



Wetland Science
Conference

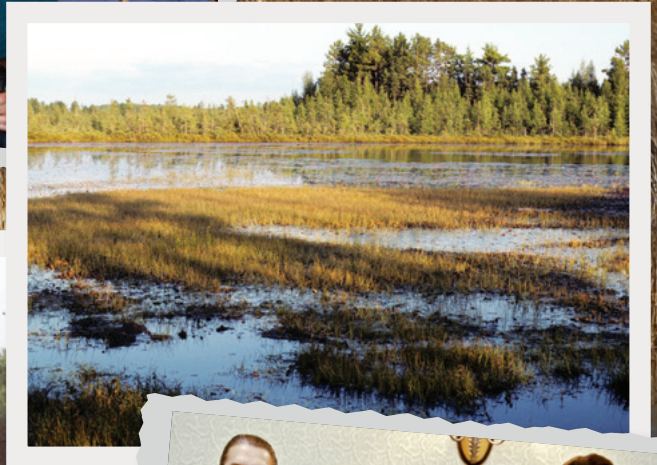
2019

Wisconsin Wetlands
ASSOCIATION

Wetlands: Yesterday, Today, and Tomorrow

February 19-21, 2019

Madison, WI





214 N. Hamilton St., Suite 201
Madison, WI 53703

Phone: 608-250-9971

wisconsinwetlands.org

Email: info@wisconsinwetlands.org

Download the Conference App

Available on IOS and Android devices. If you have questions, stop by the registration desk.

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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 and 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 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 2019. Learn more about World Wetlands Day at ramsar.org.

In 2012, Wisconsin Wetlands Association became the first U.S.-based entity to ever 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) and Chiwaukee Illinois Beach Lake Plain (designated in 2015), and the Lower Wisconsin River (under review).

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Note: You can view abstracts and biographies in our conference app, at the registration desk, or by downloading them in pdf format at conference.wisconsinwetlands.org/abstracts.

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Welcome to

Wetlands: Yesterday, Today, and Tomorrow

Wisconsin Wetlands Association's 24th Annual Wetland Science Conference

Conference Advisory Panel

Tom Bernthal WDNR (retired)

Dan Collins Landscapes of Place

Gail Epping Overholt UW-Madison Arboretum

Aaron Feggestad Stantec

Rebecca Graser USACE

Tracy Hames Wisconsin Wetlands Association

Tod Highsmith WWA Board of Directors

Kelly Kearns WDNR

Lauren Leckwee WCMP

Nick Miller The Nature Conservancy

Travis Olson UW-Extension

Randy Poelma Ho-Chunk Nation

Dan Salas Cardno

Susan Schumacher We Energies

Pat Trochlell WDNR (retired)

Dreux Watermolen WDNR

WWA staff supporting these advisors: Katie Beilfuss and Emily Buck. Logistical support provided by Fiorella Neira of Neira Event Group.

On a summer evening 50 years ago, a handful of people gathered on a front lawn in southern Wisconsin with a vision to create an independent, science-based voice for Wisconsin's wetlands at a time when no one else seemed to care. Out of this initial meeting grew the Wisconsin Wetlands Association (WWA). In 2019, WWA celebrates its Golden Anniversary: 50 years of speaking up for wetlands in Wisconsin. The 2019 conference will kick off celebrations of this momentous milestone.

The 2019 conference theme—Wetlands: Yesterday, Today, and Tomorrow—reflects this anniversary and provides an opportunity for us to look back broadly as a wetland community. Where have we come from, where are we today, and where do we need to go in the next fifty years? How have our work and our issues changed, what have we learned, and what have we accomplished? Where do we need to take our work in the future to achieve what we need for wildlife, for water, and for communities? The conference will address these questions and more. We thank you for your memories of wetlands past, your work today, and your ideas for tomorrow. Wisconsin's wetlands—and people—benefit from your efforts.

Visit the Superior Ballroom to view memorabilia and explore a timeline of WWA milestones from the past 50 years.

MONIKA BLAZS



PATRICK KIRCHNER



Program Highlights: Keynote Speakers

Keynote Address

Wednesday, February 20, 9:20–10:10 am

Location: Michigan Ballroom

Sponsored by Stantec.

Yesterday, Today, and Tomorrow in U.S. Wetland Policy: How Did We Get Here, Where Are We Headed, and Is It Enough?



Jeanne Christie
Christie Consulting Services, LLC

The history of U.S. wetland policy has deep roots going back to the Swamp Land Act of 1850. Over the years, the Clean Water Act, the “no net loss” goal, and other federal and state actions created new protections for wetlands. At the same time, the ‘science’ of wetland restoration was broadening far beyond waterfowl habitat, and national policy reflected the optimistic outlook that wetlands could successfully be restored. Despite the many advances in wetland restoration science, restoration has not yet occurred on a scale large enough to begin to address earlier losses.

So, what’s next? Christie will discuss how we came to be where we are today with respect to wetland policy at federal and state levels. She will share how past experiences may provide important insights on how to redirect and re-energize support and resources for wetlands in Wisconsin and around the country. And she will discuss how new ideas and science can inform and build on decades of pursuing the dream of halting wetland losses and restoring healthy, productive wetlands.

ABOUT THE SPEAKER Jeanne Christie is Principal at Christie Consulting Services, LLC. She was Executive Director of the Association of State Wetland Managers and has a breadth of experience from working with the USDA-NRCS, the USEPA, and WDNR. She has bachelor’s degrees in political science and environmental science from the University of Maine at Presque Isle. Jeanne was the 2007 winner of the National Wetlands Award for Education and Outreach.

Plenary Presentation

Thursday, February 21, 8:40–9:30 am

Location: Michigan Ballroom

Sponsored by Cardno.

The Power of Community: Advancing Wetland Conservation in Wisconsin



Katie Beilfuss
Wisconsin Wetlands Association

Every year, Wetland Science Conference participants remark on how important this annual gathering is for networking and fostering a sense of our shared work as a community. But what does it mean to be a community? Who are “we,” and what is the role each of us plays in this community’s wetland conservation work?

As WWA celebrates our Golden Anniversary, we want to set the stage for the next 50 years of advancing wetland science and practices. In this interactive session, Beilfuss will revisit wetland conservation themes and explore opportunities to strengthen our collective impact.

Whether you work as a consultant or a contractor, study wetlands or restore them, help implement wetland laws or help others understand them, we hope you’ll join us for this important exploration of how we can work together more intentionally and more effectively to advance wetland conservation in Wisconsin.

ABOUT THE SPEAKER Katie Beilfuss directs WWA’s communications and has been the lead staff for the annual Wetland Science Conference for ten years. She manages WWA’s private landowner outreach program and Ramsar initiative. Katie has a bachelor’s degree in environmental studies from Oberlin College and a master’s degree in land resources from UW-Madison’s Gaylord Nelson Institute for Environmental Studies. She has more than twenty years of nonprofit and environmental experience.

Program Highlights: Banquet Presentation

Wednesday, February 20

6:30–9:30 pm

Location: Michigan Ballroom

Sponsored by We Energies.

The Dismal Swamp Revealed: A Pathway to Freedom



**Dr. Cassandra
Newby-Alexander,
Norfolk State
University**

Thirty miles west
of the Atlantic

Ocean is an area that William Byrd III called a “dreadful swamp” because of its size and environmental challenges. This area, lying between the James

River in southeastern Virginia near Norfolk and the Albemarle Sound near Edenton, North Carolina, is now called the Dismal Swamp. The Swamp was a place where many enslaved African Americans from the surrounding counties in Virginia and North Carolina made their escape. Most did not remain in the swamp, instead using it as a route to the Norfolk harbor from which those seeking freedom secured passage aboard steamers headed North.

Once a marshland that spanned one million acres, the Dismal Swamp is now a 110,000-acre wildlife refuge. The refuge also commemorates its role as an escape route and safe place for fugitive slaves. Today, archaeological activity is documenting the maroons,

African Americans who lived in communities inside the swamp for many years.

As the U.S. marks the 400th anniversary of the arrival of the first black slaves in America, Newby-Alexander will share the stories of the Dismal Swamp and the people who passed through and lived there, exploring how this wetland provided critical refuge along the journey to freedom on the Underground Railroad.

ABOUT THE SPEAKER Cassandra Newby-Alexander, Ph.D., is the Dean of the College of Liberal Arts, Professor of History, and Director of the Joseph Jenkins Roberts Center for African Diaspora Studies at Norfolk State University. Her publications focus on Virginia’s African American history and the importance of the waterways in the Underground Railroad. She has also appeared in a number of documentaries and episodes on C-SPAN and serves on numerous boards.

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.



RÉGIS FRANÇOIS GIGNOUX

Program Highlights: Workshops

Pre-registration was required for workshops and capacity is limited. If you did not sign up for a workshop when you registered for the conference, please see the conference registration desk to find out if any workshops have space to accommodate you. If you are signed up for a workshop but can no longer attend, please let the registration desk know.

Don't Talk Like a Scientist

Wednesday, February 20

1:30–3:10 pm

Location: Geneva Ballroom

Instructor: Cindy Crosby, author and communication professional

Conservation Dogs: What's the Sniff All About?

Wednesday, February 20

3:40–5:00 pm

Location: Geneva Ballroom

Instructors: Cory Gritzmacher, Mequon Nature Preserve, and Laura Holder, Midwest Conservation Dogs, Inc.

Biology and Identification of Aquatic Macrophytes

Thursday, February 21

9:30 am–12:00 pm

Location: Geneva Ballroom

Instructor: Paul Skawinski, UW-Stevens Point

Wetland Soils:

An Introduction or Refresher Short Course

Thursday, February 21

1:30 pm–4:30 pm

Location: Geneva Ballroom

Instructors: Pat Trochlell, retired wetland ecologist, and Neil Molstad, former WDNR



Program Highlights: Field Trips

Thursday, February 21

1:30–4:30 pm

Pre-registration was required for field trips and capacity is limited. If you did not sign up for a field trip when you registered for the conference, please see the conference registration desk to find out if any field trips have space to accommodate you. If you are signed up for a field trip but can no longer attend, please let the registration desk know.

Field trips will run in almost any weather (with the exception of hazardous conditions). Please dress warmly and wear sturdy boots. All field trips will depart from the Madison Marriot West Conference Center Entrance at 1:30 pm; please arrive by 1:20 to get checked-in.

The Devastating Flood of Pheasant Branch:

A Tale of Two Ecosystems

Field trip leaders: Tom Bernthal, retired WDNR, and Tom Garn, retired USGS

Sponsored by Midwest Natural Resources.

A Bird Haven in Winter: Goose Pond Sanctuary

Field trip leaders: Mark Martin, Sue Foote-Martin, and Graham Steinhauer, Madison Audubon-Goose Pond Sanctuary

Sponsored by Wisconsin Coastal Management Program.

Explore Natural History Collections at UW-Madison

Field Trip Leaders: Laura Monahan, UW Zoological Museum, and Mary Ann Feist and Ken Cameron, Wisconsin State Herbarium
This is primarily an indoor field trip, but participants will have a 10-minute walk between buildings on the UW-Madison Campus.

Sponsored by Midwest Groundcovers.

WEDNESDAY, February 20, 9:00 am - 9:30 pm

9:00 - 10:10		Plenary Session (Michigan)		Sponsored by Stantec	
9:00		Welcome & Opening comments			
9:20		Conference Keynote: Yesterday, Today, and Tomorrow in U.S. Wetland Policy: How Did We Get Here, Where are We Headed, and Is It Enough? Jeanne Christie, Christie Consulting Services, LLC			
10:10 - 10:40		Break (Superior)		Sponsored by Merjent	
10:40 - 12:00		Concurrent Sessions			
		Location: Wisconsin Watershed Approaches Moderator: Kyle Magyera	Location: Mendota Invasive Species: The Big Picture Moderator: Nicole Staskowski	Special Sessions	
10:40		Wetland restoration and protection decision support: Lower Fox/Green Bay wetlands & water quality Grimm	Wetland first aid toolbox: Strategies to combat invasive species in challenging wetlands Angerhofer	Location: Geneva Career Development & Continuing Education in Wetland Science Moderator: Susan Schumacher	Location: Middleton Tribal Wetland Programs Working Group Facilitator: Randy Poelma (by invitation only) Sponsored by Forest County Potawatomi Foundation
11:00		Wetlands for tomorrow: Maintaining resilient, connected, and functional landscapes as climate changes Miller	Lessons learned in the field: Short-term observations on managing invasive grasses in wetlands using herbicides Loftus		
11:20		The Floodplain Explorer: A decision tool to prioritize floodplain restoration in the Mississippi River Basin Lent	Evaluating the success of restoration and management techniques for prairie fen sites in Michigan McGowan-Stinski		
11:40		The role of wetlands in a watershed approach to restoring the Little Plover River in Wisconsin Gaffield	Invasive species early detection surveys and management recommendations in coastal wetlands of Lake Superior Bates	Legislative/Policy Update Location: Geneva Facilitated by WWA	
12:00 - 1:30		Lunch (provided – Michigan)		Sponsored by GEI Consultants, Inc.	
1:30 - 3:10		Concurrent Sessions			
		Location: Wisconsin Wetland Flora and Plant Communities: ID and Assessment Moderator: Pat Trochlell	Location: Mendota Invasive Species: Species-Specific Control Moderator: Kelly Kearns	Workshop Location: Geneva Don't Talk Like A Scientist **Pre-registration required** Instructor: Cindy Crosby	
1:30		Development of a key to wetland plant communities O'Connor	A cryptic invasion: Lessons learned attempting to control southern cattail (<i>Typha domingensis</i>) in a Midwest wetland system Thompson		
1:50		Wetland floristic quality assessment benchmarks for WI Driftless Area & Southeastern WI Till Plains Ecoregions Marti	Mapping the invasive plant reed sweet mannagrass (<i>Glyceria maxima</i>) using aerial imagery, machine learning, and field reconnaissance Granberg		
2:10		Assessing the effectiveness of vegetative restoration techniques using wetland floristic quality Strojny	Retrofitting three wastewater treatment facilities to eradicate non-native <i>Phragmites</i> in the Chequamegon Bay region Abel		
2:30		Applying FQA methodology to assess restored wetlands: Results from 32 restoration projects Gibson	Results of landscape-scale exotic <i>Phragmites</i> treatments in Wisconsin Kron		
2:50		The new wetland mapping initiative Smith	<i>Phragmites</i> Adaptive Management Framework: Managing <i>Phragmites</i> with science on your side Stanton		
3:10 - 3:40		Break (Superior)		Sponsored by NES Ecological Services	
3:40 - 5:00		Concurrent Sessions			
		Location: Wisconsin Wetland Flora and Plant Communities: Sites and Species Moderator: Dan Collins	Location: Mendota Wetlands and People Moderator: Alison Peña	Workshop Location: Geneva Conservation Dogs: What's the Sniff All About? **Pre-registration required** Instructors: Cory Gritzmacher and Laura Holder	
3:40		Wild rice restoration on the Green Bay west shore Glenzinski	A story is worth a thousand facts: Communicating wetlands issues to future conservationists Vosen*		
4:00		Sod in motion: Moving wet prairie sod to preserve one-half acre of high-quality prairie remnant Poole	Wetland connections between science and poetry Highsmith		
4:20		<i>Cypripedium candidum</i> in the southeast glacial plains of Wisconsin: Distribution, ecology, and threats Weissgerber*	New tools to promote wetland literacy across audiences Beilfuss, K.		
4:40		Fire in forested peatlands of the Upper Great Lakes: Reconstructing the past to protect the future Sutheimer*			
5:00 - 6:30		Poster Session & Cash Bar (Superior)		Sponsored by ENCAP	
6:30 - 9:30		Banquet & Presentation (Ticketed event—Michigan)		Sponsored by We Energies	
7:30		Banquet Presentation: The Dismal Swamp Revealed: A Pathway to Freedom Dr. Cassandra Newby-Alexander, Professor of History, Dean of the College of Liberal Arts, and Director of the Joseph Jenkins Roberts Center for African Diaspora Studies, Norfolk State University			

THURSDAY, February 21, 8:30 am - 4:30 pm

8:30-9:20	Plenary Session (Michigan)	<i>Sponsored by Cardno</i>
8:30	Welcome	
8:40	Plenary Address: The Power of Community: Advancing Wetland Conservation in Wisconsin Katie Beilfuss, Outreach Programs Director, Wisconsin Wetlands Association	

9:30-10:30 Concurrent Sessions

	Location: Wisconsin Wetlands: Yesterday, Today, and Tomorrow: The Big Picture Moderator: Gail Epping Overholt	Location: Mendota Wetland Restoration Moderator: Susan Schumacher	Workshop Location: Geneva Biology and Identification of Aquatic Macrophytes **Pre-registration required** Instructor: Paul Skawinski
9:30	Promoting long-term stewardship of the Waubesa Wetlands watershed Herbst*	In-lieu fee wetland mitigation in Wisconsin: Finding competitive restoration opportunities Jaros	
9:50	WWA's wetland leadership extends to the Carolinas: The emergence of the Carolina Wetlands Association England	Riparian wetland restoration site investigation, then and now: Evolving site investigation methods and consideration of climate change Hjort	
10:10	A risky climate for cranes, wetlands, and our world Beilfuss, R.	Habitat heterogeneity and wetland-dependent bird use in Wisconsin's Glacial Habitat Restoration Area Loken*	

10:30 -11:00 Break (Superior) 11:00 -12:00 Concurrent Sessions

Sponsored by Fund for Lake Michigan

	Location: Wisconsin Wetlands: Yesterday, Today, and Tomorrow: Sites Over Time Moderator: Travis Olson	Location: Mendota Wetlands and Water Quality Moderator: Nick Miller	(Biology and Identification of Aquatic Macrophytes, continued)
11:00	50 years of wetland restoration and protection at Goose Pond Sanctuary Martin	Recovery of an AOC: Using vegetation and wildlife communities to evaluate the present and look to the future Prestby	
11:20	Dunn's Marsh: A brief history of stormwater / wetland modifications from 1836 to present and what's next Eilertson	Wetlands and agriculture: Working together to improve water quality Houghton	
11:40	Middleton's Pheasant Branch and trail system: Past, present, and future Steber	Identifying limits to denitrification in constructed wetlands Izadmehr*	

12:00 - 1:30 Lunch (provided – Michigan)

Sponsored by J.F. Brennan Company

1:30 - 4:30 Working Groups, Workshop, and Field Trips

WORKING GROUP & WORKSHOP

Practitioners' Working Group Location: Wisconsin Facilitator: Eric Parker	Fire and Management in Wetland Ecosystems: Identifying Priorities for Information Sharing and Research Location: Mendota Facilitators: Craig Maier and Jack McGowan-Stinski	Wetlands and Water Quality in Wisconsin: Where Have We Been, and Where Do We Go from Here? Location: Middleton Facilitator: Aaron Marti	Wetland Soils: An Introduction or Refresher Short Course Location: Geneva Instructors: Pat Trochlell and Neil Molstad **Pre-registration required**
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FIELD TRIPS

Pre-registration is required. Meet at the Conference Center Entrance at 1:20 to depart by bus.

The Devastating Flood of Pheasant Branch: A Tale of Two Ecosystems Field Trip Leaders: Tom Bernthal and Herb Garn <i>Sponsored by Midwest Natural Resources.</i>	A Bird Haven in Winter: Goose Pond Sanctuary Field Trip Leaders: Mark Martin, Sue Foote-Martin, and Graham Steinhauer <i>Sponsored by Wisconsin Coastal Management Program.</i>	Explore Natural History Collections at UW-Madison Field Trip Leaders: Laura Monahan, Mary Ann Feist, and Ken Cameron <i>Sponsored by Midwest Groundcovers.</i>
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Green Shading = Pre-registration required

WE WANT YOUR FEEDBACK!

Please complete the conference evaluation coming to your email inbox. Thank you!



Program Highlights: Special Sessions and Working Groups

Career Development & Continuing Education in Wetland Science

Wednesday, February 20

10:40–11:40 am

Location: Geneva Ballroom

Facilitator: Susan Schumacher,
We Energies

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 will allow ample time for questions and discussion of solutions and strategies to help support advancement in satisfying wetland science careers.

Tribal Wetland Programs Working Group

Wednesday, February 20

10:40–11:40 am

Location: Middleton Room

Facilitator: Randy Poelma,
Ho-Chunk Nation

Sponsored by Forest County Potawatomi Foundation.

This session 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 working group contributes to efforts 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. **By invitation only.**

Legislative/Policy Update

Wednesday, February 20

11:40 am–12:00 pm

Location: Geneva Ballroom

Facilitators: Brian Vigue, Erin O'Brien,
and Tracy Hames, Wisconsin Wetlands
Association

Join WWA policy staff for a briefing on our budget and policy agenda for the current legislative session, an overview of the new Legislature and Governor, the newly created Wetland Study Council, and wetland-related bills to watch. We'll also discuss how you can stay informed and engaged in WWA's efforts to help Wisconsin adopt more pro-active and comprehensive strategies to protect, restore, and manage wetlands and watersheds.

USFWS



Fire and Management in Wetland Ecosystems: Identifying Priorities for Information Sharing and Research

Thursday, February 21

1:30–4:30 pm

Location: Mendota Ballroom

Facilitators: Craig Maier, Tallgrass Prairie and Oak Savanna Fire Science Consortium, and Jack McGowan-Stinski, Lake States Fire Science Consortium

Do you use fire as a management tool in your work with wetlands? Why or why not? What issues are limiting your use of fire in your wetland management? This facilitated session, designed to support networking and exchange among participants, will provide an opportunity for practitioners and researchers to discuss and document questions and issues that are limiting prescribed fire in wetland restoration and management in Wisconsin. The outcomes of this discussion will be used to inform the Fire Science Exchange Network's future education and outreach activities across Wisconsin and to inform researchers, agencies, and other partners involved in developing or funding fire research in the Upper Midwest.

Wetlands and Water Quality in Wisconsin: Where Have We Been, and Where Do We Go from Here?

Thursday, February 21

1:30–4:30 pm

Location: Middleton Room

Facilitator: Aaron Marti, WDNR

Gather with other academics, conservation professionals, ecosystem managers, and more for a dialogue on wetlands and water quality. The group will discuss what we don't know, are unsure of, or should further verify in order to document research needs with the goal of stimulating research questions and action regarding wetlands and water quality. Despite advances in knowledge through decades of basic and applied research in the Upper Midwest and beyond, many questions remain regarding the connection of wetlands to the water quality of "traditional" waters, and the water quality within wetlands themselves. In addition, there is growing recognition of the role that wetland soils play in regulating these ecosystem services—but there are still many questions. The goal of this group is to create connections and foster collaborative field and funding opportunities to address these research needs.

Practitioners' Working Group

Thursday, February 21

1:30–4:30 pm

Location: Wisconsin Ballroom

Facilitator: Eric Parker, Heartland Ecological Group

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 was set with input from those who have participated in similar sessions at previous WWA conferences.

Program Highlights: Poster Session

Posters will be available for viewing from 8:00 am on Wednesday through 12:00 pm on Thursday in the Superior Ballroom. The Poster Session (when authors will be present to discuss their posters) will be held Wednesday, 5:00–6:30 pm.

Sponsored by ENCAP.

The code following the authors name is the location where the presenter's poster can be found. Asterisks indicate the presenter is a participant in the student presentation competition.

Arneson, Jade *	(9)	Restoration of wild rice (<i>Zizania palustris</i> L.) at coastal wetlands in the Bay of Green Bay, Lake Michigan
Belleville, Lexi *	(20)	<i>Typha</i> × <i>glauca</i> and waterfowl food availability in Great Lakes coastal wetlands
Bergen, Erin *	(19)	Drivers of non-native fish species richness and distribution in the Laurentian Great Lakes
Clark, Olivia *	(18)	Battle of the Titans: Can aggressive natives hold their own against reed canarygrass?
Hall, Anna *	(5)	Vegetation changes within the St. Louis River Estuary
Himmler, Kurtis	(17)	The effects of hybrid cattail invasion on wetland bird community composition and moist-soil seed production
Johnson, Rachel *	(4)	A watershed approach to Waubesa Wetlands: Today and tomorrow
Kretlow, Amy	(16)	Graceful cattail (<i>Typha laxmannii</i>) discovered in Southeast Wisconsin
Lewandowski, Eva	(1)	The Wisconsin Citizen-based Monitoring Network: 15 years of partnership
Manning, Nicholas	(13)	The effects of road salt on the growth and survival of freshwater snails (<i>Helisoma</i> sp.)
Mosca, Vince	(2)	Regional significance of the Hackmatack National Wildlife Refuge: Wisconsin and Illinois
Nichols, Al *	(12)	What's under the surface: Ecosystem characteristics predict growth and shell morphology in painted turtles (<i>Chrysemys picta</i>)
Niosi, Olivia *	(15)	Spatial analysis of nutrients affecting <i>Typha</i> -invaded wetland
O'Brien, Maggie	(14)	How does the time since invasion by hybrid cattail affect the diversity of a wetland seed bank?
Pearce, Tom	(3)	Wisconsin Wetland Conservation Trust: 2019 updates for WDNR's in-lieu fee mitigation program
Ray, Shelly *	(6)	Bathymetric mapping of lagoonal wetlands in the Apostle Islands National Lakeshore
Stern, Jessica *	(10)	Comparing vegetation metric robustness using a standardized protocol across four regions of the United States
Toczydlowski, Rachel*	(9)	Drift happens: The genetic structure of jewelweed reflects fragmentation of lowland forests and marshes *
Turner, Jessica *	(8)	Contrasting responses in ecosystem carbon cycling for two Northern Wisconsin fens
Wilcox, Kayla *	(11)	A baseline assessment to develop an appropriate restoration regime for the management and restoration of wetlands

Thank you!

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, workshop 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 thanks below to individuals who have made especially important contributions to this event.

Moderators

Thank you to the following partners for moderating conference sessions:

Dan Collins Landscapes of Place
Gail Epping Overholt UW-Madison Arboretum
Kelly Kearns WDNR
Kyle Magyera Wisconsin Wetlands Association
Nick Miller The Nature Conservancy
Travis Olson UW-Extension
Alison Peña Wisconsin Wetlands Association Board Chair
Susan Schumacher We Energies
Nicole Staskowski Cardno
Pat Trochlell WDNR (retired)

Field Trip Leaders

Thank you to the following individuals for their assistance with planning, coordinating, and leading our conference field trips:

Tom Bernthal WDNR (retired)
Ken Cameron Wisconsin State Herbarium
Mary Ann Feist Wisconsin State Herbarium
Sue Foote-Martin Madison Audubon Society-Goose Pond Sanctuary
Herb Garn USGS (retired)
Mark Martin Madison Audubon Society-Goose Pond Sanctuary
Laura Monahan UW Zoological Museum
Graham Steinhauer Madison Audubon Society-Goose Pond Sanctuary

Student Presentation Competition

Thank you to Dreux Watermolen, WDNR, for initiating and organizing the student presentation competition, to everyone who judged the student oral and poster presentations, and to the students who participated.

Student Scholarship Program Sponsors

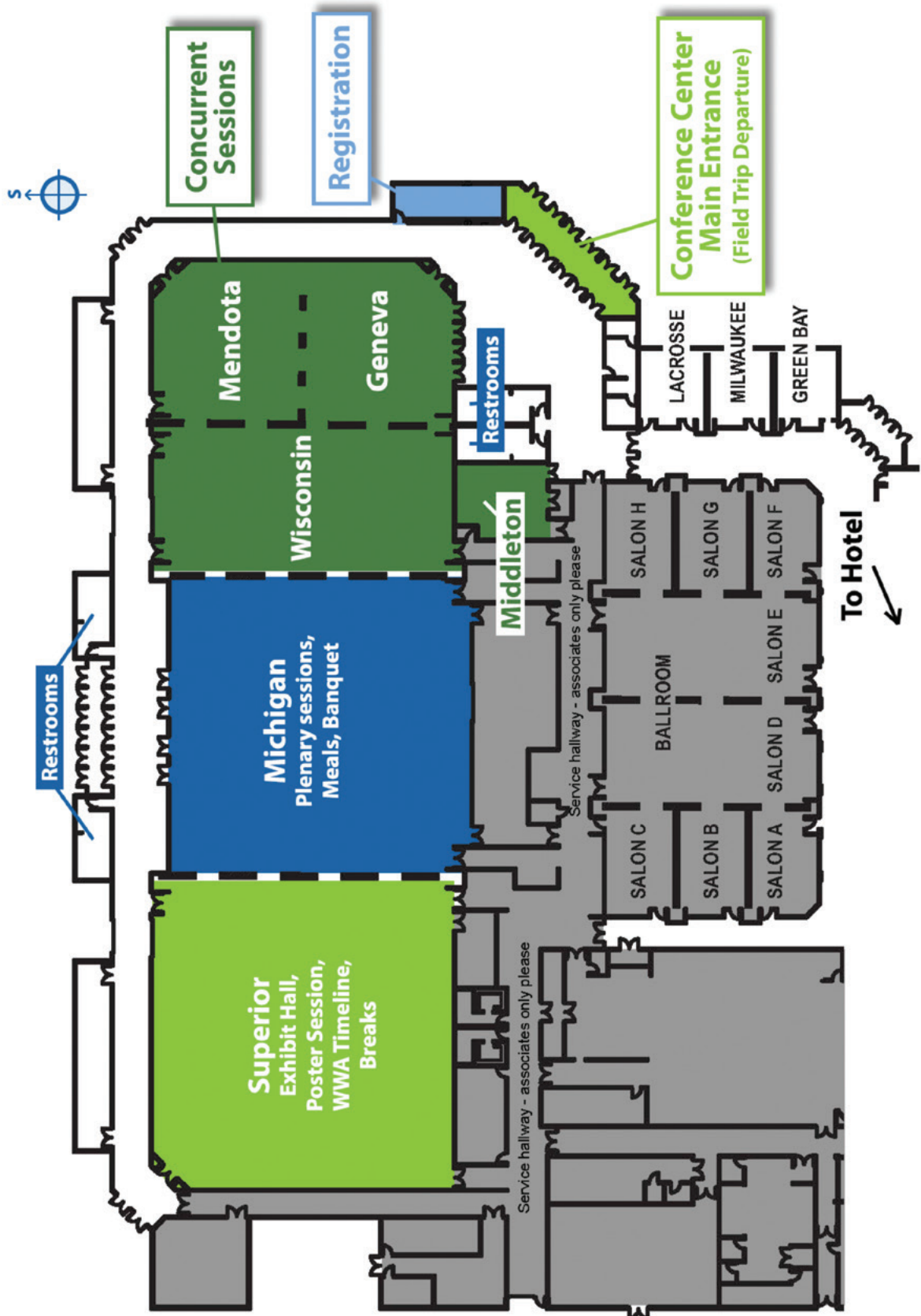
Generous contributions made by The Nature Conservancy and Heartland Ecological Group allowed us to provide financial support to many students who are attending our conference. Students receiving conference scholarships are denoted with a * in the list of volunteers below.



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

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