a series of large-scale projects along the Illinois River. The symposium presentations will feature how cooperative work with partners leads to better implementation of management plans and advancement of ecological theory.

Time	Presenters	Title
1:30 – 1:35 pm	**Lemke, Michael J.**	Opening remarks: topics and considerations in river floodplain restoration
1:35 – 1:55 pm	**Richardson, William**	Reconnecting floodplains with rivers to restore water quality ecosystem services
1:55 – 2:15 pm	**Benjamin, Gretchen**	Tools for restoring the Upper Mississippi River floodplain
2:15 – 2:30 pm	**Chen, Hua**	Values and lessons of floodplain lake restorations on the LaGrange Reach of the Illinois River
2:30 – 2:50 pm	**Yetter, Aaron P.**	Waterbird abundance in relation to floodplain connectivity and wetland habitat restoration in the Illinois River Valley
2:50 – 3:10 pm	**Lemke, Maria**	The Emiquon Preserve as a Case study in restoration ecology
3:10 – 3:25 pm	**Lemke, Michael J.**	Succession and success: monitoring pelagic microorganism communities in a newly restored river floodplain lake
3:25 – 3:30 pm	**Chen, Hua**	Closing remarks

Symposium #2 (Expo 2): Advancing Like a Fire Through the Understory – Progress and Perspectives in Oak Savanna Restoration

Organizer: Bassett, Tyler. Michigan State University, East Lansing, Michigan. Email: basset17@msu.edu

Presenters: Lincoln, Jesse, Michigan Natural Features Inventory, Lansing, Michigan. Craig Maier, Tallgrass Prairie and Oak Savanna Fire Science Consortium, Madison, Wisconsin. Chris Mulvaney, The Morton Arboretum, Lisle, Illinois.

Oak savannas, open-canopied forests characterized by an herbaceous ground layer, were historically common in the upper Midwest. Since European settlement, Midwestern oak savannas have been displaced by agriculture, development, and succession to closed-canopied forest following fire suppression. Restoration of oak savannas is a vital component of returning biodiversity and function to Midwestern landscapes, but faces several unique challenges. Savannas are structurally complex and variable by definition. Complex landscape level processes structured historical savanna communities, including fire, large mammalian grazers, and patterns of seed dispersal. These processes likely function differently in the small restorable patches that remain, and in the degraded landscapes in which they are found. As a result, restoration strategies likely require a combination of both historical (e.g., fire) and novel (e.g., tree thinning, seed additions) processes, and it is important to identify how these strategies influence both the trajectory and outcome of oak savanna restoration. Creative methods are also needed to facilitate the transfer of information between scientists and practitioners, in order to efficiently capitalize on our evolving understanding of the restoration process. Finally, savanna restoration often occurs in landscapes with a patchwork of land uses and stakeholders, including private and public landowners, hunters, and conservationists. The valuation of oak savannas for maintaining regional and global biodiversity vs. other ecosystem services varies among these stakeholder groups. The future of Midwestern oak savannas depends upon bridging the gaps between the research on how oak savannas function and how implementing that understanding can be accomplished in ways that address the needs of all stakeholders. In this symposium, the presentations will focus on the effectiveness of management strategies, as well as how these strategies are implemented by engaging citizen scientists, hunters, researchers, and a range of other stakeholders in collaborative efforts.

Time	Presenters	Title
1:30 – 1:35 pm	**Bassett, Tyler**	Introduction
1:35 – 2:00 pm	**Bassett, Tyler**	A regional scale assessment of oak savanna restoration: the impacts of prescribed fire and thinning on groundlayer diversity and composition in the southern Great Lakes Basin
2:00 – 2:25 pm	**Mulvaney, Chris**	Oak ecosystem recovery collaborative: using a collective impact framework to preserve and restore oak communities in the Chicago Region
2:25 – 2:50 pm	**Lincoln, Jesse**	Seeing the savanna through the trees: a multifaceted approach to savanna restoration on public lands in southern Michigan
2:50 – 3:15 pm	**Maier, Craig**	Crowd-sourcing uncertainty: connecting practitioners' questions to research and research needs
3:15 – 3:30 pm		Panel Discussion/Question and Answer Session

WISCONSIN LAKES PARTNERSHIP CONVENTION CONCURRENT ORAL PRESENTATION SESSION 8. FRIDAY APRIL 20, 2018

Restoration 1:30 pm – 2:30 pm. Room: Harvest/Trillium		
1:30 – 2:30	**Havranek, Tony & Cody Mattison**	Rough fish management and wild rice restoration

Watershed Connections/Water Quality 1:30 pm – 2:30 pm. Room: Evergreen		
1:30 – 2:30	**Smudde, Jeff**	Silver Creek Pilot Watershed Project at NEW Water

WISCONSIN LAKES PARTNERSHIP CONVENTION CONCURRENT ORAL PRESENTATION SESSION 9. FRIDAY APRIL 20, 2018

Restoration 3:00 pm – 4:00 pm. Room: Harvest/Trillium		
3:00 – 3:30	**Watson, Jay**	How you can help pollinators
3:30 – 4:00	**Stauner, John**	Managing pollinators on an organic cranberry marsh

Watershed Connections/Water Quality 3:00 pm – 4:00 pm. Room: Evergreen		
3:00 – 4:00	**Barrows, Alan**	Stormwater infrastructure mapping for the Lake Nagawicka watershed

SER MWGL CONCURRENT ORAL PRESENTATIONS
FRIDAY APRIL 20, 2018

Invasive Species. 3:40 pm – 5:00 pm. Room: Expo 1 **Moderator: Christopher A. May**		
3:40 – 4:00	**DeLaundreau, Maria***, R. Montgomery, W. Kiser, T. Schlagenhaft, & M. Thomsen	Tree sapling responses to reed canary grass treatments across four floodplain sites in southeast Minnesota
4:00 – 4:20	**Kearns, Kelly**	Catch them before they spread: identification of new invasive terrestrial and wetland plants coming to a natural area near you
4:20 – 4:40	**Roberts, Summer**	Lessons learned: five years of adaptive invasive species management at a corporate headquarters
4:40 – 5:00	**Leimbach-Maus, Hailee B.***, S.A. Parks, & C.G. Partridge	Genetic analysis of invasive baby's breath (*Gypsophila paniculata*) populations in a northwest Michigan dune system

Fire and Invasive Species. 3:40 pm – 5:20 pm. Room: Expo 2 **Moderator: Todd A. Aschenbach**		
3:40 – 4:00	**Knosalla, Lori***, R. Montgomery, L. Frelich, C. Roy, L. Shartell, & A. Hawkinson	Investigating seasonal variation in prescribed burn impacts to lowland brush ecosystems
4:00 – 4:20	**Catchpole, Floyd B.**	Observations on the response of sand savanna under management with fire, thinning and invasive species control
4:20 – 4:40	**Pitman, Zachery T.*** & T.A. Aschenbach	Effects of fire season and temperature on a spotted knapweed (*Centaurea stoebe*) infested grassland
4:40 – 5:00	Carlson, J., T. Polacek, & **Will Overbeck**	Bridging the gap between innovation/technology and restoration in the fight against invasive *Phragmites*
5:00 – 5:20	**Rice, Emma K.*** & J.N. McNair.	Assessment of baby's breath (*Gypsophila paniculata*) removal in the northwest Michigan dunes

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

SER MWGL CONCURRENT ORAL PRESENTATIONS
FRIDAY APRIL 20, 2018

Assurance and Assessment in Ecological Restoration. 3:40 pm – 5:00 pm. Room: Sands/Frontier. Moderator: Michael C. Demchik		
3:40 – 4:00	**Blume, Louis**, C. Palmer, B.M. Fevold, M.M. Amos, A. Bucher, & J. Schofield	Scaling the application of QA/QC strategies in ecological restoration projects
4:00 – 4:20	**Chien, Eric M.*** & S.M. Galatowtisch	Resilience-based site assessment tool to guide and prioritize restoration practice
4:20 – 4:40	**Fevold, Brick M**., J. Schofield, R. Sutter, C. Palmer, E. Benjamin, M.M. Amos, & L. Blume	A data management plan template for ecological restoration and monitoring
4:40 – 5:00	**Johnson, Wade A.** & G.L. Quiram	A restoration evaluation program for Minnesota

Wetland Restoration. 3:40 pm – 5:00 pm. Room: Stonefield/Woodland Moderator: Rachel E. Schultz		
3:40 – 4:00	**Cook, James E.**	Can our restoration efforts in sedge meadows be too successful?
4:00 – 4:20	**Schultz, Rachel E.** & J. Straub	Associations between marsh bird occupancy and wetland characteristics in the Glacial Habitat Restoration Area of Wisconsin
4:20 – 4:40	**Wenthe, Alex***, K. McCulloh, & J. Zedler	Restoring a wetland gem: applications of current tools and technologies at Waubesa Wetlands State Natural Area
4:40 – 5:00	**Orlofske, Sarah A.** & R.C. Jadin	Testing parasites as potential biological indicators of wetland health through food web models

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

SER MWGL POSTER SESSION
FRIDAY APRIL 20, 2018

East Common Hall 5:30 pm – 7:30 pm

Poster#	Presenters	Title
1	**Pyman, Andrew D.*** & C.G. Partridge	Development of rapid assessment methods for harmful algal blooms (HABs) using qPCR
2	**Beal, Maxwell R.*,** E.R. Olson, R. Lehr, & D. Tyrolt	Managing invasive aquatic macrophytes using controlled water-level drawdowns in a temperate flowage
3	**Weissgerber, Andrea L.***, J. Harrington, & D. Bart	The presence and disappearance of *Cypripedium candidum* in the southeast glacial plains of Wisconsin
4	**Loken, Zachary J.***, R. Schultz, & J. Straub	Mapping spatial heterogeneity and floristic quality of wetlands in the Glacial Habitat Restoration Area of Wisconsin
5	**Weede, Kelly L.*** & Y. Johnson	Correlation between wetland characteristics and imperiled Blanchard's cricket frog (*Acris blanchardi*) abundance across southwestern Wisconsin
6	**Gumtow, Jon** & P. Baker	Flag River estuary restoration – understanding estuary dynamics and logistical constraints
7	**Gumtow, Jon**	Going beyond the minimum with your restoration project
8	**Jensen, Deanne E.***, T.C. Shuman, & R.B. Gillespie	Effects of two-stage ditch segments on macroinvertebrate assemblages of channelized streams
9	**Troy, Jennifer L.***, A. Bisht, & R.B. Gillespie	Effects of two-stage ditch segments on fish assemblages of channelized streams
10	**Rice, Alexander C.*** & A. Myers	An ongoing experiment in scientist-landowner relations and riparian restoration in eastern Montana
11	**Burns, Madeline F.*, Hana L. Christoffersen*, Lauren N. Meyers*, Mary R. Parr*,** M. Manion, & T.A. Aschenbach	Service-based learning in Ottawa County, Michigan: the restoration potential of fifty high school students

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

Poster Session Continued

Poster #	Presenters	Title
12	Hahn, J., H. Alassaf, J. Boyd, & **Abbie Schrotenboer**	Can a suburban campus be a haven for biodiversity?
13	**Slater, Julie M.***, J. Kingsbury, & R.E. Glover	The Society for Ecological Restoration at OSU: a new SER student association
14	**Lamar, Sarah K.*** & C. Partridge	Using herbarium specimens to reconstruct the invasion of Baby's Breath (*Gypsophila paniculata*)
15	**Parajuli, Bishal***, S. Thakur, **Adam West***, & M. McNicoll	Woodland community responses to *Rhamnus cathartica* and fire: vegetation, worms, and soils
16	**Draeger, Kymberly R.***, D.L. Lindner, & G.R. Stanosz	Forests, fungi, and soil formation
17	**King, Darryl***, S. Murphy, E. Stein, & Y.D. Choi	The effect of canopy clearing on the herbaceous vegetation in Coffee Creek watershed, Chesterton, Indiana
18	**Chipps, Austin*, Rachel Heatwole*, Alex Mandi*, Jack Sytsma*,** E. Kammeyer, & R. Benedict	Impact of increasing plant richness on pollinator use in Tallgrass Prairie
19	**Peschel, Anna A.*** & R.G. Shaw	Restoration in an era of climate change: how will adaptive evolution affect prairie conservation?

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

WORKSHOPS – SATURDAY APRIL 21, 2018

Don't Talk Like a Scientist! (Expo 1)

Instructor: Crosby, Cindy. Northwestern University Press, Glen Ellyn, Illinois. Email: phrelanzer@gmail.com

How do we connect and engage a general audience of non-scientists with science concepts and the practice of ecological restoration in our communities? Whether it's a prairie, savanna, wetland, woodland, or a natural area with a mosaic of all four ecosystems-stimulating interest in degraded ecosystems and attracting support of restoration efforts begins with good communication to stakeholders. In this workshop, the instructor (Cindy Crosby) will demonstrate a variety of techniques to improve your communication skills when doing presentations for adults, including PowerPoint tips, nervousness-busters, role-playing, sensory engagement, and more---all to show how the way the science of ecological restoration is communicated can make or break its reception by a community. Unless scientists write and speak to the non-science members of the larger community in a way that attracts them to science, rather than alienates them, we may lose the support and critical funding on which our restoration initiatives depend. Cindy Crosby obtained an MS in Natural Resources/Environmental Interpretation from the University of Wisconsin-Stevens Point in 2014. She penned her book *The Tallgrass Prairie: An Introduction* (2017, Northwestern University Press) with the intention of sparking an interest in and appreciation of ecological restoration from those who have no science background. Cindy is an Interpretive Trainer for the National Association for Interpretation, and certifies natural resources leaders in communicating clearly about the natural world. She has a passion for sharing the natural world through words, images, and experiences and has done so through interpretive panels, her weekly prairie blog for non-scientists (Tuesdays in the Tallgrass), and through education and programming she presents to natural resources volunteers at The Morton Arboretum.

Application of Quality Assurance and Quality Control Principles to the Planning of Ecological Restoration Data Collection Efforts (Expo 2)

Instructors: Craig Palmer[1], Brick M. Fevold[1], Molly M. Amos[1], Adam Bucher[1], Louis Blume[2], and Judy Schofield[1]. [1] CSRA, Alexandria, Virginia. [2] U.S. Environmental Protection Agency, Chicago, Illinois. CP email: craig.j.palmer@csra.com; BF email: brick.fevold@csra.com; MA email: molly.middlebrook@csra.com; AB email: adam.bucher@csra.com; LB email: blume.louis@epa.gov; JS email: judith.schofield@csra.com;

The evaluation of the effectiveness of restoration strategies are often hampered by their lack of establishing clearly articulated goals and objectives that can be assessed in both qualitative and quantitative terms. Whether you are a restoration scientist, a restoration practitioner, or both, this workshop will provide you with additional insights and tools to establish realistic project goals and performance-based objectives critical to assess the effectiveness of your restoration strategies. You will also be introduced to the concept of data quality acceptance criteria and will work in small groups on exercises based on case studies in the Great Lakes Basin to apply the principles introduced in the workshop. An emphasis will be placed on the development of quality objective statements for projects that involve the collection of data using best professional judgement common to ecological restoration projects. Materials presented in this workshop are based on the results of

interagency collaboration, and academic and other published resources. Development and preparation of workshop materials is provided through the support of the Great Lakes Restoration Initiative.

Online Training Program Development for Ecological Restoration (Sands/Frontier)

Instructors: Galatowitsch, Susan, and Julia Bohnen. University of Minnesota, St. Paul, Minnesota. SG email: galat001@umn.edu; JB email: bohne001@umn.edu

This workshop explores on-line teaching and learning techniques for ecological restoration. Specifically, we will focus on continuing education for adults who are interested in entering into restoration practice and for restoration professionals looking to develop new skills. For many adults, online courses provide opportunities that are otherwise inaccessible to them because of work schedules and distance from college campuses. The workshop will have four parts: 1) the basics of designing online courses with practical aims; 2) techniques for teaching common restoration skills; 3) effective ways to combine online and field training; and 4) online training technology options. The workshop will feature "lessons learned" and examples from five years of offering online courses as part of the Ecological Restoration Training Cooperative at the University of Minnesota, in partnership with several state agencies. Participants should bring a computer with wireless capabilities for the "hands-on" parts of the workshop.

Who Me? A Modeler? Using Simple Modeling Tools to Explore the Costs and Benefits Management Scenarios (Evergreen)

Instructors: Swaty, Randy[1], and Megan Sebasky[2]. [1] The Nature Conservancy, Evanston, Illinois. [2] Wisconsin Department of Natural Resources, Madison, Wisconsin. RS email: rswaty@tnc.org; MS email: Megan.Sebasky@wisconsin.gov

Restoration is a difficult business-more things to do than we have resources to accomplish. So, how do we decide which treatments to apply to what and when? One useful option is using simple succession/disturbance models. In this workshop, we'll present and practice a modeling framework called Landscape Conservation Forecasting, which uses state-and-transition modeling coupled with an Excel spreadsheet to deliver a return on investment metric. We'll "play" with various combinations of restoration activities to see which one is best in terms of cost and ecological effectiveness. In the workshop participants will explore and manipulate an already built example model, learn how to obtain free modeling software, and be inspired to try modeling on their own. While modeling seems to be intimidating at times, we promise to make this fun and useful.

MEETING HOST PLENARY SESSION– SATURDAY APRIL 21, 2018

APPLIED LEARNING THROUGH PRACTICE, RESEARCH, AND REFLECTION: ENGAGING UNIVERSITY OF WISCONSIN-STEVENS POINT COLLEGE OF NATURAL RESOURCES STUDENTS IN MEANINGFUL ECOLOGICAL RESTORATION IN CENTRAL WISCONSIN

This plenary session will focus on the applied nature of the University of Wisconsin-Stevens Point's (UWSP) College of Natural Resources Forestry program and how faculty, staff, and students work together to carry out a shared mission. Specifically, the mission of the UWSP College of Natural Resources Forestry major is to provide interdisciplinary, application-based educational programs that develop ethical, employable forestry professionals with the expertise to manage resources sustainably. For a program to be successful, much of the learning is carried out in the field: faculty and students use UWSP properties, public land, and some private property for hands-on instruction. Being situated in the central Wisconsin tension zone, there is considerable variety of community types near Stevens Point. This variety allows students to experience restoration and management projects that involve prairie, savannah, and northern forests all within a short drive of the main campus. The major provides a solid understanding of ecological process and function, and students are trained in an interdisciplinary framework. Within the forestry major are four options, one of which is Ecosystem Restoration and Management. This option includes a broader biological foundation for students, and management concepts focus on conservation biology, restoration, and large scale ecosystem management.

Time	Presenter	Title
10:20 – 10:40 am	Ginnett, Tim	Overview of the UWSP College of Natural Resources
10:40 - 11:05 am	Demchik, Michael	The Forestry Major
11:05 - 11:15 am	Cook, James	The Restoration Option of the Forestry Major
11:15 - 11:25 am	Imp, Richard	UWSP's SER Student Association
11:25 - 11:35 am	Johnson, Alissa	Alumnus perspective
11:35 - 11:55 am	Gumtow, Jon	Employer perspective
11:55 - 12:10 pm		Question and answer session



OVERVIEW OF THE UWSP COLLEGE OF NATURAL RESOURCES AND ITS FORESTRY MAJOR

From University of Wisconsin-Stevens Point's beginnings as a teachers' college (the Stevens Point Normal School), conservation has been part of the school's curriculum. In 1935, a professor at Stevens Point successfully lobbied to require conservation education for all public school students in Wisconsin. This was meant to instill a better sense of stewardship in the population following the dramatic cutover of the Wisconsin forests and the haphazard promotion of farming on marginal lands. In 1946, the school was known as the Central State Teachers College at Stevens Point and it offered the nation's first degrees in conservation education. As participation in higher education expanded in the United States, so did the Stevens Point campus. It became a comprehensive university in 1964 and enrollment steadily increased. In 1970, the University of Wisconsin-Stevens Point (UWSP) created the College of Natural Resources to facilitate a focus on undergraduate education in natural resources management.

The philosophy of the College of Natural Resources (CNR) at UWSP is that of "Integrated Natural Resource Management" and the belief that all resource managers should be trained in a program with a strong background in the liberal arts while having exposure to the various disciplines involved in natural resource management. For that reason, all CNR students participate in a shared core of coursework that includes coverage of human dimensions of natural resource management, soils, water, fisheries, wildlife, forestry, and ecology. All of our students also attend a six-week summer field experience program that is an immersion experience which offers one-week modules on forestry, land measurement and GIS, water, wildlife, soils, soil engineering, and plants. This integrated core curriculum is viewed as essential to a student's ability to be more than a specialist in one area of resource management. After the CNR core and the summer field experience, the students in the Forestry major take forestry core courses as well as option-specific courses. UWSP offers a forestry degree with specific career path-targeted options that includes: 1) urban forestry; 2) forest management; 3) forest recreation; and 4) forest ecosystem restoration and management.

One of the great luxuries of teaching in Stevens Point is that we are literally in Wisconsin's "Gateway to the Pineries". In addition to the Schmeeckle Reserve, a 1.13 km^2 resource that is attached to the main campus, students and faculty also have access to the Central Wisconsin Environmental Station (less than 32.2 km from campus), Treehaven (5.67 km^2 in Tomahawk, Wisconsin), and a range of smaller other forest parcels owned and managed by UWSP. In addition, the cooperation of a range of public and private land managers has opened many land bases to our students. For this reason, field activities are imbedded in a range of our coursework. Students learn through both theory and practice…the best combination.

With such a vibrant program, student organizations have flourished at UWSP. We have well over 100 student organizations on campus. The groups that have participated in some of the recent restoration projects include UWSP's Society for Ecological Restoration (SER), Society of American Foresters, and UWSP Fire Crew. Notably, UWSP's SER is only one of two SER Student Associations in the Midwestern United States.

Finally, the unique nature of our program combined with the very large number of alumni (12,500 and counting) has resulted in an extremely dedicated employer community related to the college. Various professionally advisory committees, such as the Forestry Advisory Committee, help the faculty better meet employer demands from our graduates and maintain the career focus of our program.

In summary, UWSP serves an important need nationally in natural resource education. Our students are trained broadly in natural resource management with specialized training in their majors such as Forest Ecosystem Restoration and Management.

LUNCH, BUSINESS MEETING, & AWARDS CEREMONY (12:10 – 1:50 PM)

PLENARY PRESENTATION – SATURDAY APRIL 21, 2018

Tracy Hames
Wisconsin Wetlands Association
Madison, Wisconsin

LANDSCAPE-SCALE WETLAND RESTORATION IN WISCONSIN: THERE'S MORE TO IT THAN JUST GOOD SCIENCE

Abstract: Over the past 150 years, Wisconsin has lost half of its original 10 million acres of wetlands to human development. This level of wetland loss has resulted in statewide impacts to the health of our watersheds, our waters, our fish and wildlife populations, and our economic and community well-being. Landscape level wetland restoration is needed to meaningfully reverse the impacts of wetland loss in Wisconsin. There are no formulas to guide the development and implementation of such efforts, but there are certain elements and considerations shared by successful large-scale wetland restoration projects. Opportunities and roadblocks influencing project success involve technical, policy-related, economic, and human aspects. This presentation will examine the elements and considerations, and the opportunities and roadblocks affecting successful large-scale wetland restoration actions using examples from across the varied landscapes of Wisconsin and other regions. Though incredibly challenging, large-scale wetland restoration efforts represent some of the most professionally and personally rewarding endeavors we can undertake as natural resource managers.

Biography**:** Tracy Hames is currently the Executive Director of the Wisconsin Wetlands Association, which is a non-partisan, science-based, statewide non-profit organization dedicated to the protection, restoration, and enjoyment of Wisconsin's wetlands. Tracy was raised in Arden Hills, Minnesota. He developed a love and appreciation for nature and the environment at a young age through many years hunting, fishing, and camping. Tracy obtained a BA in Biology and Environmental Studies from Macalester College in 1984, and a MS in Natural Resources from the University of Wisconsin-Stevens Point in 1990. In 1989 he moved west to work as a Waterfowl and Wetlands Biologist for the Yakama Indian Nation, where he stayed for 22 years. At Yakama he built one of the largest agricultural-based wetland protection and restoration projects in the Pacific Northwest. This project, located in two of the most productive steelhead-producing watersheds in the Yakima River Basin, made use of the cultures and traditions of the Yakama People along with science-based techniques to produce an approach to restoration combining traditional knowledge and ecological concepts. This project, encompassing over 20,000 acres and hundreds of river/creek miles, emphasized the restoration of historic conditions in an incredibly disturbed landscape. Restoration activities targeted floodplains, river and creek channels, wetlands, riparian forests, and grasslands. A Midwesterner at heart, Tracy moved back to Wisconsin in 2012 to take the position of Executive Director with Wisconsin Wetlands Association. In this position, he works across the state to help communities understand how wetlands can be solutions to the habitat, water quality, flooding, and other issues they face.

SER MWGL CONCURRENT ORAL PRESENTATIONS
SATURDAY APRIL 21, 2018

Prairie and Grassland Restoration. 3:30 pm – 4:50 pm. Room: Expo 1 **Moderator: Mary Damm**		
3:30 – 3:50	**Barak, Rebecca**, Z. Ma, K. Havens, & L. Brudvig	Linking decision-making for seed mix design to restoration outcomes in midwestern restored prairies
3:50 – 4:10	**Herron-Sweet, Christina**, I. Lane, & D. Cariveau	Similarity of bee communities in remnant vs. restored tall grass prairie fragments
4:10 – 4:30	**Thomforde, Stephen**	The benefits of grazing grasslands
4:30 – 4:50	**Aschenbach, Todd A**. & P.R.McGhan	Sand prairie restoration at the Newaygo Prairies Research Natural Area, Manistee National Forest, Michigan

Forest and Floodplain Restoration. 3:30 pm – 4:50 pm. Room: Expo 2 **Moderator: Brad Gordon**		
3:30 – 3:50	**Demchik, Michael C**., K. Burns, & T. Quinn	Restoration forestry at the Central Wisconsin Environmental Station: the plan and early initiation
3:50 – 4:10	**Murphy, Shane M.***, D.A. King, & Y.D. Choi	Effects of deer barrier and grass-specific herbicide on the growth of native ash seedlings (*Fraxinus* spp.)
4:10 – 4:30	**Wallace, Tori**, C. Brown, K. Davis, J. Hussey, & S. Byrd	Adaptive management challenges in the short-term: three years of forest restoration monitoring at the Dawes Arboretum Red Barn Reserve
4:30 – 4:50	**Gordon, Brad**, O. Dorothy, & E. Shader	Floodplain restoration in the Upper Mississippi Basin: connecting the dots between floodplain management and water quality

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

SER MWGL CONCURRENT ORAL PRESENTATIONS
SATURDAY APRIL 21, 2018

Policy, Planning, and the Human Dimension. 3:30 pm – 5:10 pm. Room: Sands/Frontier **Moderator: Robin Rothfeder**		
3:30 – 3:50	**Brown, Carrie L**. & S. Byrd	Seeing is believing: engaging the conservation community in a network of native plant demonstration sites regionally and throughout the U.S.
3:50 – 4:10	**May, Christopher A**., G.M. Annis, & D.R. Pearsall	Western Lake Erie Coastal Conservation Vision – landscape scale planning for nature and people
4:10 – 4:30	**McGuire, S. Andrew** & T. Ehlinger	The social-ecological dynamics of linked surface-groundwater governance in Wisconsin
4:30 – 4:50	**Rothfeder, Robin**, S. Hinners, D. Pataki, & S. Goldsmith	Building multi-institutional capacity for watershed management and restoration: lessons from the Mountain West
4:50 – 5:10	**Swaty, Randy L.,** K. Blankenship, S. Hagen, K. Hall, J. Patton, & J. Smith	Putting natural areas in context: LANDFIRE sets the stage for restoration, climate science, and landscape conservation

Stream and River Restoration. 3:30 pm – 5:30 pm. Room: Evergreen **Moderator: Chris Lenhart**		
3:30 – 3:50	**Ehlinger, Timothy**, A. Thompson, S.A. McGuire, & A. Menke	From cabbages to cordgrass; Pike River restoration in an urban context
3:50 – 4:10	**Evans, Bryn E.,** T.R. Van Deelen, & S.S. Crimmins	Assessing semi-aquatic mammal status following habitat restoration: cost effectiveness and recommendations
4:10 – 4:30	**Grieser, Jennifer M.**	Setting achievable goals for urban stream restoration utilizing stream functions pyramid
4:30 – 4:50	**McPherson, Brady**	Function-based stream mitigation and its implications for ecological restoration
4:50 – 5:10	**Melchior, Marty**, B. Lee, & B. Swanson	Re-naturalization of a domesticated creek in the Midwestern United States
5:10 – 5:30	**Smiley Jr., Peter C.** & K.W. King	Headwater fish population responses to planting grass filter strips adjacent to channelized agricultural headwater streams

OFFSITE FIELD TRIPS - SUNDAY APRIL 22, 2018

8:00 am to 3:00 pm: ***Emmons Creek Savanna Restoration Field Trip.*** Demchik, Michael. University of Wisconsin-Stevens Point, Stevens Point, Wisconsin. Email: Michael.demchik@uwsp.edu

Transportation and lunch will be provided for up to 27 participants. The field trip will depart from and return to the Holiday Inn-Stevens Point Convention Center. The focus of this trip will be visiting and discussing sand ecosystems in central Wisconsin: barrens, savannas and scrub oak woodlands/forests. We will visit the state managed Emmons Creek Fisheries Area and Emmons Creek Barrens. The management objectives for these properties are to provide trout habitat in Emmons Creek, provide habitat for barrens-obligate species like Karner blue butterfly, and to restore savanna habitat. Specifically, we will visit sites with younger grassland restorations, aging restorations, shelterwood cuts for oak regeneration, and undergoing proactive management to respond to future invasion by emerald ash borer and other activities. University of Wisconsin-Stevens Point (UWSP) students have been involved in many of the activities on this property. Much of the timber that has been marked and cut in the last seven years was done to support training students in timber marking for a wide-range of land management goals, which part of UWSP's annual marking camp. The monitoring for Karner blue butterfly has been done using student workers and a faculty member at UWSP. This property also hosts an oak reserve tree research unit for a faculty member at UWSP. This field trip will be outdoors, so dress accordingly for the weather and anticipated conditions.

8:30 am to 12:30 pm: ***Moses and Lost Creek Wetland Restorations Field Trip.*** James Cook [1] and Jon Gumtow[2]. [1] University of Wisconsin-Stevens Point, Stevens Point, Wisconsin. [2] Stantec, DePere, Wisconsin. JC Email: jcook@uwsp.edu

Transportation will be provided for up to 26 participants. The field trip will depart from and return to the Holiday Inn-Stevens Point Convention Center. The guided tour will visit two recently completed wetland restorations in and near Stevens Point. One restoration site is 0.07 km^2 in size and the other is 1.42 km^2. Originally, Moses Creek was a channelized stream within the eastern portion of University of Wisconsin-Stevens Point's (UWSP) Schmeeckle Reserve. A major restoration project in summer and fall of 2010 re-created the natural stream meanders and restored the historic wetland floodplain. New trails and boardwalks provide access to the wetland, which has been planted with trees, shrubs, and marsh vegetation. The $900,000 restoration was funded as a mitigation project by the Wisconsin Department of Transportation. Participants will learn about the technical aspects of the restoration project, benchmarks for measuring success, and research on vegetative development and propagule sources. The second stop of this guided tour will be at UWSP's Schmeeckle Reserve Visitor Center and the Wisconsin Conservation Hall of Fame. Participants will then proceed to the Lost Creek site on the outskirts of Stevens Point. The Lost Creek site includes a diverse wetland complex involving 3.2 km of naturalized stream channel to replace low quality drainage ditch habitat and a landscaping plan that included a diverse mix of riparian, forested wetland, wet meadow, shallow marsh, and upland prairie habitats on retired farmland. The field trip leaders will compare progress at the two sites and draw conclusions about the utility of Wisconsin's wetland mitigation banking program. This field trip will be outdoors, so dress accordingly for the weather and anticipated conditions.

9:00 am to 12:00 pm: **Tomorrow River Fish Habitat Restoration Field Trip.** Peter Segerson[1] and Matt Salchert[2]. [1] Wisconsin Department of Natural Resources (retired), Black River Falls, Wisconsin. [2] Frank Hornburg Chapter of Trout Unlimited, Wisconsin. PS email: ps205v@hotmail.com; MS email: MS mattsalchert@yahoo.com

Participants will be responsible for their own transportation and maps will be provided. This guided tour will begin at the Holiday Inn-Stevens Point Convention Center. We will visit a range of stream restoration and dam removal projects along the Tomorrow River, a Class 1 and 2 trout stream located 20 minutes east of Stevens Point. We will visit the Nelsonville pond site, where a dam removal project in 1988 created almost a 1.6 km of high quality trout stream. We will also visit the Amherst mill pond site, where the community recently decided to repair a failing dam on the Tomorrow River. In the Amherst case, the pond has not returned exactly as expected and we will consider the ecological and socioeconomic challenges that the site now presents. We will also view additional restoration sites and places where modified agriculture practices have fostered improved stream habitat and water quality. This field trip will be outdoors, so dress accordingly for the weather and anticipated conditions.

VOLUNTEER WORKDAYS - SUNDAY APRIL 22, 2018

9:00 am to 12:00 pm: ***Schmeeckle Reserve Restoration Project Volunteer Work Day.*** Paul Skawinski and Jim Buchholz. University of Wisconsin-Stevens Point, Stevens Point, Wisconsin. PS email Paul.Skawinski@uwsp.edu; JB email jbuchhol@uwsp.edu

Participants are responsible for their own transportation and maps will be provided. Participants will gain hands on experience with wetland and forest restoration as part of this volunteer workday. Schmeeckle Reserve is a 1.13 km^2 conservancy area located on the north side of University of Wisconsin-Stevens Point campus and about 10 minutes from the Holiday Day Inn-Stevens Point Convention Center. The reserve features 8 km of trails and boardwalk, a 0.10 km^2 lake, and numerous restoration challenges. Recent blow-downs created an opportunity to implement a 0.01 km^2 forest restoration project at a highly-visible street intersection. A project to eliminate non-native *Phragmites* spp. has also created opportunities to restore native wetland perennials. There are also many other opportunities to address other woody non-native invasives! Participants will work alongside with volunteers from The Friends of Schmeeckle Reserve and UWSP faculty and staff. This volunteer opportunity will be outdoors, so dress accordingly for the weather and anticipated conditions.

9:00 am to 12:00 pm: ***Green Circle Trail Invasive Species Management Project Volunteer Work Day.*** Ryan Rose[1] and Chris Hamerla[2]. [1] Portage County Parks, Stevens Point, Wisconsin. [2] Golden Sands Resource Conservation and Development, Stevens Point, Wisconsin. RR email RoseR@co.portage.wi.us; CH email Chris.Hamerla@goldensandsrcd.org

Participants are responsible for their own transportation and maps will be provided. The work site is located about 15 minutes from the Holiday Inn-Stevens Point Convention Center. Green Circle Trail is a scenic hiking and biking trail along the Wisconsin River that loops through the Stevens Point area. It represents one of the most popular and highly used recreation resources in central Wisconsin. Participants will gain hands on experience with invasive species removal and management as part of this volunteer opportunity. Additionally, participants will be provided with an overview of the vectors of woody invasive species and the long-term ecological goals for the trail and the nearby river islands. Our restoration work will focus on the removal of woody invasive species that have moved into the understory of a mixed pine and hardwood riparian forest. Participants will work alongside with volunteers from The Green Circle Trail Association. This volunteer opportunity will be outdoors, so dress accordingly for the weather and anticipated conditions.

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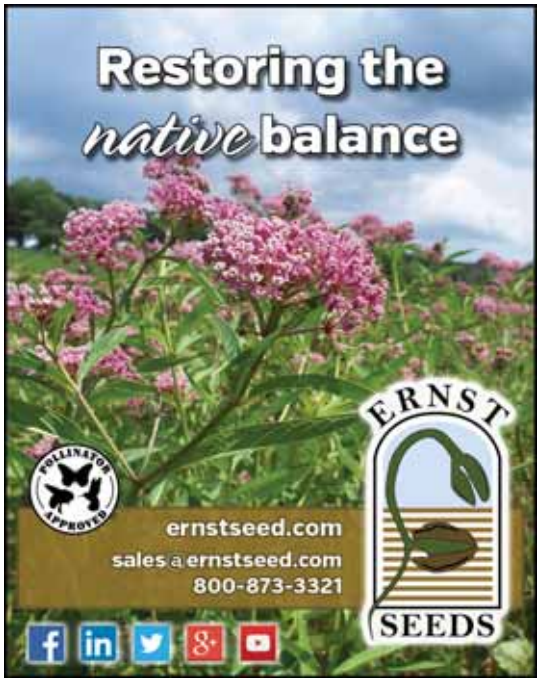

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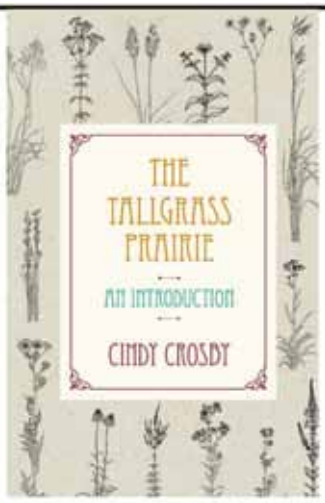

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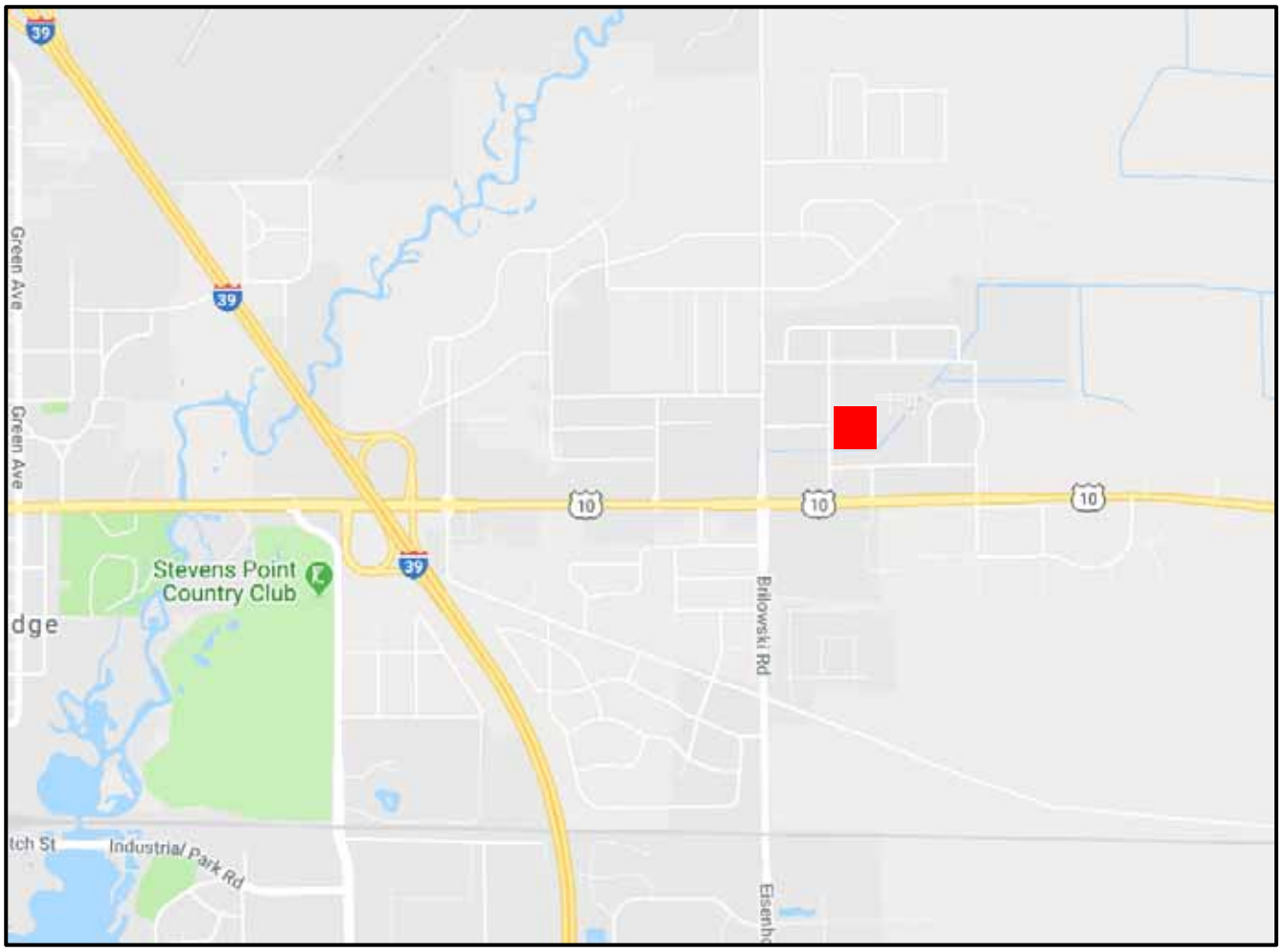
Location of the Holiday Inn Stevens Point-Convention Center on the East Side of Stevens Point, Wisconsin



- The physical address of the Holiday Inn Stevens Point-Convention Center is: 1001 Amber Avenue Stevens Point, Wisconsin
- The red square on the map indicates the location of the Holiday Inn Stevens Point-Convention Center
- All meeting events on Friday and Saturday will be held in the Holiday Inn Stevens Point-Convention Center.
- Free parking for meeting attendees is available within the Holiday Inn Stevens Point-Convention Center parking lot
- More detailed maps of Stevens Point, Wisconsin and Portage County are available at the Stevens Point Convention and Visitors Bureau website below:

  https://www.stevenspointarea.com/about/getting-around/area-maps/

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ABOUT THE SER MIDWEST-GREAT LAKES CHAPTER

- We are a non-profit organization that was recognized by SER as a regional chapter in March 2008. The Chapter serves a seven state region of Ohio, Indiana, Michigan, Illinois, Wisconsin, Minnesota, and Iowa.
- **Mission***:* To promote the science and practice of ecological restoration to assist with the recovery and management of degraded ecosystems within the Midwestern and Great Lakes regions.
- **Membership Benefits**
  - *Opportunity to network with colleagues and showcase your work at annual chapter meetings and state level events held throughout the year*
  - *Reduced chapter meeting registration rates*
  - *Chapter communications consist of the Restoration News Midwest blog and other social media streams that highlight regional ecological restoration issues, news, projects, and practitioners*
  - *Opportunities to promote ecological restoration-related events and discuss ecological restoration-related issues though the chapter social media*
  - *Webinars on relevant restoration topics in the region*
  - *Student members eligible to apply for research and practice grants through our Student Grant Program*
  - *Membership within our international parent society*
- ***Interested in becoming a member? See*** http://chapter.ser.org/midwestgreatlakes/

AVAILABLE IN JUNE 2018 FROM UNIVERSITY OF IOWA PRESS

Ecological Restoration in the Midwest
Past, Present, and Future

edited by Christian Lenhart & Peter C. Smiley Jr.

"The editors and authors bring together the history, theory, and practice of ecological restoration in the Midwest into a much-needed resource. There is no comparable book dedicated to the broad range of topics, challenges, and successes of restoration for this region of the United States."—Christopher A. May, the Nature Conservancy

Focusing on six cutting-edge case studies that highlight thirty restoration efforts and research sites throughout the region—Iowa, Indiana, Illinois, Wisconsin, Michigan, Minnesota, and Ohio— editors Christian Lenhart and Peter "Rocky" Smiley Jr. bring together a group of scholars and practitioners to show how midwestern restoration efforts have developed, as well as where they are headed. Whether cleaning up contamination from auto plants in Ohio, or restoring native prairie grasses along the Iowa highway, the contributors uncover a vast network of interested citizens and volunteer groups committed to preserving the region's environment.

This study, intended for researchers, students, and practitioners, also provides an updated synthesis of restoration theory and practice, and pinpoints emerging issues of importance in the Midwest, such as climate change and the increase in invasive species it will bring to the region. Though focusing exclusively on the Midwest, the contributors demonstrate how these case studies apply to restoration efforts across the globe.

Contributors: Luther Aadland, David P. Benson, Andrew F. Casper, Hua Chen, Joe DiMisa, Steve Glass, Heath M. Hagy, John A. Harrington, Neil Haugerud, Constance Hausman, Michael J. Lemke, Christian Lenhart, Jen Lyndall, Dan Shaw, John A. Shuey, Peter C. Smiley Jr., Daryl Smith