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**21ST ANNUAL CONFERENCE**  
FEBRUARY 23-25, 2016 GREEN BAY, WI

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### About Wisconsin Wetlands Association

Wisconsin Wetlands Association is dedicated to the protection, restoration, and enjoyment of wetlands and associated ecosystems through science-based programs, education, and advocacy. We envision a state where wetlands are healthy, plentiful, and support ecological and societal needs and where citizens care for, appreciate, and interact with these natural resources. We are a non-profit, non-partisan, member-supported conservation organization.

If you are not yet a member of Wisconsin Wetlands Association, we encourage you to show your support for wetlands and for our wetland conservation programs by becoming a member today!

Learn more and join online at [www.wisconsinwetlands.org](http://www.wisconsinwetlands.org)

### World Wetlands Day

February 2nd is World Wetlands Day, the annual worldwide celebration of wetlands that commemorates the signing of the Ramsar Convention on Wetlands on February 2, 1971, in the Iranian city of Ramsar. On World Wetlands Day, government agencies, non-governmental organizations, and groups of citizens around the world take action to raise public awareness of wetland values. WWA's Wetland Science Conference is held in celebration of World Wetlands Day 2016. Learn more about World Wetlands Day at [www.ramsar.org](http://www.ramsar.org).

In 2012, Wisconsin Wetlands Association became the first U.S.-based entity to win the Wetlands Conservation Award for Education from the Ramsar Convention. We were honored for our work to promote and increase the number of designated Ramsar Wetlands of International Importance in Wisconsin and the United States as well as for our outreach and education programs that promote the ideals of the Ramsar Convention. We continue to work with Wisconsin wetland professionals and enthusiasts to nominate worthy Wisconsin wetlands for Ramsar designation, including the Kakagon and Bad River Sloughs (designated in 2012), the Door Peninsula Coastal Wetlands (designated in 2014), Chiwaukee Illinois Beach Lake Plain (designated in 2015), and the Lower Wisconsin River.



#### Make it Social

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or Follow us on Twitter [@WIWetlandsAssoc](https://twitter.com/WIWetlandsAssoc)

Share your conference experience using  
[#WWAConference!](https://twitter.com/WWAConference)

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## Welcome to Wisconsin Wetlands Association’s 21<sup>st</sup> Annual Wetland Science Conference: Wetland Solutions

Wetlands offer solutions to many challenges that communities face today, including flood and storm water management, poor water quality, and maintaining a high quality of life to attract and retain community members. We also need to address solutions to the many problems that face wetlands today, from invasive species to sedimentation, climate change to groundwater withdrawals. This year’s annual Wetland Science Conference will address these issues and more.

We gather together the wetland community—scientists, managers, students, regulators, and others—to share and discuss wetland science, management, restoration, and protection issues. We gather to contribute to the growing regional collaboration for protecting and conserving Wisconsin’s wetlands. And we gather to network, because some of the best learning comes through conversation and beer.

We thank you for being here and for your ideas for wetland solutions. We also thank the following important advisors whose expertise and ideas ensure that this conference is high quality, effective, and fun.

### Conference Advisory Panel

- Thomas Bernthal:** WDNR
- Eric Epstein**
- Betsy Galbraith:** USFWS
- Bill Hafs:** NEW Water
- Bud Harris:** UW-Green Bay Emeritus
- Tracy Hames:** Wisconsin Wetlands Association
- Tod Highsmith:** WWA Board
- Bob Howe:** UW-Green Bay
- Kelly Kearns:** WDNR
- Tony Kuchma:** Oneida Nation

- Mary Linton:** Snapping Linton Ecology
- Nick Miller:** The Nature Conservancy
- Travis Olson:** Wisconsin Coastal Management Program
- Randy Poelma:** Ho-Chunk Nation
- Patrick Robinson:** UWEX & UW-Green Bay
- Jim Ruwaldt:** WWA Board
- Jeff Smudde:** NEW Water
- Pat Trochell:** WDNR
- Nicole Van Helden:** The Nature Conservancy
- Dreux Watermolen:** WDNR
- Bobbie Webster:** UW-Green Bay

**WWA staff and interns supporting these advisors:** Katie Beilfuss and Julia Slotnick. Conference logistical support provided by Jodi Fisher and Fiorella Neira of IMPACT Virtual Services.

## Program Highlights: Keynote Speakers

### Keynote Address

Wednesday, February 24, 9:00-10:10 AM  
Location: Turtle-Bear Clan Ballroom

*Thank you to We Energies for their generous sponsorship of this session.*

### Community Dynamics and Resiliency of Green Bay Coastal Marshes: A Forty Year Perspective

#### H.J. “Bud” Harris

Professor Emeritus of Natural and Applied Sciences, UW-Green Bay



The coastal wetlands of Green Bay are purported to constitute 50% of the coastal wetlands of Lake Michigan. This is an impressive figure when you consider that the west shore of Green Bay constitutes roughly 7% of the shoreline of Lake Michigan. An estimated 60% of west shore coastal marshes have been permanently lost and the losses of wet forested wetland have been even more extensive. Harris will share some of what he has learned about these ecosystems, their flora and fauna, and the dynamics and the resiliency of the system over the past 40 years. He will conclude with comments on recent restoration and management efforts and some observations on what to expect from a changing climate.

### About the Speaker

H. J. “Bud” Harris joined UW-Green Bay when it was a fledgling institution in 1969 and retired in 1999. He taught undergraduate courses in ecology and graduate courses in wetland ecology and ecosystem management. He and his students initiated research on coastal wetlands of Green Bay, Lake Michigan. He served as Sea Grant Program Coordinator for the Green Bay sub-program during the 1980’s and subsequently served as the “On Site Coordinator” for the USEPA Green Bay PCB Mass Balance Study for PCBs. He served as chair for the Sea Grant Advisory Council for 10 years and has been involved in Great Lakes research and restoration efforts for over four decades.

### Plenary Presentation

Thursday, February 25, 8:30-9:20 AM  
Location: Turtle-Bear Clan Ballroom

*Thank you to Stantec for their generous sponsorship of this session.*

### Incorporating Hydrologic and Geomorphic Variability in the Restoration of Natural Processes: A Half Century of Land Management Experience across North America

#### Leigh Fredrickson

Former Director of the Gaylord Laboratory, University of Missouri



Leigh Fredrickson will share 70 years of wetland experience based on his childhood passion, academic education, and professional responsibilities. While his experiences took him to three continents, his focus has been on challenges throughout North America where he has inspected thousands of wetlands on more than 300 Fish & Wildlife Refuges and many state and private initiatives. His is a story of successes and failures in southern hardwoods, riverine, estuarine, montane, prairie, and tropical wetlands in a wide variety of climates. Fredrickson’s presentation will focus on the formative and natural processes that determine the abiotic diversity on sites across the globe, conditions that must be considered if we are to achieve some level of sustainability to assure future biodiversity.

### About the Speaker

Leigh Fredrickson’s interest in wetlands was set early when his Dad took him to collect cattail leaves to serve as water sealants in oak barrels. Fredrickson’s dad was a cooper, making the barrels that were still used to ship and process meat in the 1940s. These annual trips to an oxbow lake on the Missouri River Floodplain exposed Fredrickson to a different experience than hunting and fishing in the same wetland and floodplain. A variety of experiences, from river wanderings, farming, Boy Scouts, and undergraduate and graduate education, honed a conservation passion and position as Director of the Gaylord Laboratory at the University of Missouri. Fredrickson’s work with seventy-five graduate students and especially with wetland managers across the nation taught him about system complexity and the challenges of decision-making.

Program Highlights

WWA Annual Meeting & Social

Tuesday, February 23, 6:00-9:00 PM  
Location: Turtle-Bear Clan Ballroom

Thank you to Oneida Nation for their generous sponsorship of this event.

This fun event kicks off Wisconsin Wetlands Association's 21st Annual Wetlands Conference with plenty of time for catching up with your wetland colleagues and friends while enjoying light snacks and a cash bar. Hear highlights from WWA's work in 2015 during a brief annual membership meeting. Savor the sights and sounds of the Oneida Nation Smoke Dancers, who will showcase years of Haudenosaunee culture through dance. You don't want to miss this free event.

Career Development & Continuing Education in Wetland Science

Wednesday, February 24, 12:40-1:20 PM  
Location: Iroquois Ballroom

Wetland scientists from a variety of backgrounds will address challenges and opportunities facing students, young professionals, and people considering a change in the direction of their career in fields related to wetland science. We'll discuss "lessons learned" and the role of networks to support discovery and learning. Moderator Susan Schumacher (We Energies) will allow for ample time for questions and discussion of solutions and strategies to help support advancement in satisfying wetland science careers.

Wetland Book Club: Braiding Sweetgrass

Wednesday, February 24, 3:40-5:00 PM  
Location: Bear Clan Ballroom

Called the work of "a mesmerizing storyteller with deep compassion and memorable prose" (Publishers Weekly) *Braiding Sweetgrass* is poised to be a classic of nature writing. As a botanist, Robin Wall Kimmerer asks questions of nature with the tools of science. As a member of the Citizen Potawatomi Nation, she embraces indigenous teachings that consider plants and animals to be our oldest teachers. Kimmerer brings these two lenses of knowledge together to take "us on a journey that is every bit as mythic as it is scientific, as sacred as it is historical, as clever as it is wise" (Elizabeth Gilbert). Kimmerer is this year's banquet presenter. This book group session will give interested readers the chance for a more in-depth discussion of Kimmerer's writing and ideas.

Banquet Presentation

Wednesday, February 24, 6:30-9:30 PM  
Location: Turtle Clan Ballroom

Thank you to Cardno for their generous sponsorship of this event.

Reciprocity and Restoration: Finding Common Ground between Scientific and Traditional Ecological Knowledge.

Robin Wall Kimmerer

Mother, ecologist, writer, and Professor at SUNY Syracuse, New York

Ecological restoration has met with considerable success in restoring ecosystem structure and function. This talk reminds us that "it's not the land which is broken, but our relationship to land." By integrating scientific and traditional ecological knowledge, might we arrive at strategies for healing relationships as well? This presentation explores the concept and practice of "reciprocal restoration" and offers a model of interweaving indigenous knowledge and philosophy with the tools of western science.

About the Speaker

Dr. Kimmerer is a mother, plant ecologist, writer and SUNY Distinguished Teaching Professor at the SUNY College of Environmental Science and Forestry in Syracuse, New York. As a writer and a scientist, her interests in restoration include not only restoration of ecological communities, but restoration of our relationships to land. Dr. Kimmerer holds a BS in Botany from SUNY ESF, an MS and PhD in Botany from the University of Wisconsin. Of European and Anishinaabe ancestry, Kimmerer is an enrolled member of the Citizen Potawatomi Nation.

Note: The Banquet is a ticketed event open to conference participants and the general public who purchased tickets in advance. If you did not purchase a ticket, please see the conference registration desk for information about ticket availability.



Program Highlights: Symposia

Solutions for Improving the Health of Green Bay

Wednesday, February 24, 2015, 10:40 AM-5:00 PM  
Location: Turtle Clan Ballroom

Thank you to USFWS for their generous support of this symposium.

Green Bay Conservation Partners are improving the health of the Lower Fox River and Green Bay through innovative projects to improve water quality, restore habitat for fish and wildlife, and connect the community to natural resources. The Great Lakes Restoration Initiative (GLRI) has served as a catalyst for additional restoration projects within the Area of Concern and entire watershed, including restoration of the Cat Island Chain in Lower Green Bay. Despite historic losses and present day stresses, the coastal wetlands of Green Bay support a remarkable amount of fish and wildlife diversity. Protection and restoration projects like those focused on the West Shore involve private landowners, public lands, and innovative partnerships. Pilot projects are currently underway to tackle water quality issues resulting from excessive sediment and nutrient loading. There is more work to be done, but we are restoring the health and vitality of a freshwater resource that is integral to our economy, culture, and way of life. This symposium will share how individual project accomplishments roll up to a shared vision of restoring the health of Green Bay.

This symposium was organized by Betsy Galbraith (USFWS) and Nicole Van Helden (The Nature Conservancy).

Symposium Presenters

Betsy Galbraith: USFWS

Robert Howe: UW-Green Bay

Patrick Forsythe: UW-Green Bay

Victoria Lubner: The Nature Conservancy

Mark Walter: Brown County

Patrick Robinson: UWEX & UW-Green Bay

Bobbie Webster: UW-Green Bay

Chuck Larscheid: Brown County

Brian Glenzinski: Ducks Unlimited

Jim Snitgen: Oneida Nation

Kari Hopfensberger: Northeast Wisconsin Land Trust

Jason Petrella: Brown County Parks

Nicole Van Helden: The Nature Conservancy

How Wetland Banking and Wisconsin's In-Lieu Fee Program Can Contribute Wetland Solutions

Thursday, February 25, 9:30 AM-12:00 PM  
Location: Turtle Clan Ballroom

This symposium explores the process for establishing in lieu fee (ILF) programs and wetland banks in the state of Wisconsin, clarifying the distinctions between the two approaches and discussing the role of science in decision-making. Both ILF programs and banks provide wetland compensation for losses permitted by the U.S. Army Corps of Engineers (USACE) and the Wisconsin Department of Natural Resources (WDNR). Information in this symposium will be presented by agency experts and consultants with experience in Wisconsin banking and ILF establishment. Topics will address criteria and processes for site selection, including how and why these criteria are developed and applied; the USACE role, timing, and process for reviewing ILF programs, ILF sites, and wetland banks; and the WDNR role and process for both ILF and bank establishment.

This symposium was organized by Rebecca Graser, USACE.

Symposium Presenters

Leslie Day: USACE

Ann Key: Wetlands and Waterways, LLC

Matt Matrise: WDNR

Pam Schense: WDNR

Barbara Walther: USACE



Wednesday, February 24, 9:00 A.M. - 9:30 P.M.				Sponsored by We Energies	
9:00-10:10		Plenary Session (Turtle & Bear Clans Ballroom)			
9:00		Welcome & Opening comments			
9:20		Conference Keynote: Community Dynamics and Resiliency of Green Bay Coastal Marshes: A Forty Year Perspective <i>H.J. "Bud" Harris, Professor Emeritus of Natural and Applied Sciences at the University of Wisconsin-Green Bay</i>			
10:10-10:40		Break (Wolf Clan Ballroom)			
10:40-12:00		Concurrent Sessions			
		Location: Turtle Symposium: Solutions for Improving the Health of Green Bay Wetlands <i>Moderators: Betsy Galbraith &amp; Nicole Van Helden</i>	Location: Bear Wetland Solutions <i>Moderator: Dreux Watermolen</i>	Location: Iroquois Watershed Approaches <i>Moderator: Tom Bernthal</i>	
10:40		A framework for improving the health of Green Bay wetlands   Galbraith	Wetland and wildlife avoidance and impact minimization in the Van Loon Bottoms   Viernum	The Watershed Approach: A statewide decision support tool for restoring and protecting wetland services   Miller	
11:00		What's so special about Green Bay wetlands?   Howe	Wetland associated with linear utility projects   Halverson	The Watershed Approach: From mapping to functional assessment - GIS tool development   Axler	
11:20		The importance of wetland habitat to Great Lakes migratory fish   Forsythe	Tiedeman pond water quality and trails enhancement project   Steber	Developing a decision support tool for restoration and protection of Great Lakes coastal wetlands   Cooper	
11:40		The role of wetlands in improving water quality   Lubner	Constructed and restored wetlands' relationship to stream restoration using natural channel design   Baker	Putting wetlands to work for your community: A model wetland conservation ordinance   Magyera	
12:00 - 1:30		Lunch — provided   Grand Council Ballroom			
12:40 - 1:20		Career Development & Continuing Education in Wetland Science   Iroquois Ballroom			
1:00 - 1:30		Legislative updates   Turtle Clan Ballroom			
1:30 - 3:10		Concurrent Sessions			
		Location: Turtle Symposium: Solutions for Improving the Health of Green Bay Wetlands <i>Moderators: Betsy Galbraith &amp; Nicole Van Helden</i>	Location: Bear Applications of Wetland Science, in Policy & Regulations <i>Moderator: Kelly Kearns</i>	Location: Iroquois Wetland Assessment <i>Moderator: Nick Miller</i>	
1:30		Restoration of the Cat Island Chain in lower Green Bay   Walter	Solving the wetland identification puzzle with effective off-site review   Walther	The 2011 National Wetland, Condition Assessment   McDavit	
1:50		Opportunities for littoral wetland restoration within the wave shadow of the Cat Island barrier   Robinson	A proposed set of landform descriptors for wetland delineation purposes   Nedland	The 2011-12 Wisconsin Intensification Study: Analyses of wetland condition in the Lake Michigan basin   Marti	
2:10		Coastal wetlands of the east shore: The Point au Sable Nature Reserve in lower Green Bay   Webster	Priority refuge resources of concern as a bottom-up approach to surrogate species selection   Salas	Using invasive species databases to guide wetland monitoring   Granberg	
2:30		Green Bay west shore Northern Pike habitat restoration project   Larscheid	Using floristic quality assessment benchmark survey data to improve wetland restoration plans   Trochlell		
2:50		Restoring the west shore of Green Bay   Glenzinski	Floristic quality and wetland indicator status considerations in northern Wisconsin ephemeral ponds   Little		Tribal Wetland Programs Working Group
3:10- 3:40		Break (Wolf Clan Ballroom)			
3:40-5:00		Concurrent Sessions			
		Location: Turtle Symposium: Solutions for Improving the Health of Green Bay Wetlands <i>Moderators: Betsy Galbraith &amp; Nicole Van Helden</i>	Location: Bear Wetland Book Club: Braiding Sweetgrass <i>Special Guest: Robin Wall Kimmerer</i>	Location: Iroquois Tools for Wetland Identification, Restoration, and Management <i>Moderator: Pat Trochlell</i>	
3:40		Restoring the stream channel downstream of a restored wetland in the South Branch of the Suamico River   Snitgen	Wetland Book Club: Braiding Sweetgrass	USFWS National Wetlands Inventory mapping of five Wisconsin watersheds   Worsham	
4:00		Tools for protecting Green Bay wetlands   Hopfensbeger	Discuss this profound and moving book with its author, Robin Wall Kimmerer, whom Publishers Weekly has called "a mesmerizing storyteller with deep compassion and memorable prose."	Status of the Wisconsin Wetlands Inventory and use for locating specific wetland types for vegetation surveys   Noll	
4:20		Connecting the public to wetlands   Petrella	Prior sign up required and attendees need to have read the book to attend.	Using LiDAR in wetland restoration and management   Braden	
4:40		Panel: Lessons learned and future work to improve the health of Green Bay   Van Helden	Moderators: Charlie Luthin, Curt Meine, & Alice Thompson	WDNR's Surface Water Grant Program: Helping to restore and manage Wisconsin wetlands   Thomsen	
5:00 - 6:30		Poster Session & Cash Bar (Wolf Clan Ballroom)			
6:30 - 9:30		Banquet & Presentation (Ticketed event - Turtle Clan Ballroom)			
7:30		Banquet Presentation: Reciprocity and Restoration: Finding Common Ground Between Scientific and Traditional Ecological Knowledge Robin Wall Kimmerer, Distinguished Teaching Professor and Director, Center for Native Peoples and the Environment, SUNY Syracuse			

Thursday, February 25, 8:30 A.M. - 4:30 P.M.			Sponsored by Stantec
8:30-9:20	Plenary Session (Turtle & Bear Clans Ballroom)		
8:30	Welcome		
8:40	Plenary Address: Incorporating Hydrologic and Geomorphic Variability in the Restoration of Natural Processes: A Half Century of Land Management <i>Experience Across North America, Leigh Fredrickson, Former Director of the Gaylord Laboratory, University of Missouri</i>		
9:20 - 9:30	Break (Wolf Clan Ballroom)		
Sponsored by ATC			
9:30-10:30	Concurrent Sessions		
	<b>Location: Turtle</b> Symposium: How Wetland Banking and Wisconsin's In-Lieu Fee Program Can Contribute Wetland Solutions <i>Moderator: Rebecca Graser</i>	<b>Location: Bear</b> Wetland Case Studies II <i>Moderator: Jim Ruwaldt</i>	<b>Location: Iroquois</b> Wetlands and People I <i>Moderator: Travis Olson</i>
9:30	Solutions to authorized wetland loss: Compensatory wetland mitigation   <b>Walther</b>	Wetland restoration in Milwaukee's Menomonee Valley: Lessons learned   <b>Marek</b>	The Wetlands Reserve Easement Program in Wisconsin: Building on a legacy   <b>Kidd</b>
9:50	Everything you need to know about wetland banking and in-lieu fee programs   <b>Day</b>	Engineered ecosystems: A cyborg approach to littoral wetland restoration of Grand Lake St. Marys   <b>Pfeiffer</b>	Assessing Wisconsin Extension educators' potential roles in community level wetland issues   <b>Kies</b>
10:10	Wetland mitigation bank site selection: Advising prospective buyers   <b>Key</b>	Persistence & partnership benefit wetland for private and public neighbors   <b>Pfost</b>	Implementing a citizen-based wetland monitoring program in the Milwaukee County Park System   <b>Robson</b>
10:30-11:00	Break (Wolf Clan Ballroom)		
Sponsored by Ho-Chunk Nation			
11:00-12:00	Concurrent Sessions		
	<b>Location: Turtle</b> Symposium: How Wetland Banking and Wisconsin's In-Lieu Fee Program Can Contribute Wetland Solutions <i>Moderator: Rebecca Graser</i>	<b>Location: Bear</b> Wetland Case Studies II <i>Moderator: Jim Ruwaldt</i>	<b>Location: Iroquois</b> Wetlands and People II <i>Moderator: Travis Olson</i>
11:00	In lieu fee programs and wetland banks: Similarities and differences in the review process   <b>Day</b>	Wild rice restoration planning in the St. Louis River Estuary   <b>Prancus</b>	"This vee of sandhill cranes": Using poetry to express our human connection to wetlands   <b>Thompson</b>
11:20	WDNR's role in wetland mitigation and the mitigation banking process   <b>Schense</b>	Miller Creek Wetland Restoration Project   <b>Waupochick</b>	Working from the ground up: Engaging individuals and communities in wetland conservation   <b>Williamson</b>
11:40	The infrastructure behind watershed-based decisions of an in lieu fee program   <b>Matrise</b>	A wetland and landscape restoration case study from the urbanized landscape of Northeastern Illinois   <b>Bart</b>	Fascinating species of Wisconsin wetlands to engage public interest   <b>Skawinski</b>
12:00 - 1:30	Lunch (provided - Grand Council Ballroom)		
Sponsored by J.F. Brennan			
1:30 -4:30	Field Trips & Working Groups		
	Working Groups		
	Practitioners Working Group Location: Turtle Clan Ballroom <i>Moderator: James Havel</i>		Finding Solutions to Non-native <i>Phragmites</i> Location: Bear Clan Ballroom <i>Moderators: Brock Woods &amp; Jason Granberg</i>
	This session offers an opportunity for wetland practitioners—including consultants, federal, state, and local regulators, land managers, and others—to discuss current issues relevant to their daily work.		This session is an opportunity for everyone concerned about non-native <i>Phragmites</i> in Wisconsin to ask questions and discuss how best to contain this troublesome subspecies.
	Field Trips		
	All field trips will depart from the hotel main entrance. Prior sign up required; check at registration desk for remaining availability.		
	Unique Collections at UW-Green Bay's Cofrin Center for Biodiversity: The Richter Museum & Fewless Herbarium <i>Thank you to Wisconsin Public Service Foundation for their generous sponsorship of this trip.</i>	Finding Solutions for a Critical Coastal Wetland: Point au Sable Nature Preserve <i>Thank you to Hey &amp; Associates for their generous sponsorship of this trip.</i>	Restoration of an Oneida Headwater Wetland Complex: Coyote Run <i>Thank you to Midwest Access Solutions for their generous sponsorship of this trip.</i>

Program Highlights: Poster Session

Posters will be available for viewing 8:00 AM - 4:30 PM on Wednesday and Thursday in the Wolf Clan Ballroom. The Poster Session, when authors will be present to discuss their posters, will be held Wednesday, 5:00–6:30 PM. Thank you to the Cofrin Center for Biodiversity, UW-Green Bay, for their generous sponsorship of this event.

Church, James	Amphibian dynamics in forested ephemeral wetlands of Western Wisconsin
Curran, Melissa	The Ridges Sanctuary Orchid Conservation Project
Giese, Erin	Assessing wetland health using breeding birds as indicators
Graham, Grace	A new statewide inventory of springs in Wisconsin
Granberg, Jason	<i>Glyceria maxima</i> identification & distribution
Herrick, Brad	Differential persistence among native species planted in a stormwater retention pond
Ingebritsen, Jeff	USFWS National Wetlands Inventory mapping of five Wisconsin watersheds
Kamke, Kaira	Developing a baseline assessment undergraduate study for effects of a fire regime on invasive wetland flora
Kamke, Kaira	Characterizations of aquatic macroinvertebrate communities in four Central Wisconsin wetlands
Kearns, Kelly	Wisconsin’s regulated wetland invasive plants
Kupsky, Brianna	Identifying establishment and restoration potential of <i>Vallisneria americana</i> in the Lower Bay of Green Bay, WI
McGinley, Paul	A hydrodynamic framework to evaluate the importance of stream corridor topography and wetlands
McIntyre, Susan	Natural succession on a roadside dolomite prairie restoration project and comparison to three remnant sites
Moen, Shawn	Effects of environment, dispersal, and competition on two <i>Bidens</i> species in ephemeral pond communities
Nieset, Julie	Compilation of 28 years of wetland delineation and monitoring in Illinois. . . and counting
Reif, Roberta	Assessment of <i>Phragmites australis</i> treatment at Point au Sable Natural Area using aerial imagery
Skawinski, Paul	Aquatic plants under the ice: Who’s down there?
Skawinski, Paul	<i>Chara brittonii</i> : A rare species of Wisconsin fens
Teber, Tarek	Speciation, seasonal variations and export fluxes of nutrients from the urbanized lower Milwaukee River
Vujanovic, Michael	Paleolimnological indicators infer 6,300 years of change in Volo Bog, a <i>Sphagnum</i> wetland
Waechter, Zachary	Misapplications of hydrologic indicators using the Midwest and Northcentral Northeast regional supplements
Wiley, Chandra	Environmental characteristics’ effect on forested ephemeral wetland diversity
Winfield, Anna	Drivers of hydroperiod in ephemeral and permanent wetlands

Program Highlights: Field Trips

Thursday, February 25, 1:30-4:30 PM

Pre-registration for field trips was required. Please see the registration desk if you will not attend a field trip for which you signed up so that your space can be freed up for someone on the waiting list. If you did not pre-register and would like to attend, please see the registration desk to find out if space might be available.

**Please dress warmly and wear sturdy boots. Field trips will run in almost any weather (with the exception of hazardous conditions). All field trips will depart by bus at 1:30 PM from the main hotel entrance. Please arrive 10 minutes early to board the appropriate bus.**

Unique Collections at UW-Green Bay’s Cofrin Center for Biodiversity: The Richter Museum and Fewless Herbarium

**Trip Leaders:** Tom Erdman, Curator of The Richter Museum, and Jay Horn, Curator of the Fewless Herbarium, Cofrin Center for Biodiversity at UW-Green Bay

**Thank you to Wisconsin Public Service Foundation for their generous sponsorship of this field trip.**

This field trip will offer a glimpse into two renowned collections at the UW-Green Bay Cofrin Center for Biodiversity: The Richter Museum of Natural History and the Fewless Herbarium. The Richter Museum includes collections of all locally breeding bird species and most mammal, reptile, amphibian, and fish species. The Fewless Herbarium houses a collection of more than 35,000 dried vascular plant vouchers, of which more than 90% are from Wisconsin. Learn about the unique resources of both of these collections and how they can contribute to your continuing wetland education and efforts. This is an indoor field trip.

Finding Solutions for a Critical Coastal Wetland: Point au Sable Nature Preserve

**Trip Leaders:** Dr. Bob Howe and Bobbie Webster, UW-Green Bay Cofrin Center for Biodiversity

**Thank you to Hey & Associates for their generous sponsorship of this field trip.**

Point au Sable is located on a prominent peninsula along the east shore of Lower Green Bay. It is one of the few unmodified estuarine wetlands in the entire Lake Michigan ecosystem. In 2012, the Cofrin Center for Biodiversity undertook the restoration of coastal areas at Point au Sable, restoring standing water and native vegetation to the 25-acre coastal lagoon at the tip of the point and improving fish spawning habitat in the swales off of Wequiock Creek. Shoreline habitat improvements involved control of *Phragmites australis*. Field trip leaders will describe the project goals, outcomes, and next steps.

Restoration of an Oneida Headwater Wetland Complex: Coyote Run

**Trip Leader:** Tony Kuchma, Oneida Nation

**Thank you to the Midwest Access Solutions for their generous sponsorship of this field trip.**

This field trip will explore nearly 200 acres of restored wetland and upland habitat along the south branch of the Suamico River. Formerly shrub swamp and sedge meadow, the site was ditched and cleared in the 1930s for agriculture and produced row crops until 2003. The restoration included construction of a settling basin and water treatment wetland upstream from the main wetland basin to help buffer the main wetland from the nutrient load coming from the site’s 2,000-acre agricultural watershed. Don’t miss this rare opportunity to visit a restored wetland owned and managed by the Oneida Nation that is typically only accessible to tribal members.

Program Highlights: Working Groups

Tribal Wetland Programs Working Group

Wednesday, February 24, 2:30-3:10 PM

Location: Iroquois Ballroom

Facilitator: Randy Poelma

This working group will provide tribal wetlands staff with the opportunity to more formally interact, share ideas and best practices, and identify opportunities for collaboration and growth. This will be the first meeting of this group and will kick-off efforts to institutionalize the gathering in order to foster long-term collaboration, dialogue, and exchange of information that supports and encourages strategic, effective efforts to restore and care for wetlands in Wisconsin. All tribal wetlands staff are encouraged to attend.

Please note that the following programs are held concurrent with the conference field trips on Thursday afternoon.

Practitioner’s Working Group

Thursday February 25, 1:30-4:30 PM

Location: Turtle Clan Ballroom

Facilitator: James Havel, NES Ecological Services

This session offers an opportunity for wetland practitioners—including consultants, federal, state, and local regulators, land managers, and others—to discuss current issues relevant to their daily work. The agenda will be set with the input of those who participated in a similar working group at recent WWA conferences. Topics covered will likely include what’s new with state wetland policies, including how they have or will change the review and approval of wetland development permits and associated compensatory mitigation requirements.

Finding Solutions to Non-native Phragmites

Thursday February 25, 1:30-4:30 PM

Location: Bear Clan Ballroom

Facilitators: Brock Woods & Jason Granberg, UWEX/WDNR

This session is an opportunity for everyone concerned about non-native Phragmites in Wisconsin to ask questions and discuss how best to contain this troublesome subspecies. Participants will have a brief opportunity to share their own management approaches and lessons learned, learn about other efforts around the Great Lakes to curb this invasive, and participate in a discussion about how to work together to effectively manage it into the future. Because grant funding has allowed WDNR and many partners to do extensive control work in Great Lakes basin counties recently, county and township personnel and local organizations that will do follow-up control work are especially encouraged to attend, but anyone interested in learning about this invasive plant and its control is welcome.

Acknowledgments

More than 100 experts and enthusiasts have contributed to the planning and content of this conference. We would like to thank all of the presenters, field trips leaders, and working group leaders for sharing their expertise with the regional wetland and water resource professional community. While it is not feasible to acknowledge every contributor individually, we offer special thanks below to individuals who have made especially important contributions to this event.

Moderators

Thank you to the following partners for moderating conference sessions:

Tom Bernthal: WDNR

Betsy Galbraith: USFWS

Jason Granberg: WDNR

Rebecca Graser: USACE

James Havel: NES Ecological Services

Kelly Kearns: WDNR

Charlie Luthin: Spring Creek Consulting

Curt Meine: Aldo Leopold Foundation

Nick Miller: The Nature Conservancy

Travis Olson: Wisconsin Coastal Management Program

Patrick Robinson: UWEX & UW-Green Bay

Jim Ruwaldt: WWA Board

Alice Thompson: Thompson & Associates Wetland Services

Pat Trochlell: WDNR

Nicole Van Helden: The Nature Conservancy

Dreux Watermolen: WDNR

Brock Woods: WDNR

Field Trip Leaders

Thank you to the following individuals for their assistance planning, coordinating, and leading our conference field trips to wetlands near Green Bay:

Tom Erdman: Richter Museum, Cofrin Center for Biodiversity, UW-Green Bay

Tony Kuchma: Oneida Nation

Jay Horn: Fewless Herbarium, Cofrin Center for Biodiversity, UW-Green Bay

Bob Howe: Cofrin Center for Biodiversity, UW-Green Bay

Bobbie Webster: Cofrin Center for Biodiversity, UW-Green Bay

Student Scholarship Program Sponsors

Generous contributions made by The Nature Conservancy and the Fund for Lake Michigan allow us to provide financial support to many students who are attending our conference. Students receiving conference scholarships are denoted with a \* in the list of volunteers below.



Volunteers

We thank the following volunteers for assisting us with the many and varied aspects of conference logistics (\* denotes student scholarship recipient):

Monika Blazs

Jacob Cerminar\*

Nick Chiaro\*

Maryssa Fenwick\*

Willson Gaul\*

Nicole Gieldon\*

Lee Hengescht

Jonathan Hill\*

Kaira Kamke\*

Candace Kraft\*

Ethan Robers\*

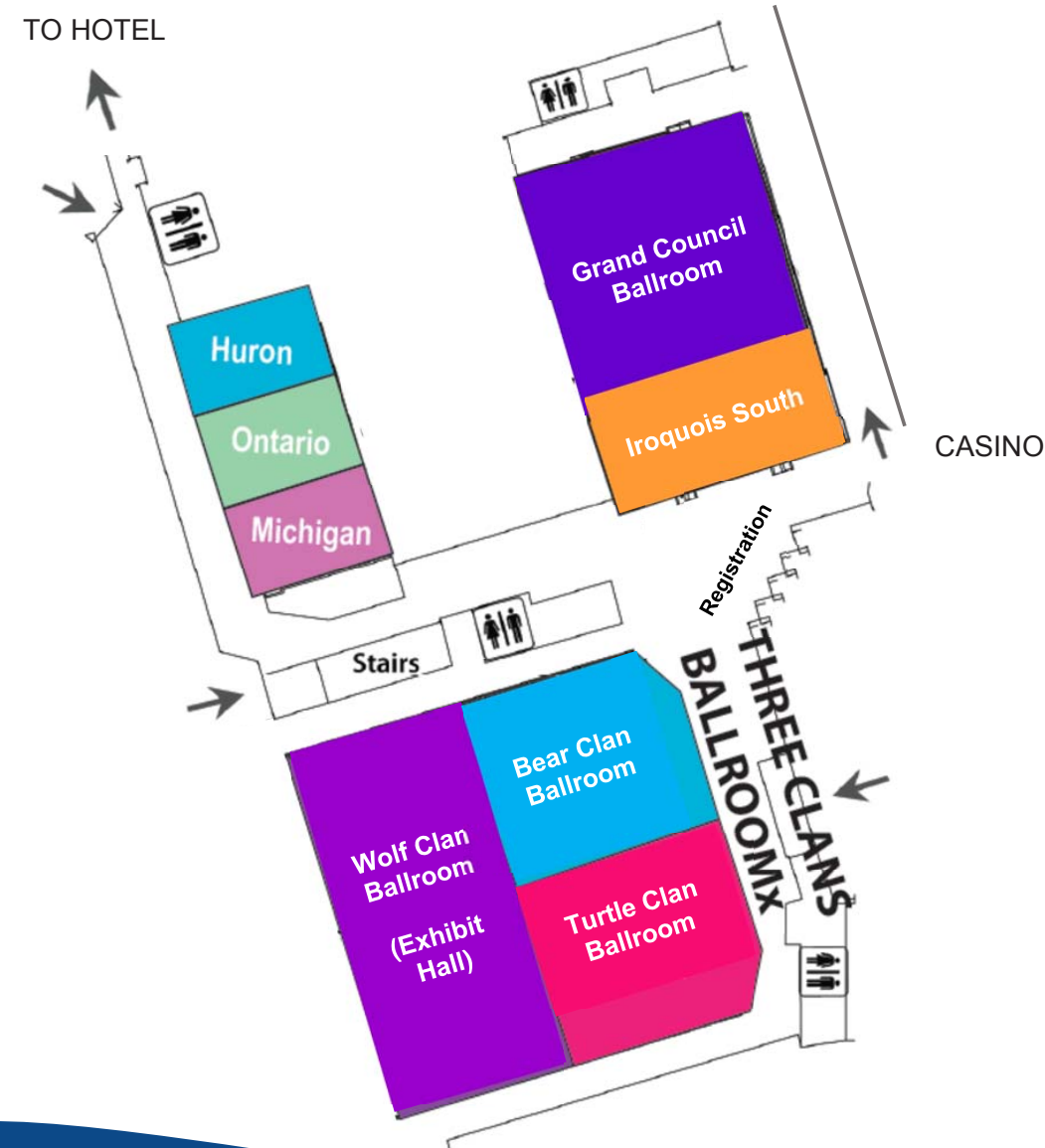
Michael Sinclair\*

Graham Steinhauer\*

Brenna Witek\*



# Map of Radisson Hotel & Conference Center



# Sponsors & Exhibitors

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