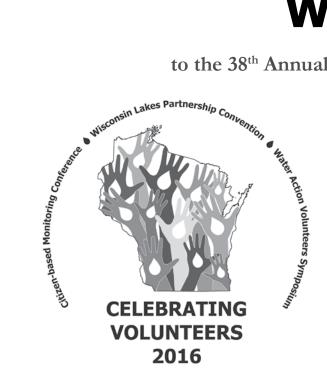
# 2016 Agenda





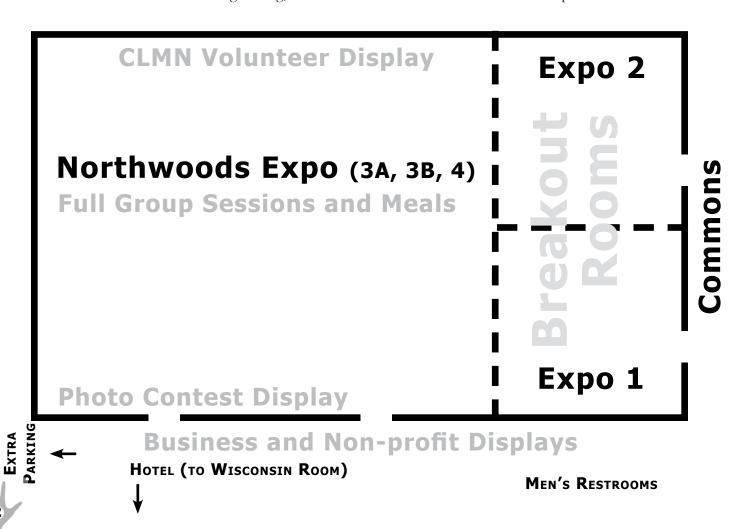
### Welcome

#### to the 38th Annual Wisconsin Lakes Partnership Convention



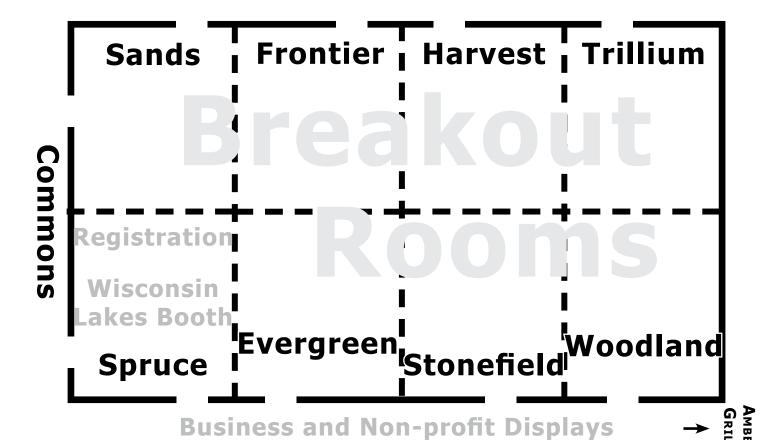
The 2016 Lakes Partnership Convention is a celebration of the volunteer spirit that helps make Wisconsin great. This year we mark the thirty-year anniversary of the Citizen Lake Monitoring Network (CLMN), a proven effort to engage volunteers to collect critical information about our lakes. Lake water quality is only one dimension of the CLMN effort, and there are many more ways to gather ecological data both in the water and across the landscape. We invite you to take time and learn about these diverse projects, both new and old. The information collected about watershed health will make it easier to paint a full picture of the complex web of life that surrounds a lake. We've also invited two additional meetings to join us for 2016: the Water Action Volunteers (WAV) Symposium and the Wisconsin Citizen-based Monitoring Network Conference. WAV is to rivers and streams what CLMN is to our lakes, and they are celebrating their 20th anniversary this year. The Wisconsin Citizenbased Monitoring Network provides coordination, communication,

and recognition, along with technical and financial resources, to citizens and scientists working together to monitor and evaluate Wisconsin's natural resources, from plants and animals to water, weather and soils. Our agendas will overlap and blend on Friday, April 1; you can learn more about this overlapping agenda starting on page 32, and read about these citizen science programs on page 39. There's a lot to learn and many people to talk to and hear from. Welcome to the gathering, and welcome to the Wisconsin Lakes Partnership!



### **Table of Contents**

Map of Convention Center	2-3
Convention At-a-glance	4-5
Wednesday Agenda (Workshops/Special Sessions/Welcome Reception)	6-7
Thursday Agenda	8-9
Friday Agenda	10-12
Saturday Agenda	13
Wednesday Special Technical Sessions	
Wednesday Evening Welcome Reception	15
Thursday Concurrent Session Descriptions16-	
Keynote and Guest Speaker Biographies	18-19
Thursday Poster Session Titles/Presenters	
Thursday Evening Events	29
Friday Concurrent Session Descriptions	
Friday Evening Events	
Saturday Concurrent Session Descriptions	45-47
Post-convention Online Archive, Save the Date-2017, PartnersB	ack Cover



3



### **Lakes Convention At-A-Glance**

		<i>,</i> , , , , , , , , , , , , , , , , , ,	Agenda subject to change without notice.
	<u>Time</u>	<u>Location</u>	EVENT
	8:00am-5:00pm <b>9:00am-12:00pm</b>	Spruce Breakout Rooms	Registration and Wisconsin Lakes booth Open <b>Pre-convention Workshops</b> (pre-registration required)
a	10:15-10:45am	Commons	Refreshment Break
Ü	12:00-6:00pm	Commons	Exhibits Open
S	12:00-1:30pm	Northwoods Expo	Pre-registered Lunch or Lunch on your own
U	1:30-4:30pm	<b>Breakout Rooms</b>	Pre-convention Workshops (pre-registration required)
	3:00-3:30pm	Commons	Refreshment Break
	4:45-5:45pm	<b>Breakout Rooms</b>	Special Technical Sessions
Wednesday	5:45-7:00pm		Networking Time (Dinner on your own)
	EVENING EVENT		
	7:00-11:00pm	Woodland	Wisconsin Lakes Partnership Welcome Reception
			(Included with Thursday registration)
	6:45am-7:45am	Wisconsin Room	Sunrise Yoga
	7:30am-5:00pm	Spruce	Registration and Wisconsin Lakes booth Open
	8:00am-6:00pm	Commons	Exhibits Open
	8:00-8:50am	<b>Breakout Rooms</b>	Concurrent Sessions
	9:00-10:45am	Northwoods Expo	Welcome and Kickoff Keynote
ल	11:00am-12:00pm	<b>Breakout Rooms</b>	Concurrent Sessions
Ö	12:15-1:30pm	Northwoods Expo	Lunch & Speaker
Thursday	1:45-2:25pm	<b>Breakout Rooms</b>	Concurrent Sessions
	2:35-3:15pm	<b>Breakout Rooms</b>	Concurrent Sessions
	3:15-3:45pm	Commons	Refreshment Break
	3:30-5:00pm	Commons	Lakes Poster Presentations
$\vdash$	5:00-6:00pm		Networking time - visit exhibitors and educational displays
	5:30-8:00pm	Northwoods Expo	Lake Stewardship Banquet & Awards Ceremony
	_		(Registration required or \$25 at the door)
	EVENING EVENT 8:00-11:00pm	Woodland Room	Lakes Partnership After Hours: Song Swap/Poetry Slam
	0.00-11.00pm	woodiand Room	Lakes Facule 13mp Arter 110drs. 30mg 3wap/ 10etry 3fam
	6:45am-7:45am	Wisconsin Room	Sunrise Yoga
	7:30am-1:30pm	Spruce	Registration Open
	8:00am-1:30pm	Commons	Exhibits Open
	8:00-8:40am	<b>Breakout Rooms</b>	Concurrent Sessions
>	8:50-9:50am	<b>Breakout Rooms</b>	Concurrent Sessions
d	10:00-10:30am	Commons	Refreshment Break
	10:30-11:30am	<b>Breakout Rooms</b>	Concurrent Sessions
	11:45am-1:15pm	Northwoods Expo	Lunch and Keynote Speaker Alyssum Pohl
Frid	1:30-4:30pm	<b>Breakout Rooms</b>	Post-convention Workshops (pre-registration required)
	4 40 4 40	D 1 D	



1:30-2:30pm

2:30-3:00pm

3:00-4:00pm

**Concurrent Sessions** 

**Concurrent Sessions** 

Refreshment Break

**Breakout Rooms** 

**Breakout Rooms** 

Commons

### A Blended Agenda

Beginning with Friday's agenda, the Wisconsin Lakes Partnership Convention will combine with the annual Water Action Volunteers (WAV) Symposium and the Wisconsin Citizen-based Monitoring (CBM) Network Conference. Since 2006 the WAV coordinators have hosted an annual statewide gathering for citizen stream monitors, local program coordinators and others interested in volunteer stream monitoring. The CBM Network has held six conferences since 2004; their conference is an opportunity to share findings from recent citizen science projects and foster connections and information sharing across the state's citizen-based monitoring community. The CBM Network will have a special kickoff session with Ben Zuckerberg on Friday morning in the Northwoods Expo at 8:50 (Lakes Partnership and WAV folks are welcome to join this kickoff session or attend any of the six concurrent sessions during that time slot). After the CBM kickoff, the three meetings will merge for the balance of the day and all of the attendees will hear from Alyssum Pohl during our luncheon keynote. After Friday afternoon's sessions and workshops, the Lakes Partnership Convention will conclude and the CBM Conference and WAV Symposium will continue into the evening with poster sessions, an awards banquet, and Saturday sessions, concluding at 2:30 pm on Saturday, April 2.

# CBM Conference & Water Action Volunteers WAV Symposium At-A-Glance

Agenda subject to change without notice.

	<u>Time</u>	<u>Location</u>	EVENT
	6:45am-7:45am	Wisconsin Room	Sunrise Yoga
	7:30am-1:30pm	Spruce	Registration Open
	8:00am-1:30pm	Commons	Exhibits Open
ı	8:50-9:50am	Northwoods Expo	Citizen-based Monitoring Welcome - Ben Zuckerberg
	10:00-10:30am	Commons	Refreshment Break
	10:30-11:30am	<b>Breakout Rooms</b>	Concurrent Sessions
	11:45am-1:15pm	Northwoods Expo	Lunch and Keynote Speaker Alyssum Pohl
	1:30-4:30pm	<b>Breakout Rooms</b>	Afternoon Workshops (pre-registration required)
	1:30-2:30pm	<b>Breakout Rooms</b>	Concurrent Sessions
	2:30-3:00pm	Commons	Refreshment Break
	3:00-4:00pm	<b>Breakout Rooms</b>	Concurrent Sessions
	4:00-5:30pm	Commons	CBM/WAV Poster Presentations
	5:00-6:00pm	Spruce	WAV Local Coordinators Meet and Greet
	6:00-8:00pm	Expo 3	CBM/WAV Award Ceremony

aturday

7:30am Commons Registration Open

8:00-9:30am Expo 2/Trillium Concurrent Sessions

9:30-10:00am Commons Refreshment Break

10:00-11:15am Expo 2/Trillium Concurrent Sessions

11:30am-12:30pm Expo 2/Trillium Concurrent Sessions

12:30 2:30pm Expo 3 Specialist Office Hours and Bu

12:30-2:30pm Expo 3 Specialist Office Hours and Buffet Lunch

### Wednesday Lakes Agenda

March 30, 2016

Registration Open 8:00 am-5:00 pm Spruce

Morning Workshops - Pre-registration Required			
Room -	Woodland	Ехро 2	Wisconsin
9:00 am-12:00 pm	Beginner Lake District Commissioner Training Eric Okson	Healthy Lakes 101 Pamela Toshner Healthy Lakes team members	Using WordPress to Build your Organization's Website Larry Bresina
10:15-10:45 am	Refreshment Break in Commons		
12:00-1:30 nm	Lunch on your	own (or pre-registered lunch in No	rthwoods Expo)

	Afternoon Workshops - Pre-registration Required			
Room	Woodland	Ехро 2	Wisconsin	Off-site Brewery
1:30-4:30 pm	Advanced Lake District Commissioner Training Philip Freeburg Dan Hill	Healthy Lakes 102 Pamela Toshner Healthy Lakes team members	Introduction to Lake Eutrophication Modeling and Using WiLMS Paul McGinley	Groundwater and Breweries Bill DeVita  Meet in Commons entry at 1:15 pm for shuttle bus.
3:00-3:30 pm		Refreshment Break in Commons		

### **Explore your Options**

This year's lakes convention includes blocks of concurrent sessions arranged by the following topics, which we call "streams." Follow one stream as it winds through the convention or discover a new path by attending sessions from many streams.

#### **Thursday Streams**

- Aquatic Invasive Species
- Citizen Science
- Lake Research
- Planning, Management and Implementation
- Ecology
- Lake Management Policy

#### Friday Streams

- Aquatic Invasive Species
- Citizen Science
- Healthy Lakes
- Streams, Rivers and Watersheds
- Ecology
- Community-driven Resource Management
- Monitoring Beyond the Lake (WAV)
- CBM Invasive Species
- Tools for Engagement





### Wednesday Lakes Agenda

Exhibits Open 12:00-6:00 pm Commons

March 30, 2016

Morning Workshops - Pre-registration Required			
Room —	Stonefield	Frontier	Sands
9:00 am-12:00 pm	Digital Story Telling Christina Rencontre	Volunteer Recruitment Candise Miller James Brakken	Manual Removal of EWM Chris Hamerla
10:15-10:45 am	Refreshment Break in Commons		
12:00-1:30 pm	Lunch on your own (or pre-registered lunch in Northwoods Expo)		

	Afternoon Workshops - Pre-registration Required			
Room	Evergreen	Stonefield	Sands/Frontier	
1:30-4:30 pm	Lake District Treasurer Training Eric Olson Don Putnam Krista Olson Jeri McGinley	21st Century Communications Tim Campbell Aaron Conklin	Shoreland Zoning Lynn Markham Kay Lutze	
3:00-3:30 pm		Refreshment Break in Commons		

Special Technical Sessions			
Room -	Ефо І	Ехро 2	Evergreen
4:45-5:45 pm	DNR Response Framework for Invasive Species Exercise (Hands-on) Amanda Perdzock	APM and Advancements in EWM Research and Management (Q/A Panel) Scott Provost Michelle Nault Scott Van Egeren	Dam Inspections: Common Problems and Solutions Bill Sturtevant
	page 14	page 14	page 14
5:45-7:00 pm	Networking Time (dinner on your own)		
7:00-11:00 pm	Wisconsin Lakes Partnership Convention Welcome Reception Woodland Room and Amber Grill		

# Thurs/Fri Mornings

Thursday and Friday, 6:45-7:45am - Wisconsin Room

Quita Sheehan will lead participants through basic yoga poses in a mellow and relaxed environment. Participants should bring a yoga mat or bath towel with them. Comfortable clothing is recommended. *Free and welcome to all ages and levels of interest*.



# **Thursday Lakes Agenda**

March 31, 2016

Registration Open 7:30 am-5:00 pm Spruce

	Con	current Sessions	Spruc
Room Stream	<b>Expo I</b> Citizen Science	Expo 2 Aquatic Invasive Species	<b>Evergreen</b> Planning, Management and Implementation
8:00-8:50 am	Dip-In to the Roots of the Self-Help Lake Monitoring Program Carolyn Betz  Introduction to the CLMN Paul Skawinski	Fighting the Spread of Invasive Species: Tests of Decontamination Techniques Bart De Stasio	More Than a Paperweight: Developing an Actionable Lake Management Plan Stephanie Prellwitz Charlie Marks
	How the DNR Uses Citizen Lake Monitoring Data Katie Hein page 16	Wisconsin DNR's New Decontamination Manual Code Maureen Ferry page 16	page 17
9:00-10:45 am	1 0	Fenary Session - Northwo	
7.00 10.15 am		eer Monitoring Really Make	•
	Welcome Speaker ~	Cathy Sandeen Kick-off Keynote S anel ~ CLMN Professionals ~ Moderate	peaker ~ Kris Stepenuck
11:00 am- 12:00 pm	A Volunteer Perspective: The How, What, and Why Behind Citizen Lake Monitoring Panel Discussion	AIS Statewide Programs: The Water Guard Story Samantha Olsen	Considerations for Success, Challenges and Sharing our Experience: Hand-pulling and DASH for Aquatic Invasive
	page 20	Future Direction - How Are We Doing?  Bob Wakeman	Plant Removal Barb Gajewski, Stephanie Boismenue Ned Greedy
12:15-1:30 pm		page 20 woods Expo ~ Speaker Susan Sylvester	page 20 ; Wisconsin DNR page 19
1:45-2:25 pm	Citizen Scientists Help Identify Long-term Trends in Water Clarity Across the U.S. Noah Lottig	Improving AIS Monitoring in Wisconsin Maureen Ferry	Think Outside the Lake Jim Miller
	Statewide Aquatic Remote Sensing Program in WI Steven Greb, Daniela Gurlin page 22	page 22	page 22
2:35-3:15 pm	All Eyes on Lake Water Quality Katie Nicholas Paul Dearlore	Local Priority Wetland Invasive Species for Monitoring/Control Brock Woods	Aeration: Where and When Has it Worked? Heath Benike
	Temperature and Fish Populations Gretchen Hansen	Invasive Species Databases Can Guide Wetland Invasives Control Around Your Lake! Jason Granberg	Buzz Sorge
	page 24	page 24	page 25
3:30-5:00 pm	Lakes Poster Session	on in Commons - Refreshment Break f	<i>from 3:15-3:45</i> page 26-28
5:00-6:00 pm		Networking Time	
5:30-8:00 pm		rdship Banquet & Awards Ceremo letworking ~ 6:00 pm Banquet Di	•
8:00-11:00 pm	Lakes F	Partnership After Hours - Woodlan	d Room

# **Thursday Lakes Agenda**

Exhibits Open 8:00 am-6:00 pm Commons March 31, 2016

ommons	Conc	current Sessions	
Room Stream	Stonefield/Woodland Lake Management Policy	Sands/Frontier Ecology	Harvest/Trillium  Lake Research
8:00-8:50 am	Shoreland Zoning Updates Lynn Markham Kay Lutze	Lake Ecology for Beginners  Buzz Sorge	Fish Production Responses to Long-term Additions of Coarse Woody Habitat Greg Sass
			Working Towards Increased Sustainability of Panfish in Wisconsin Andrew Rypel
	page 17	page 17	page 17
9:00-10:45 am		Plenary Session - Northwo	-
	Does Volunt	eer Monitoring Really Make	A Difference?
	Welcome Speaker ~ Keynote Pa	Cathy Sandeen Kick-off Keynote S anel ~ CLMN Professionals ~ Moderate	Speaker ~ Kris Stepenuck ed by Eric Olson page 18
11:00 am-	Updates on Legislation	Furbearers and Forest Wildlife	Water Quality Management of
12:00 pm	Affecting our Lakes Mike Engleson	John Olson	Lakes in Series Cory McDonald
			A New Lake and Watershed Characteristic Dataset for Wisconsin Lake Modeling
	page 20	page 21	Matt Diebel
12:15-1:30 pm	Lunch in Northwo	oods Expo ~ Speaker Susan Sylvester,	Wisconsin DNR page 21
1:45-2:25 pm	Lake Organization Capacity	Monitoring in the Dark	
	Analysis Nick Hudson	John P. White	
	INUK FIUUSON	Project Budburst	
		Caleh Slemmons Sandra Henderson	
2:35-3:15 pm	wDNR Surface Water Grants:	page 23  Master Naturalist	Revealing a Lake's History in
2.33-3.13 pm	What's on the Horizon?	Becky Sapper	Its Sediments
	Shelly Thomsen		Paul Garrison
	0.5	noce 25	0.5
3:30-5:00 pm	page 25  Lakes Poster Session	page 25  in Commons - Refreshment Break fr	page 25 rom 3:15-3:45 page 26-28
5:00-6:00 pm	Lance 1 Oster Session	Networking Time	om 9.19 9.19 page 20-20
5:30-8:00 pm	Wisconsin Lake Stewardship Banquet & Awards Ceremony - Northwoods Expo 5:30 pm Socializing/Networking ~ 6:00 pm Banquet Dinner ~ awards to follow		
9,00 11,00			
8:00-11:00 pm	Lakes 1	artnership After Hours - Woodlar	IG KOOM

# Friday Morning Agenda

April 1, 2016

Registration Open 7:30 am-1:30 pm Spruce

Concurrent Sessions			Spruc
Room Stream	<b>Expo I</b> Citizen Science	<b>Expo 2</b> Aquatic Invasive Species	<b>Evergreen</b> Streams, Rivers and Watersheds
8:00-8:40 am	Citizen Lake Monitoring Network Inspires Volunteer AIS Collaboration Around Silver Lake in Waukesha Co. Nate Rice  Porters Lake Eurasian Water-milfoil Monitoring and Management Skip Hansen Dick Hansen Brenton Butterfield Paul Skawinski	AIS Communications: Audience Segmentation Strategies for Communicating with Boaters at High Risk of Spreading AIS Bret Shaw AIS Communication Strategies for Wisconsin Tim Campbell	Red Cedar River Water Quality Partnership Dan Zerr Ron Verdon Ted Ludwig Julia Olmstead
8:50-9:50 am	The Past, Present, and Future of the Secchi Dip-in Lauren Salvato  Citizens Monitoring Stream Flow and Lake Levels in the Wisconsin Central Sands Jessica Hancke  North Temperate Lakes Long-term Ecological	Integrated Pest Management: Testing the Efficacy of Milfoil Weevils in Controlling Eurasian Water-milfoil Susan Knight John Havel  Manual Removal of Eurasian Water-milfoil on Silver Lake Nate Rice	Lower Fox River Watershed Monitoring Program Whitney Passint Bobbie Webster  Erosion Modeling and Citizen Science Working Together in the Sugar River Watershed Wade Moder
40.00.40.20	Research Network  Jessica Corman  page 32	Panel Discussion: Integrated Pest Management Strategies Jodi Lepsch Amy Thorstenson Nate Rice Susan Knight page 33	page 34
10:30-10:30 am 10:30-11:30 am	Moving from Monitoring to Management Jo Latimore  CLMN Survey Results: The Future of CLMN Katie Hein Paul Skawinski	Wisconsin's Rapid Response to the Introduction of Starry Stonewort and a Case Study Using Diver Assisted Suction Harvesting on Silver Lake, Washington County  Tim Plude Bradley Steckart	Volunteer Monitoring to Evaluate Improvements of Ag. Runoff from Installation of Conservation Practices Herb Garn  A Partnership that Strives for Clean Water and the Role of Citizen Monitors Patricia Cicero Nancy Sheehan  Three Years of Warm-season Monthly Data on Nitrate, Phosphorus, E. Coli, and Coliform Gerald Pellett
	page 36	page 36	page 37

# **Friday Morning Agenda**

Exhibits Open 8:00 am-1:30 pm Commons

April 1, 2016

ommons	Conc	urrent Sessions	
Room Stream	<b>Woodland/Trillium</b> Healthy Lakes	Sands/Frontier Ecology	<b>Stonefield</b> Community-driven Resource Management
8:00-8:40 am	Fish Sticks Success Brenda Nordin Dennis Thornton Donna Ford	Mussels Lisie Kitchel	Water Way Walk: Lac du Flambeau Experience Tinker Schuman (Migizikwe - Eagle Woman) Norm Wetzel Virginia Chosa Roberta Gast Nancy Junkerman
8:50-9:50 am	page 31	page 31	page 31
G <sub>BM</sub>	CBM Conference Welcome & Plenary - Northwoods Expo Citizen Science Benefits Conservation Welcome and Plenary Speaker ~ Ben Zuckerberg  page 19		
8:50-9:50 am	Native Plants and Rain Gardens Lisa Reas Bill Foley	High Water Pants at Ripon High Kat Griffith Danika Steggall High School Outreach Jesse Schwingle	Using Social Marketing to Improve Shoreland Health Nancy Turyk
	page 34	page 35	page 35
10:00-10:30 am		Refreshment Break in Common	
10:30-11:30 am	Diversion and Rock Infiltration Cheryl Clemens	Frogs and Toads Andrew Badje  Snapshot Wisconsin Jennifer Stenglein	Partnerships Working in Minnesota's Dakota County Soil and Water Conservation District Lindsey Albright
	page 37	page 38	page 38
11:45 am - 1:15 pm		n Plenary Session - Northw! Lessons Learned Down th	_
	Luncheon Keynote Speaker ~ Alys	ssum Pohl	page 19



# Friday Afternoon Agenda

April 1, 2016

11:45 am -	Lunch Plenary Session - Northwoods Expo							
1:15 pm	Paddle On! Lessons Learned Down the Mississippi							
	Lunch Keynote Speaker ~ Alyssum Pohl page 19							
Afternoon Concurrent Sessions								
Room — Stream	Expo I  Monitoring Beyond the Lake (WAV)	Expo 2 CBM Invasive Species	Spruce/Evergreen Tools for Engagement	Sands/Frontier Ecology				
1:30-2:30 pm	History of Water Action Volunteers (WAV) and Citizen Monitoring in Streams Kris Stepenuck  Using Water Quality Monitoring to Assist Farmers in Developing BMPs John Delaney page 40	No Ordinary Worm Watch! Bernie Williams  page 41	Countywide Lake and River Organizations Facilitator: Mike Engleson	Wisconsin's Wolf Monitoring Program David MacFarland  page 41				
2:30-3:00 pm								
2.30-3.00 pm	Refreshment Break in Commons							
3:00-4:00 pm	Grande Cheese: Partnering in the Rock and Lower Sugar River Watersheds Pat Cardiff  From Monitoring to Planting: Knocking out Knotweed on Badfish Creek in Rock Co. Lynne Diebel	Awareness of the Unusual: Wisconsin's First Detector Network Tony Summers	Make a Splash! Leverage Your Waterway to Draw Attention to Lake and River Issues Alyssum Pobl John Sullivan  Testing the Waters: A Paddle and Probe Adventure Suzanne Wade Patricia Cicero	Blue-green Algae in Wisconsin Gina LaLiberte Jordan Dieckman				
4:00-5:30 pm	CBM/WAV Poster Session in Commons page 44							
5:00-6:00 pm	WAV Local Coordinators Meet and Greet - Spruce page 44							
6:00-8:00 pm	CBMN and WAV Award Ceremony - Expo 3							

Afternoon Workshops - Pre-registration Required							
Room	Harvest	Trillium	Stonefield	Woodland	Express (off-site)	Wisconsin	
1:30-4:30 pm	Aquatic Plant Ecology and Identification Susan Knight Michelle Nault Paul Skawinski	Mapping for Citizens Christine Koeller	Clean Boats Clean Waters Erin McFarlane	LoonWatch Loon Ranger Training Erica LaMoine	Hands-on Shoreland Restoration Nick Homan	SWIMS and the Lake and AIS Map Viewer Jennifer Filbert Dennis Weise	

# Saturday Agenda

Registration Table Commons

April 2, 2016

Concurrent Sessions							
Room Stream	<b>Expo 2</b> Citizen-based Monitoring	<b>Trillium</b> Water Action Volunteers					
8:00-9:30 am	The Role of the Wisconsin Citizen-based Monitoring Network Lucas Olson  The Human Outcomes of Citizen Science: Benefits to Volunteers	SWIMS Training for WAV  Jeanne Scherer  Ilana Haimes  WAV Program Updates  Peggy Compton  Ilana Haimes					
	Eva Levandowski page 45	page 45					
9:30-10:00 am	Refreshment Bre	ak in Commons					
10:00 am-11:15 pm	Why We Do What We Do: Volunteers Share their Passions Wisconsin Citizen Scientists page 46	TP Training for WAV Ilana Haimes page 46					
11:30 am-12:30 pm		Stories from an Old Time River Rat Kenny Salwey page 47					
12:30-2:30 pm	Specialist Office Hours and Buffet Lunch in Expo 3						

The CBM Conference & WAV Symposium conclude at 2:30 pm on Saturday, April 2, 2016.





### **Special Technical Sessions**

<u>4:45-5:45pm</u>

#### <u>4:45-5:45pm – Expo 1 Room</u>

#### DNR Response Framework for Invasive Species Exercise (Hands-on)

This session will be a review of the state's Response Framework for Invasive Species. During this exercise, participants will assume the roles of various partners (DNR employee, County AIS Coordinator, Lake group member, etc.) to act out the WI DNR's response process. Participants of this session will learn how to respond to a new invasive species discovery, be taught the steps that go into planning a response effort, and get a chance to provide feedback on the Department's process.

Presenter: Amanda Perdzock, Rapid Response Coordinator, Wisconsin DNR

#### 4:45-5:45pm - Expo 2 Room

#### APM and Advancements in EWM Research and Management (Q/A Panel)

During this session statewide lake specialists will provide an update on current Aquatic Plant Management (APM) monitoring and research being conducted in Wisconsin. Researchers will summarize Wisconsin's 10-year Eurasian water-milfoil (EWM) monitoring project tracking unmanaged and actively managed lakes, as well as several case studies looking at herbicide efficacy and selectivity. They will also discuss the future of EWM management, describing some new technologies and tools which are currently being developed and integrated into existing techniques to help improve our ability to manage the species. By working together to better understand the roles that management techniques and environmental factors contribute to our success (or lack thereof), we seek to continue to improve our ability to manage EWM over the long-term, while minimizing adverse effects to native species and water quality.

Presenters: Scott Provost, Water Resource Management Specialist, Wisconsin DNR, Michelle Nault, Water Resource Management Specialist, Wisconsin DNR, and Scott Van Egeren, Water Resource Management Specialist, Wisconsin DNR

#### 4:45-5:45pm – Evergreen Room

#### **Dam Inspections: Common Problems and Solutions**

The focus of this presentation will be the common problems which arise during a dam inspection and how to remedy them. Attendees will learn about the owner required inspection process, what are the most common deficiencies noted during inspections and potential remedies dam owners can implement.

Presenter: Bill Sturtevant, Dam Safety Engineer, Wisconsin DNR

The broadest, and maybe the most meaningful definition of volunteering: Doing more than you have to because you want to, in a cause you consider good.





### **Wednesday Evening**

### <u>7:00-11:00pm</u>



# Lakes Partnership Welcome Reception

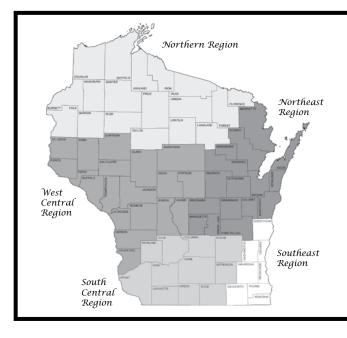
#### Wednesday, March 30 ~ 7:00 - 11:00pm Woodland Room

You are invited to the 2016 Wisconsin Lakes Partnership Convention Welcome Reception on Wednesday evening. Join us in a relaxed environment where we will serve up a few tasty appetizers and beverages. This informal gathering of lake lovers is a great way for newcomers to "get their feet wet," and for seasoned convention attendees to reconnect.

#### Featuring:

Wisconsin Lake Leaders Institute graduates Wisconsin Citizen Scientists Wisconsin Lakes Partnership professionals

Included as part of your Thursday registration.



#### Wisconsin Lake Contacts

Wisconsin Department of Natural Resources (WDNR) Lake Coordinators and Aquatic Plant Management Coordinators have responsibility for administering the WDNR's lake programs. These folks can help with:

- Lake management education, information and technical assistance
- Grants: lake planning, aquatic invasive species, lake protection and classification, and other project funding
- Clean Boats, Clean Waters watercraft inspection
- Citizen Lake Monitoring Network
- Aquatic plant management

To find your local lake coordinator (or other important Wisconsin lake contacts) go to:

http://dnr.wi.gov/lakes/contacts





### **Thursday Sessions**

8:00-8:50am

#### 8:00-8:50am — Expo 1 Room - Citizen Science

#### Dip-In to the Roots of the Self-Help Lake Monitoring Program

In 1986, the Wisconsin DNR created a citizen lake monitoring program modeled after similar programs around the country. With a Secchi disc and a hand-drawn, how-to monitoring notebook, 126 volunteers were armed to track the water clarity of 113 lakes. Learn about the modest beginnings of the program and how things were done "back in the day." See the old data post-cards, the original Secchi disc (it still works), and the hand-made equipment and how it was used (including a live demonstration). While we could never have predicted the program's growth and spin-offs, it is with pride that after thirty years, the Citizen Lake Monitoring Network is still recognized as a cornerstone of the Wisconsin Lakes Partnership.

Presenter: Carolyn Betz, Research Program Manager, UW-Madison

#### Introduction to the Citizen Lake Monitoring Network

The Citizen Lake Monitoring Network (CLMN) creates a bond between 1000+ citizen volunteers statewide and the Wisconsin Lakes Partnership. The goal is to collect high quality data, educate and empower volunteers, and share this information. Paul Skawinski, the Statewide Citizen Lake Monitoring Coordinator, will discuss the types of monitoring activities that volunteers do as part of the Wisconsin Citizen Lake Monitoring Network, how staff provide support, and how volunteers can get involved.

Presenter: Paul Skawinski, Statewide Citizen Lake Monitoring Coordinator, UW-Extension Lakes

#### How the Department of Natural Resources Uses Citizen Lake Monitoring Data

This talk will briefly highlight how data is used and set the stage for examples of data applications that will be showcased throughout the *Citizen Science* sessions to follow throughout the day. Developing phosphorus standards, understanding patterns of water clarity in space and time, modeling lake temperature and managing fisheries, predicting lake suitability for invasive species, and developing individual lake management plans are just a few examples of how much can be gained from CLMN data.

Presenter: Katie Hein, Water Resource Management Specialist, Wisconsin DNR

#### 8:00-8:50am — Expo 2 Room - Aquatic Invasive Species

#### Fighting the Spread of Invasive Species: Tests of Decontamination Techniques

The spread of aquatic invasive species (AIS) in Wisconsin is a major environmental issue, and there is a pressing need for scientific information on which procedures can effectively decontaminate boats, trailers, and sampling gear. Our studies on New Zealand mudsnails and spiny waterfleas have examined the effectiveness of cleaning methods currently being considered by DNR staff and scientists, but also apply to citizen scientists helping in the fight against AIS. We will discuss the results of various methods and provide information for establishing more practical guidelines on decontamination methods for managers, researchers, and citizen scientists.

Presenter: Bart De Stasio, Professor of Biological Sciences, Lawrence University

#### Fighting the Spread of Invasive Species: Wisconsin DNR's New Decontamination Manual Code

Clean Boats, Clean Waters survey results indicate that 77% of boaters inspect their boats and equipment and remove any plants attached. While these methods are sufficient for the general public, the Wisconsin Department of Natural Resources follow a more rigorous protocol as outlined in the Boat, Gear, and Equipment Decontamination and Disinfection Manual Code due to the variety of water related work and programs involved (Fish Management, Law Enforcement, Water Quality, etc). This manual code was recently revised to make the Department's steps more effective for all aquatic invasive species and also to apply to Department agents and contractors, and some permitees. This presentation will describe the revisions that were made and the process. *Presenter: Maureen Ferry, Statewide Aquatic Invasive Species Monitoring Lead, Wisconsin DNR* 



# Thursday Sessions, cont.



#### 8:00-8:50am

### 8:00-8:50am — Evergreen Room - Planning, Management and Implementation More Than a Paperweight: Developing an Actionable Lake Management Plan

Lake Management Plans (LMPs) have a tendency to accumulate unused on a bookshelf. In Green Lake, Wisconsin, local stakeholders developed an LMP that has become the cornerstone of lake and watershed management efforts. Join the Green Lake Sanitary District and the Green Lake Association as they recount their experience of lake management before and after local partners developed the Green Lake LMP in 2013. Highlights will include how the LMP team was formed and how the plan was written, major project components, how the Green Lake LMP functions as an adaptable plan that aligns partners' management efforts, and goals for future LMP iterations. This session can help lake associations and lake managers interested in beginning the LMP process or transforming an unused LMP into an actionable framework for lake and watershed management. *Presenters: Stephanie Prellwitz, Green Lake Association and Charlie Marks, Green Lake Sanitary District* 

### 8:00-8:50am — Stonefield/Woodland Room - Lake Management Policy

#### **Shoreland Zoning Updates**

Shoreland zoning standards were changed in a big way by the state budget bill passed in July 2015 and went into effect immediately. State law now says counties cannot have shoreland standards more protective than state standards, which means no larger lot sizes, setbacks, buffers, etc. The state minimum shoreland standards since 1967 have become the minimum and maximum standards. We will discuss the specifics of this law, shoreland science, what county zoning staff are doing, how lake organizations can get involved, and the requirement for county shoreland ordinances to comply with the NR 115 standards by October 1, 2016.

Presenters: Lynn Markham, Center for Land Use Education, UW-Stevens Point and Kay Lutze, Water Regulations and Zoning Specialist, Wisconsin DNR

#### 8:00-8:50am — Sands/Frontier Room - Ecology

#### Lake Ecology for Beginners

Join us as we share insights about the physical, chemical, and biological characteristics that make our lakes so unique. Understand why some lakes are shallow and others deep. Some lakes are full of aquatic plants while others are less so. We'll take a look at the lakes dotting the Wisconsin landscape and discuss management challenges and opportunities we face in leaving a lake legacy for future generations.

Presenter: Buzz Sorge, Lakes Biologist, Wisconsin DNR

#### 8:00-8:50am — Harvest/Trillium Room - Lake Research

#### Fish Production Responses to Long-term Additions of Coarse Woody Habitat

In 2015, a long-term whole-lake study was initiated on Sanford Lake to test for fish production responses to additions of wood in lakes. The practice of adding wood to lakes to improve fish habitat (known as Fish Sticks) is commonly used in Wisconsin fisheries management; however, the response of fish communities to this management tool has rarely been evaluated. The primary goal of this study is to test whether or not wood addition in the form of *tree drops* increases fish production. Greg will explain the study and its amazing results. *Presenter: Greg Sass, Natural Resource Program Supervisor, Wisconsin DNR* 

#### Working Towards Increased Sustainability of Panfish in Wisconsin

Panfish are the most frequently caught type of fish in Wisconsin. Yet, over 70+ years, significant declines have been observed in sizes of bluegills, black crappies, and yellow perch in our state. A new adaptive panfish management plan has been enacted in Wisconsin that seeks to improve panfish size on almost 100 lakes through a series of experimental fishing regulations. The hope is that a combination of sound science, outreach, and management can be used to improve panfish opportunities for future generations of Wisconsin anglers. This talk will discuss the strategy behind the new management plan.

Presenter: Andrew Rypel, Research Scientist, Wisconsin DNR





# **Thursday Keynote**







### Thursday Kick-off Keynote - Northwoods Expo - 9:00-10:45am Does Volunteer Monitoring Really Make A Difference?

Kris Stepenuck, Extension Assistant Professor, Rubenstein School of Environment and Natural Resources, University of Vermont

At 30 and 20 years old, respectively, the Citizen Lake Monitoring Network and the Water Action Volunteer Stream Monitoring Program are two of the longest running volunteer water monitoring programs in the United States. Nearly 400 programs like these support more than 1700 groups to monitor the health of streams, lakes, wetlands, groundwater, and marine waters around the country. They support volunteers to monitor more than 20,000 sites annually. With so much data being collected, the question arises, are these

data being used to help inform management decisions, to impact policies, or to protect or improve water quality? In this presentation results and anecdotes from a recent national survey of these programs will be shared that clearly demonstrate that the answer to this question is, unmistakably, yes! From discovering faulty septic systems, and illegal municipal stormwater connections, to requiring compliance to regulations on the part of dam owners, stormwater districts, and wastewater treatment plants, these programs have effectively contributed to helping protect and improve local waters. Come find out what these programs have in common and hear stories of their successes.

Kris Stepenuck is an Extension Assistant Professor with the Rubenstein School of Environment and Natural Resources at the University of Vermont, and Extension Program Leader for Lake Champlain Sea Grant. From 2001-2015, she coordinated Wisconsin's Water Action Volunteers Stream Monitoring Program. She currently serves as secretary of the Citizen Science Association, and additionally maintains a website, listery, and Twitter account to help volunteer water monitoring programs across the U.S. In her free time, she enjoys hiking, whitewater kayaking and skiing with her husband.

#### Citizen Lake Monitoring Network Panel

Following Kris' presentation will be a panel discussion made up of professionals directly involved with water monitoring in Wisconsin. There will be time for Q & A.

Kris Stepenuck; Bob Wakeman, Statewide AIS Coordinator, Wisconsin DNR; Tim Asplund, Monitoring Section Chief, Wisconsin DNR; Paul Skawinski, Statewide CLMN Coordinator, UW-Extension; and Peggy Compton, WAV Stream Monitoring Program Coordinator, UW-Extension

Moderator: Eric Olson, Director, UW-Extension Lakes

#### **Reusable Water Bottles**

Pick up a water bottle for only \$5 at the Wisconsin Lakes booth to show your connection with the Wisconsin Lakes Partnership! Proclaiming "All water is lake water," these bottles help remind us why we work so hard to protect in partnership our legacy of lakes!

Single-wall aluminum, holds 17 oz.





### **Friday Keynotes**







#### <u>Friday Morning Keynote</u> - Northwoods Expo - 8:50-9:50am Citizen Science Benefits Conservation

Ben Zuckerherg, Ph.D., Assistant Professor, Department of Forest and Wildlife Ecology at the University of Wisconsin-Madison and Co-chair, Wisconsin Initiative for Climate Change Impacts (WICCI) Wildlife Research Working Group

Citizen science, the involvement of volunteers in data collection, has increased the scale at which ecological research can be conducted. The benefits for conservation lie in understanding how threats - such as climate change and habitat loss - are impacting species and entire ecosystems. Zuckerberg will review the role of citizen science in measuring, understanding, and predicting the role of modern climate change on bird communities and conservation.









#### Friday Luncheon Keynote - Northwoods Expo - 11:45am-1:15pm Paddle On! Lessons Learned Down the Mississippi

Alyssum Pohl, Paddle On

Alyssum Pohl has personally taken citizen science to a whole new level. She set out early last summer to paddle the entire length of the Mississippi by kayak, monitoring water conditions along the way. In addition to water quality data, Alyssum spent time gathering river water samples every 100 miles and sent them to Adventurers and Scientists for Conservation

for their freshwater microplastic research project. This effort is "crowdsourcing" water samples from around the world to learn about the amount of tiny plastic particles that are increasingly showing up in the food web. Alyssum will share her results as well as interesting stories from her four months on the river.

### **Guest Speakers**



#### Thursday Welcome - Northwoods Expo - 9:00am

Cathy Sandeen, Chancellor, UW-Extension and UW Colleges

Cathy Sandeen began her appointment as the third chancellor of the University of Wisconsin Colleges and the University of Wisconsin-Extension on December 15, 2014. She has been a leader in higher education and innovation in California and nationally with the American Council on Education. Sandeen brings more than 22 years of leadership experience to our 13 UW College campuses and UW-Extension partners who serve Wisconsin's 6 million residents.



#### Thursday Lunch - Northwoods Expo - 12:15-1:30pm

Susan Sylvester, Bureau Director, Water Quality, Wisconsin DNR
Susan joined the WDNR in 1994 and is responsible for the wastewater and water resources subprograms which include the Lakes & Rivers program. She also serves on the Great Ships Initiative Advisory Board, the ECOS water committee, the Association of Clean Water Administrators as the

Advisory Board, the ECOS water committee, the Association of Clean Water Administrators as the nutrient workgroup chair, and is the chair of the Upper Mississippi River Basin Association Executive Committee. Previously, she worked 11 years in the water programs for USEPA-Region 5, and 6 years as an aquatic biologist with the Michigan DNR.



### **Thursday Sessions**

11:00am-12:00pm

#### 11:00am-12:00pm — Expo 1 Room - Citizen Science

#### A Volunteer Perspective: The How, What, and Why Behind Citizen Lake Monitoring

The list of panelists and lakes they represent is diverse, spanning southern to northern Wisconsin. Join us for an open discussion on citizen lake monitoring from the volunteers' perspectives.

Panel Members: Mike Backus, Jordan Lake, Adams County; Kay Scharpf, Franklin Lake, Forest County; Jessica Rice, Silver Lake, Waukesha County; Cheryl Clemens, Harmony Environmental, Polk County; Chuck Ecklund, Lake Redstone, Sauk County; Tom Walters, Lake Redstone, Sauk County; Dan Pagel, Blue Lake, Oneida County; and Lisa Griffin, Lake Ripley, Jefferson County

#### 11:00am-12:00pm — Expo 2 Room - Aquatic Invasive Species

#### Aquatic Invasive Species Statewide Programs: The Water Guard Story

This presentation will include background on the Water Guard program, what we have done over the years to educate the public about aquatic invasive species and promote behavior change in boaters and anglers, and the new and exciting plans for the 2016 season on the water. Join us to learn about this special team of Water Guards! *Presenter: Samantha Olsen, Conservation Warden, Wisconsin DNR* 

#### Aquatic Invasive Species Statewide Programs: Future Direction - How Are We Doing?

Audience members will learn about Wisconsin's Aquatic Invasive Species (AIS) Partnership, future plans, and ways to get involved. Information about the local, state, and national role our Lakes and AIS Partnership plays will provide audience members with a picture of the importance of everyone's actions. A brief introduction to our AIS Strategic Plan update and how to provide input will be provided.

Presenter: Bob Wakeman, Statewide Aquatic Invasive Species Coordinator, Wisconsin DNR

# 11:00am-12:00pm — Evergreen Room - Planning, Management and Implementation Considerations for Success, Challenges and Sharing our Experience: Hand-pulling and DASH for Aquatic Invasive Plant Removal

Hand removal can be an effective tool in your toolbox to manage for aquatic invasive plants. This presentation will cover some hand removal strategies used to manage aquatic invasive plants (primarily non-native milfoils) including the use of divers and diver assisted suction harvesting or DASH. We will discuss applicability as a tool, challenges and strengths, and demonstrate how hand removal can be used in an integrated approach including consideration to best management practices. This presentation will provide information from our experiences on the process, resource anticipations for citizen lead efforts, challenges, and expectations.

Presenters: Barb Gajewski, Aquatic Ecologist, Many Waters LLC; Stephanie Boismenue, Oneida County; and Ned Greedy, Tomahawk Lake Association, Oneida County

### 11:00am-12:00pm — Stonefield/Woodland Room - Lake Management Policy Updates on Legislation Affecting our Lakes

To advocate solid public policy that protects and preserves our lakes and waters, you need to have a thorough understanding of what's going on in the world of legislation. The 2015-17 legislative session is shaping up to be another tumultuous time for natural resources legislation, especially concerning water and lakes, which makes this understanding all the more important. This presentation will focus on legislation covering a wide gamut of issues, from shoreland development and waterways regulations, to groundwater and the law governing management of lake districts in Wisconsin. We'll make sure you leave understanding the issues facing our lakes, lake organizations, and the Lakes Partnership.

Presenter: Mike Engleson, Executive Director, Wisconsin Lakes



# Thursday Sessions, cont.



### 1:00am-12:00pm

#### 11:00am-12:00pm — Sands/Frontier Room - Ecology

#### Furbearers and Forest Wildlife

Join this Furbearer Specialist who, while forgotten in the north woods, worked with neat critters like bald eagles, common loons, ospreys, and black bears. Beginning in 1985, John became active on the Wolf Recovery Team which eventually was successful and led to his involvement with the Wolf Science Team until April of 2013. Wetlands, wild rice, and muskrats are special to John, who will share highlights and tidbits about our Wisconsin furbearers, especially those that share our aquatic world with us.

Presenter: John Olson, Wildlife Specialist, Wisconsin DNR

#### 11:00am-12:00pm — Harvest/Trillium Room - Lake Research

#### Water Quality Management of Lakes in Series

Lakes in series (often called lake chains), whether natural or artificial, can present unique management challenges. Water quality in a given lake is determined by characteristics of the local watershed and the larger upstream watershed, as well as internal processes occurring in both the lake and the upstream lakes. The relative influence of these factors can vary significantly among interconnected lakes and can also vary seasonally. These concepts are illustrated using the results of a recent study of seasonal phosphorus dynamics in the Yahara Chain of Lakes in Dane County. Management recommendations based on these results will be presented and also generalized to be applicable to lake chains throughout Wisconsin.

Presenter: Cory McDonald, Natural Resource Scientist, Wisconsin DNR

#### A New Lake and Watershed Characteristic Dataset for Wisconsin Lake Modeling

The Wisconsin Department of Natural Resources recently delineated watershed boundaries for all Wisconsin lakes over five acres in surface area. Several lake and watershed characteristics have since been developed, including lake morphometry, water residence time, watershed land cover, and estimates of phosphorus loading. All variables have been compiled into a single spreadsheet that can be used as a primary reference for Wisconsin lake characteristics and as a source for inputs to lake water quality models. This presentation will introduce the dataset and provide an overview of its appropriate uses and limitations.

Presenter: Matt Diebel, Water Resource Management Specialist, Wisconsin DNR

# Who are Wisconsin's Lake Leaders?

We all do important work to help our lakes, but these folks have kicked it up a notch after graduating from the Wisconsin Lake Leaders Institute. Over 300 graduates from ten crews are doing great work across the state. To find out more about Lake Leaders, pick up a brochure at the UWEX Lakes educational table near registration, or ask someone wearing a button that looks like this!







# **Thursday Sessions**

1:45-2:25pm

#### 1:45-2:25pm — Expo 1 Room - Citizen Science

#### Citizen Scientists Help Identify Long-term Trends in Water Clarity Across the United States

Integrating limnological data collected by citizens, tribal groups, state and federal agencies, and research institutions across large spatial extents provides a unique opportunity to quantify temporal patterns of change. We analyzed data from more than 600 lakes with 22+ years of Secchi observations from a 17 state region of the United States using kernel-based time series clustering with dynamic time warping as a similarity measure to determine unique temporal Secchi patterns (e.g., increasing, decreasing, non-linear) and landscape and lake factors that influenced those patterns. We found a diverse set of temporal Secchi patterns, some of which would not have been identifiable using more traditional approaches. Our results from this analysis suggest that temporal patterns do not cluster spatially, indicating that local factors may be more important for determining temporal patterns than broad-scale regional landscape drivers. In other words, citizen science is very important! *Presenter: Noah Lottig, Assistant Scientist, Trout Lake Station, UW-Madison* 

#### Statewide Aquatic Remote Sensing Program in Wisconsin

This presentation gives a brief overview of recent Wisconsin Department of Natural Resources activities associated with the remote sensing of water resources, including new capabilities to measure more water quality parameters in addition to water clarity (Secchi disk), utilization of image archives to examine trends in lake water quality and delineate relationships between environmental drivers (such as climatic conditions and land use) with changes in lake water quality, and interactive ways to present the satellite-derived data for public use. This program relies heavily on citizen-based monitoring data for satellite model calibration. See how broad-based participation provides an important linkage for public engagement in the State's water resources protection.

Presenters: Steven Greb, Research Scientist, Wisconsin DNR and Daniela Gurlin, Research Scientist, Wisconsin DNR

#### 1:45-2:25pm — Expo 2 Room - Aquatic Invasive Species

#### Improving Aquatic Invasive Species Monitoring in Wisconsin

The Wisconsin Department of Natural Resources (DNR) aquatic invasive species (AIS) monitoring program has been supported by a strong network of volunteers and many partners. To expand these efforts, the DNR began a five year project in 2010 using statistically valid methods to collect baseline data and evaluate the rate of AIS spread within the state. Additionally, in 2015 the state completed pilot projects on streams to help identify priority locations for early detection AIS monitoring on streams. Learn how results from these projects on lakes and streams will inform the AIS monitoring strategy with the aim of improving early detection and rapid responses and also increasing volunteer participation.

Presenter: Maureen Ferry, Statewide Aquatic Invasive Species Monitoring Lead, Wisconsin DNR

### 1:45-2:25pm — Evergreen Room - Planning, Management and Implementation Think Outside the Lake

This session will focus on watershed management with a special emphasis on structures and land use modifications to reduce the inflow of nutrients and sediment into lakes and streams. Deer Lake has reduced its watershed phosphorous loading by 55% resulting in Secchi disc improvements of 300-400%. Trails and signage in our conservation areas provide opportunities to understand the relationship between the watersheds and the lake. *Presenter: Jim Miller, Deer Lake Conservancy* 



# Thursday Sessions, cont.



### 1:45-2:25pm

#### 1:45-2:25pm — Stonefield/Woodland Room - Lake Management Policy

#### Lake Organization Capacity Analysis

The Wisconsin Lakes Partnership has been a model of statewide inland lake management for forty years. A network of hundreds of lake associations and districts are central to the Partnership's success. Researchers from UW-Stevens Point and UW-Madison have recently completed an analysis of these organizations to better understand where and when they formed. The research also looks at lake organization budgets and the distribution of Wisconsin Department of Natural Resources lake grants to explore ways that we can measure and compare the work that they are doing. We will also look at ways that this information can help target new outreach and organizational assistance efforts to strengthen the Partnership.

Presenter: Nick Hudson, Graduate Student in Agriculture and Applied Economics, UW-Madison

#### 1:45-2:25pm — Sands/Frontier Room - Ecology

#### Monitoring in the Dark

Seven bat species call Wisconsin home. Several species migrate to warmer climates for winter, while the others hibernate in caves and mines. The cave bats now face the threat of extinction from white-nose syndrome. Learn what must be done to protect them and how the bat program monitors the health and trends of Wisconsin's bat population with the assistance of citizen scientists.

Presenter: John P. White, Conservation Biologist, Wisconsin DNR

#### **Project Budburst**

Project Budburst is an exciting citizen science project led by the National Ecological Observatory Network (NEON) and the Chicago Botanic Garden. The program has allowed tens of thousands of interested individuals and groups to observe, collect, and report data about seasonal changes in plants since 2007. NEON is also collaborating with The PhenoCam Network on Season Spotter, a new citizen science project that leverages the desire of the public to contribute to climate change research. Volunteers classify images from a network of automated remote digital cameras. Over 100K images have been classified since the project began in July 2015. Funding for both projects has been provided by the National Science Foundation. Learn more about this citizen volunteer opportunity!

Presenters: Caleb Slemmons, Field Technician, NEON Inc. and Sandra Henderson, Science Educator, NEON Inc.



### **Thursday Sessions**

2:35-3:15pm

#### 2:35-3:15pm — Expo 1 Room - Citizen Science

#### All Eyes on Lake Water Quality

Lakes are dynamic and complex, and conditions can change rapidly in both time and space. This is particularly true in near-shore areas where many people interact with our lakes. Although near-shore conditions are constantly fluctuating, lake monitoring has traditionally involved infrequent sampling at limited locations. Sharing results in an accessible and timely fashion has also proved difficult. Consequently, the public is largely unaware of these dynamics and how they influence beach conditions at any given time. This talk will challenge the audience to rethink the role of citizen monitoring, including how it can be used to close current monitoring gaps and identify public health risks. We will share intriguing discoveries and approaches to tracking the formation of blue-green algal blooms on our lakes. We will also discuss the community impacts of a near-shore monitoring program located in Dane County and how to make lake information instantly accessible to the public.

Presenters: Katie Nicholas, Watershed Coordinator, Clean Lakes Alliance and Paul Dearlove, Watershed Program Manager, Clean Lakes Alliance

#### Temperature and Fish Populations

Temperature influences all aspects of lake ecology from nutrient cycling to fish populations. Lakes do not respond uniformly to changes in air temperature. Water clarity, depth, surface area, and surrounding land cover all play critical roles in determining water temperatures. Thus, documenting trends in water temperature and understanding how those trends relate to changes in lake ecosystems and food webs requires monitoring across broad temporal and spatial scales and at high temporal frequencies. Find out how historical trends in water temperature can help fisheries managers assure fisheries success into the future.

Presenter: Gretchen Hansen, Natural Resource Research Scientist, Wisconsin DNR

#### 2:35-3:15pm — Expo 2 Room - Aquatic Invasive Species

#### Local Priority Wetland Invasive Species for Monitoring and Control

The Wisconsin Department of Natural Resources has received federal Great Lakes Restoration Initiative grants for Great Lakes watersheds to find and eliminate or reduce pioneer populations of non-native *Phragmites australis* and tall manna grass (TMG; *Glyceria maxima*). Both are large exotic grasses that can have disastrous effects on your lakeshores and waterways. As both move into Wisconsin, their invasion fronts are where most grant work will occur. The goals are to reduce their presence sufficiently so that local efforts can maintain cleared areas, stop further advances, and help replace stands with native species. Through 2015, the Phragmites project identified and chemically treated over 1200 sites across 30 counties. Some sites have been eliminated, but many must be treated again before the grant ends in 2016. TMG work has just started by identifying and confirming sites and ends in 2017. You can help by learning to identify both plants, reporting new sites, reporting basic site information, and sponsoring local efforts to assist.

Presenter: Brock Woods, Wetland Invasive Plant Coordinator, UW-Extension/Wisconsin DNR

#### Invasive Species Databases Can Guide Wetland Invasives Control Around Your Lake!

Independent online databases such as the Early Detection and Distribution Mapping System, Great Lakes Early Detection Network, and others have accumulated a wealth of invasive species records. However, these records have not been very useful for control until now. Wisconsin Department of Natural Resource (WDNR) has combined agency and external records to create useful maps of reported locations, as well as regional priority wetland invasive plant (WIP) lists that will help citizens know which wetland species likely occur around their lakes. These are the species most in need of being recognized and reported. Such maps and short lists will make both your learning and outreach easier and more effective, so come learn how to access them! By noting how often a species occurs within your area, you can also decide which WIPs should be controlled first. Spatial data also identifies fronts as species invade across the landscape, helping WDNR develop effective control strategies. *Presenter: Jason Granberg, Water Resource Specialist, Wisconsin DNR* 



# Thursday Sessions, cont.



### 2:35-3:15pm

### 2:35-3:15pm — Evergreen Room - Planning, Management and Implementation Aeration: Where and When Has it Worked?

Aeration is a tool that can be used to address internal nutrient loading or low levels of dissolved oxygen that can lead to fish kills. This presentation will cover how aeration works and then jump into case studies from DNR Fisheries Supervisors and Lake Biologists to explore where and when aeration works, what does it take for a lake to identify the need for aeration, install a system, and manage/monitor it for desired results, and where is it not a feasible management tool.

Presenters: Heath Benike, Fisheries Supervisor, Wisconsin DNR and Buzz Sorge, Lakes Biologist, Wisconsin DNR

#### 2:35-3:15pm — Stonefield/Woodland Room - Lake Management Policy

#### WDNR Surface Water Grants: What's on the Horizon?

Over the last 26 years Wisconsin Department of Natural Resources (WDNR) has offered cost-share programs that provide over \$6 million a year to lake and river groups, nonprofits and governments for locally-led lake, river, and aquatic invasive species planning and management projects. Come learn about the grant programs and the proposed changes.

Presenter: Shelly Thomsen, Water Resource Management Specialist, Wisconsin DNR

#### 2:35-3:15pm — Sands/Frontier Room - Ecology

#### Master Naturalist

The Wisconsin Master Naturalist Program (WIMN) is a growing network of well-informed citizens dedicated to conservation education and service within their communities. The WIMN Volunteer Training Course provides 40 hours of coursework in natural history, interpretation, and conservation stewardship. Courses combine classroom instruction with field experiences and are taught by professional natural resources educators and scientists, who are trained to deliver the WIMN course. Wisconsin Master Naturalists then perform at least 40 hours of volunteer service each year. The presentation will talk about the efforts to grow this program and opportunities it provides for citizen engagement throughout the state of Wisconsin.

Presenter: Becky Sapper, Director Wisconsin Master Naturalist Program, UW-Extension

#### 2:35-3:15pm — Harvest/Trillium Room - Lake Research

#### Revealing a Lake's History in Its Sediments

Much about a lake's water quality history is preserved in its sediments. This talk will summarize the types of information found in the sediments. Sediment cores have been collected from over 200 lakes throughout Wisconsin. Information including changes in the lake's sedimentation rate, watershed erosion, deep water oxygen levels, and phosphorus concentrations can be determined from the sediments. Examples of common watershed practices that have impacted a lake's ecology will be described. These include early and recent agricultural practices, lakeshore development, early logging, and climate change.

Presenter: Paul Garrison, Research Scientist, Onterra

White ... Exhibitor

### **Check out the Ribbons**

Looking for someone to help answer your questions?

Trying to find a new friend? Check the ribbons on the name tags around you!

Blue ... WDNR Lakes Coordinator Lime Green ... Newcomer

Green ... Convention Staff Maroon ... Lake Stewardship Award

Nominees and Winners

Red ... Speaker Hot Pink ... Press





### **Thursday Lakes Posters**

### Commons 3:30-5:00pm

Listed by topic, then alphabetically

Poster descriptions and author contact information will be available on the online convention archive.

TOPIC: Aquatic Invasive Species
Cattails (*Typha spp.*): How Volunteers Can Track
their Presence and Identification

Joy Marburger, Purdue University North Central

Changes to Chapter NR 40, Wisconsin Administrative Code

Amy Kretlow, Wisconsin DNR

Creating Boot/Wader-Cleaning Stations to Prevent Spread of Aquatic Invasive Species Kaycie Stushek, UW-Madison

Flowering Rush: Impacts and Management Chris Hamerla, Golden Sands Resource Conservation and Development Council, Inc.

Great Lakes Nuisance: Invasive Common Reed (Phragmites australis ssp. australis)

Jacob Cerminar, UW-Stevens Point

Hand Removal of Yellow Floating Heart (Nymphoides peltata) Lake Gordon, Forest County John Preuss, Lumberjack Resource Conservations and Development Council, Inc.

Interns and Volunteers Monitoring with Beaver Creek Reserve Citizen Science Center Emily Lind, Beaver Creek Reserve

The Milfoil Weevil (Euhrychiopsis lecontei) as a Biological Control

James Miazga, UW-Stevens Point

Milfoil Weevils (Euhrychiopsis lecontei) Study Results

Amy Thorstenson, Golden Sand Resource Conservation and Development Council, Inc.

Nitellopsis obtusa (starry stonewort) is an Invasive Charophyte (green algae)
Dan Larkin, University of Minnesota

Purple Loosestrife Beetles: A Life Cycle Explored

Krista Kamke, Golden Sands Resource Conservation and Development Council, Inc.

Rapid Response Actions Following the Discovery of Round Gobies in Little Lake Butte des Morts

Michelle Nault, Wisconsin DNR

Rapid Response in the Discovery of Water Lettuce (Pistia stratiotes)

Susan Graham, Wisconsin DNR

Rapid Response to the Aquatic Invasive Species Starry Stonewort (*Nitellopsis obtuse*) Tim Plude, Wisconsin DNR

Richland County Willow Creek Watershed Japanese Knotweed Removal Project

Don Barrette, Southwest Badger Resource Conservation and Development Council, Inc.

Spiny Water Fleas: Trouble for Freshwater Systems

Aaron O'Connell, UW-Platteville

WI Trappers: Invasive Species Partners on Land, in Water, and All Points In-between Chris Hamerla, Golden Sand Resource Conservation and Development Council, Inc.





# Thursday Lakes Posters, cont.

3:30-5:00pm

Commons

**TOPIC:** Citizen Science

**15,000** ft<sup>2</sup> Shoreland Buffer Restoration Project Molly McKay, Langlade County

Digital Observation Technology Skills (DOTS) program – Youth Education

Dr. R. Justin Hougham, Marc Nutter, Alex Nussbaum, Taylor Riedl, and Sarah Burgess, UW-Extension, Upham Woods Outdoor Learning Center

Lake Level Monitoring: Fluctuating Water Levels – Historical Data

Anne Kretschmann, North Lakeland Discovery Center

Statewide Volunteer Lake-level Monitoring Program

Joshua Wied, Wisconsin DNR

Volunteer Data to Lesson Plans

John Preuss, Lumberjack Resource Conservation and Development Council, Inc. and Sandy Wickman, UW-Extension Lakes

Water-related Volunteer Opportunities in Wisconsin

Paul Skawinski, UW-Extension Lakes

**TOPIC:** Ecology

Aeration's Effect on Algae: A Review of Success and Failures

Patrick Goodwin, State University of New York

Characterization of Macroinvertebrate Assemblages in Restored and Natural Wetlands in Central Wisconsin

Kaira Kamke, UW-Stevens Point

**TOPIC:** Education

Developing and Sustaining a Lakeshore Habitat Restoration Training for Professionals in Wisconsin

Patrick Goggin, UW-Extension Lakes

Wisconsin Geographic Names Council (WGNC) – Name That Lake

David Winston, Wisconsin DNR

TOPIC: Lake Management

New Method for Measuring Dissolved Nutrients

Don K Button, Big Sand Lake Preservation Association

Wisconsin's New Healthy Lakes Initiative: Technical Assistance and Funding for Lakeshore Best Practices

Patrick Goggin, UW-Extension Lakes

TOPIC: Native Plants & Animals
How to Identify Common Macroscopic
Algae in Wisconsin's Lakes

Gina LaLiberte, Wisconsin DNR

Non-native Aquatic Macrophytes Pose Many Different Threats to the Biological Diversity and Stability of Freshwater Ecosystems

Nicholas McCarney, George Williams College of Aurora University

(Continued on page 28.)



# Thursday Lakes Posters, cont.

#### Commons

3:30-5:00pm

TOPIC: Research

Conservation of Genetic Resources is a Vital Component of Walleye (Sander vitreus) Management in Wisconsin

Michael Vaske, UW-Stevens Point

Evaluation of Large-scale Low-dose 2,4-D Treatments for Eurasian and Hybrid Watermilfoil Control Across Multiple Wisconsin Lakes

Michelle Nault, Wisconsin DNR

Identifying Spatial and Temporal Patterns of Anthropogenic Nitrogen Deposition and the Influence on Aquatic Community Change in Wisconsin Lakes

Krista Slemmons, UW-Stevens Point

Secchi Depth Data Collected by Citizen Lake Monitoring Network (CLMN) Volunteers Provides the Foundation for the Operational Remote Sensing of Water Clarity Daniela Gurlin, Wisconsin DNR

Shoreline and Benthic Aquatic Debris Research—Geneva Lake

Christopher Wells, George Williams College of Aurora University

TOPIC: Rivers, Streams & Watershed "Impaired Waters" Appears Sometimes in Media Reports, But They Never Really Explain What That Means

Reesa Evans, Adams County

The Lower Fox River and Green Bay are Impaired by Excessive Loadings of Phosphorus and Sediments

Scott Heinritz, Fox Valley Technical College

Riparian Zones are Important Filtration Systems that are Often Overlooked

Ricardo Jaimes, Ripon College



# Check out the CLMN display in the Northwoods Expo!

Volunteers are always appreciated, but this year's convention is specifically aimed at *celebrating volunteers!* Because the Citizen Lake Monitoring Network (CLMN) has completed 30 years, we wanted to highlight the volunteers of this program. Check out the east wall in our large meeting room to see who entered data in 2015 – some are newbies, and some are seasoned veterans, but the data these volunteers collect will be useful now and well into the future. You can also read what some of the 20-year citizen lake monitors have said about their experiences monitoring water quality on their lakes. We'd love to have you add your own thoughts to the display!





# **Thursday Evening**

#### 5:30-8:00pm – Northwoods Expo

Wisconsin Lake Stewardship Banquet & Awards Ceremony

5:30 pm - Socializing/Networking

6:00 pm - Banquet dinner (awards to follow)

Please join us in celebrating the 2016 Wisconsin Lake Stewardship Award winners and new nominees at our banquet and awards ceremony on Friday evening. The Wisconsin Lakes Partnership presents the annual Lake Stewardship Awards to recognize the extraordinary volunteer and professional efforts of individuals and groups who protect and improve our lakes. People are nominated for Stewardship Awards by their peers - what

### Registration required \$25 at the door

#### Congratulations 2016 Wisconsin Lake Stewardship Award Winners!

Citizen: Gene Weyer

**Group**: Burnett County Lakes and Rivers Association **Public Service**: Susan Borman and Dorothy Semple

Lifetime Achievement: John Skogerboe

a meaningful way to say, "Thank you!" to the people in your community who work so hard to care for our lakes. Winners of these awards join a select group of women, men, students and organizations whose unmatched

dedication, vision and commitment ensure Wisconsin's legacy of lakes will be safe and secure for generations to come. We will also be recognizing four individuals who have dedicated 30 years of volunteer service to the Citizen Lake Monitoring Network.

#### 30-Year CLMN Volunteers

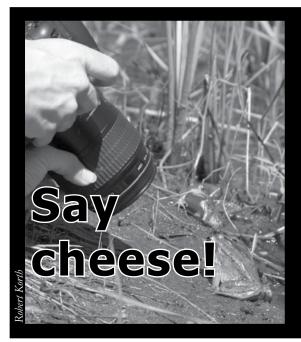
Dale Jalinski, Bear Lake, Oneida County
Bob Kirschner, Crystal Lake, Forest County and
Emden Lake, Oneida County
Tom Rulseh, McDonald Lake, Vilas County
Kay Scharpf, Franklin Lake, Forest County

These volunteers have collected over 1,000 Secchi readings combined!

#### 8:00-11:00pm - Woodland Room

#### Lakes Partnership After Hours - Song/Poem/Story Swap

With "Celebrating Volunteers" as the theme of this convention, and after honoring our state's Lake Stewards, we can keep the celebration going after hours. There is a lot to celebrate, so let's relax with stories, poems and songs. If you have an instrument, bring it with you! Bring along your knitting or just stop by for a listen. The only requirement is to relax and enjoy yourself!



# Celebrating Volunteers Through Photography

14th Annual Photo Contest Submissions and Winners!

Check out the west wall in the Northwoods Expo and admire the beautiful, striking and fun images of lake life.

#### **VOTE FOR YOUR FAVORITE!**

Tell us which photo you think is the best by voting for your favorite image. A ballot box and paper slips are next to the photo display – we will count the ballots on Friday and award a ribbon for the People's Choice. We will also reveal the winners selected by our panel of professional photographers.



### **Friday Sessions**

8:00-8:40am

#### 8:00-8:40am — Expo 1 Room - Citizen Science

#### Citizen Lake Monitoring Network Inspires Volunteer Aquatic Invasive Species Collaboration Around Silver Lake in Waukesha County

By snorkel, scuba, kayak, and canoe, invasive species we're looking for you! Learn how the Silver Lake Management District and greater Silver Lake community continue the Citizen Lake Monitoring Network (CLMN) volunteer tradition, building on and adding to past collaborative efforts from diverse stakeholders. In 2014, the Silver Lake Management District received a Southeastern Wisconsin Invasive Species Consortium, Inc. funding assistance award sponsored by the We Energies Foundation to conduct a Eurasian watermilfoil (EWM) hand-pulling project utilizing scuba divers from Underwater Connection in Delafield. In June of 2014, volunteers hand-pulled 100% of the EWM from a dense stand located in the southwest corner of the lake. The following spring, only about 20% of the EWM had re-emerged, helping re-energize our campaign to combat invasive species. *Presenter: Nate Rice, Silver Lake Management District* 

#### Porters Lake Eurasian Water-milfoil Monitoring and Management

Eurasian watermilfoil (EWM) was discovered in Porters Lake during the summer of 2012. The Porters Lake Management District quickly collaborated with various partners to address this problem and discuss the best management response. Through strategic manual removal of the EWM, a small herbicide treatment, a Rapid Response grant from the WDNR, and intense monitoring, the EWM was reduced to below detectable levels by June 2013. Regular monitoring of the lake by CLMN volunteers and staff continued to find no EWM remaining in the lake until September 2015, when a few EWM plants were found and removed. Volunteer AIS monitoring and diligent manual removal efforts have kept costs of EWM control in Porters Lake to near zero, with no chemical herbicides applied to the lake since the initial infestation treatment.

Presenters: Skip Hansen, Porters Lake Management District; Dick Hansen, Porters Lake Management District; Brenton Butterfield, Onterra, LLC; and Paul Skawinski, UW-Extension Lakes

#### 8:00-8:40am — Expo 2 Room - Aquatic Invasive Species

### Aquatic Invasive Species Communications: Audience Segmentation Strategies for Communicating with Boaters at High Risk of Spreading Aquatic Invasive Species

Because some boaters pose more risk to spreading aquatic invasive species (AIS) than others, targeted outreach to high-risk boaters could be beneficial. This presentation will describe an analysis of 2013 Wisconsin boater survey data that explores how higher risk groups are different in terms of attitudes and behaviors, as those factors may inform communication strategies. Gain a better understanding of the benefits and drawbacks of segmenting audiences in an AIS context, identifying specific messaging for AIS-prevention outreach initiatives, and learning which AIS prevention behaviors are followed more or less often.

Presenter: Bret Shaw, Environmental Communication Specialist and Professor, UW-Extension/UW-Madison

#### Aquatic Invasive Species Communications: Strategies for Wisconsin

The Wisconsin Aquatic Invasive Species (AIS) Partnership implements multiple communication programs and campaigns to help to prevent the spread of AIS. The Stop Aquatic Hitchhikers! and Habitattitude campaigns, utilized by the Wisconsin AIS Partnership, are both national brands approved by the U.S. Fish and Wildlife Service and the Aquatic Nuisance Species Task Force. These national brands provide recognized and consistent messaging for our network of statewide partners. Programming featuring these national brands is supplemented by targeted communication campaigns, like the 4th of the July Landing Blitz and the Drain Campaign, help AIS partners reach specific audiences with relevant information. All of these efforts combined have effectively raised awareness of AIS issues and helped everyone in Wisconsin do their part to Stop Aquatic Hitchhikers! Presenter: Tim Campbell, Aquatic Invasive Species Communications Specialist, UW-Extension/Wisconsin DNR





#### 8:00-8:40am

#### 8:00-8:40am — Evergreen Room - Streams, Rivers and Watersheds

#### Red Cedar River Water Quality Partnership

The Red Cedar River Water Quality Partnership came together in 2013 when several professionals working on water quality issues in the Red Cedar River Basin began talking about better coordination of efforts to address the phosphorus levels and frequent, intense blue-green algal blooms in Lakes Tainter and Menomin, as well as in lakes higher up the watershed and in the river itself. The Partnership has grown to include business partners, several lake associations, farming organizations, and multiple agencies at the local, county and state level. The Partnership has authored a ten-year strategy to address phosphorus issues and oversees work focused on these efforts. This presentation will discuss how all these various groups and citizens came together, what they have accomplished, and the ten-year plan for the watershed and lakes.

Presenters: Dan Zerr, Lower Chippewa Basin Natural Resource Educator, UW-Extension; Ron Verdon, President of Tainter Menomin Lake Improvement Association (TMLIA); Ted Ludwig, Coordinator, Red Cedar Basin Monitoring Group; and Julia Olmstead, Coordinator of the Farmer-Led Watershed Council Project, UW-Extension

#### 8:00-8:40am — Woodland/Trillium Room - Healthy Lakes

#### Fish Sticks Success

The Belle Plaine Sportsman Club and the Cloverleaf Lakes Association collaborated on a Healthy Lakes project that contained fish sticks and shoreline restoration. The project created habitat for fish and wildlife, aided in erosion control, and brought the two groups together to achieve a common goal, protecting and enhancing the quality of aquatic life in the Cloverleaf Lakes.

Presenters: Brenda Nordin, Lakes Biologist, Wisconsin DNR, Dennis Thornton, President, Cloverleaf Lakes Protective Association and Donna Ford, Secretary, Belle Plaine Sportsmans Club

#### 8:00-8:40am — Sands/Frontier Room - Ecology

#### Mussels

Learn about one of Wisconsin's most diverse, yet hidden treasures, our native mussels (also known as clams). Can you believe that over half of Wisconsin's 52 native mussel species are listed as threatened, endangered, or species of concern? Declining water quality and habitat alterations, as well as invasive mussels pose major threats to the existence of our native mussels, which have a fascinating life history and have contributed to the history of Wisconsin. The Mussel Monitoring Program of Wisconsin would appreciate help in monitoring native mussels in your area!

Presenter: Lisie Kitchel, Conservation Biologist, Wisconsin DNR

### 8:00-8:40am — Stonefield Room - Community-driven Resource Management Water Way Walk: Lac du Flambeau Experience

No one disputes that water is essential for life. A group of volunteers in Lac du Flambeau decided last winter that an act of gratitude, respect, and even reverence for the gift of water was overdue, and they chose to do something about it. Following in the footsteps of those who participated in the original Waterwalk around Lake Superior in 2003, residents of Lac du Flambeau decided to host their own Waterwalk around two lakes near the heart of the community during Mother's Day weekend in 2015. Sparked by Tinker Schuman (Migizikwe-Eagle Woman), a local Ojibwe Spiritual Woman, and the efforts of a small planning committee, dozens of tribal and non-tribal residents participated in a sunrise reverential ceremony before carrying a pail of water for ten miles around Flambeau and Long Interlaken Lakes. The walk ended with participants gathering for fellowship and a potluck feast. With future generations in mind, plans for a 2016 Waterwalk are underway. This session will touch on the recent history of waterwalks, including the various roles volunteers have played to make them successful, and will include an actual water ceremony.

Presenters: Tinker Schuman (Migizikwe - Eagle Woman), Ojibwe Tribe; Norm Wetzel, Virginia Chosa, Roberta Gast and Nancy Junkerman, Members of Lac du Flambeau Town Lakes Committee





### Friday CBM Welcome

8:50-9:50am



Friday Morning CBM Welcome & Plenary – Northwoods Expo – 8:50-9:50am

#### Citizen Science Benefits Conservation

Dr. Ben Zuckerberg, University of Wisconsin-Madison Read more about Ben on page 19.

### **Friday Sessions**

8:50-9:50am

#### 8:50-9:50am — Expo 1 Room - Citizen Science

#### The Past, Present, and Future of the Secchi Dip-in

Originally called *The Great American Secchi Dip-In*, the first year of the Dip-in recruited 826 participants from six lake monitoring programs in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. The Secchi Dip-in was created to enable volunteers to submit water clarity measurements to an online database and see how their data compare on a variety of scales, from regional to international. The program has also been utilized for volunteers to begin monitoring efforts and to increase monitoring efforts within their communities. In the midst of underfunded state volunteer monitoring programs, the Secchi Dip-in has served as a place for volunteers to continue submitting their data. The Secchi Dip-in is grateful for Wisconsin's twenty-one years of participation and submission of more than 5,000 water quality measurements. This talk will focus on trends in Wisconsin's water transparency and how it compares nationally.

Presenter: Lauren Salvato, North American Lake Management Society

#### Citizens Monitoring Stream Flow and Lake Levels in the Wisconsin Central Sands

Citizens can collect much-needed, high quality streamflow and lake level data when appropriately recruited, trained, and deployed. In 2013 and 2014, conservation departments from five counties recruited volunteers to monitor stream flow and lake levels. Center for Watershed Science and Education (CWSE) staff trained volunteers to use professional grade OTT MF Pro flow meters. Throughout the Wisconsin Central Sands, volunteers and county staff monitored 73 stream sites monthly and 44 lakes bimonthly and entered data into the DNR SWIMS database. Join us to see how this amazing volunteer effort has evolved.

Presenter: Jessica Haucke, Associate Research Specialist, Water and Environmental Analysis Lab and Center for Watershed Science and Education, UW-Stevens Point

#### North Temperate Lakes Long-term Ecological Research Network

How do we know when shifts in walleye populations or ice duration are unique to a single lake or due to larger scale perturbations? Or, if the shifts are part of a natural cycle or indicative of a directional change? Wisconsin is home to the nation's longest running ecological lake research program, the North Temperate Lakes Long-Term Ecological Research (NTLLTER) Network. For thirty years, this program has measured physical, chemical, biological, and social variables in lakes in the Northern Highlands and Yahara Watershed. This long-term information, combined with experiments and modeling approaches, helps us understand different human impacts and environmental changes that shape the past, present, and future of lakes. In this talk, learn the importance of long-term monitoring data, how these data might be useful to your lake's management, and how information from your lake might help understand the future of Wisconsin's lakes.

Presenter: Jessica Corman, Post-doctoral Research Associate, Center for Limnology, UW-Madison





### 8:50-9:50am

#### 8:50-9:50am — Expo 2 Room - Aquatic Invasive Species

### Integrated Pest Management: Testing the Efficacy of Milfoil Weevils in Controlling Eurasian Water-milfoil

Nuisance levels of Eurasian water-milfoil (EWM) are often treated with herbicides, but biocontrol using milfoil weevils is an enticing alternative treatment. We tested the effectiveness of milfoil weevils for control of EWM under natural lake conditions. In 2013, we began a field experiment in four lakes, stocking weevils in two beds and leaving two additional beds as controls in each lake. Background weevil densities were highly variable among EWM beds and were often greater than the densities stocked. Weevil damage to EWM was common and correlated to weevil density. However, growth of EWM was independent of weevil density and the biomasses of native plants and EWM were independent of stocking treatment. In a survey of 35 lakes from northern Wisconsin, weevils were more common in lakes with EWM that had not been treated with herbicides than in EWM lakes treated with herbicides or in lakes with northern water-milfoil and no EWM.

Presenters: Susan Knight, Research Scientist, Trout Lake Station, UW-Madison and John Havel, Missouri State University

#### Integrated Pest Management: Manual Removal of Eurasian Water-milfoil on Silver Lake

Learn about the partnerships, resources, and people that are "pulling" for Silver Lake, Waukesha County. A volunteer-driven Eurasian water-milfoil (EWM) hand-pulling effort by the Silver Lake Management District and lake advocates has targeted a shallow water site that is now EWM free, as well as a deeper water location requiring SCUBA divers to remove the plant. In 2014, the Silver Lake Management District received a Southeastern Wisconsin Invasive Species Consortium, Inc. funding assistance award sponsored by the We Energies Foundation to conduct a Eurasian watermilfoil hand-pulling project utilizing scuba divers. See the process and equipment in action: underwater video of volunteer SCUBA divers from Underwater Connection in Delafield hand-pulling the EWM plants, the plant transfer to the above-water support team for secure disposal, as well as before and after video of both the shallow water and deep water locations.

Presenter: Nate Rice, Silver Lake Management District

#### Panel Discussion: Integrated Pest Management Strategies

Join us for a panel discussion among staff and citizens who have experience with utilizing various methods to manage Eurasian water-milfoil and other invasives.

Panel members: Jodi Lepsch, Water Resource Management Specialist, Wisconsin DNR; Amy Thorstenson, Executive Director, Golden Sand Resource Conservation & Development Council, Inc.; Nate Rice, Silver Lake Management District and Susan Knight, Research Scientist at Trout Lake Station, UW-Madison





8:50-9:50am

#### 8:50-9:50am — Evergreen Room - Streams, Rivers and Watersheds

#### Lower Fox River Watershed Monitoring Program

The University of Wisconsin-Green Bay is highly involved with citizen science projects that focus on the health of the Fox River watershed. In 2003, the Lower Fox River Watershed Monitoring Program was established. The program is a collaboration among university scientists and high schools in northeast Wisconsin. Currently, there are seven streams monitored by eleven schools within the watershed. This past year, UW-Green Bay and UW-Extension have partnered with the Town of Scott to monitor Wequiock Creek. Learn their findings and how this unique partnership has made a difference for this watershed.

Presenters: Whitney Passint, Education and Outreach Coordinator for the Lower Fox River Watershed and Bobbie Webster, Natural Areas Ecologist, Wisconsin DNR

#### Erosion Modeling and Citizen Science Working Together in the Sugar River Watershed

Data collected by citizen scientists are combining with EVAAL (Erosion Vulnerability Assessment for Agricultural Lands) modeling to highlight agricultural fields most susceptible to runoff in the Upper Sugar River Watershed. Wisconsin Action Volunteer (WAV) monitors performed total phosphorus testing throughout the watershed in 2015, and students from UW-Whitewater spearheaded the modeling efforts using data that is largely free to the public. Learn about the benefits of EVAAL modeling, the components needed to create it, and how it interacts with data collected by WAV volunteers. Find out how this data will be used to educate farmers on best management practices and funding resources to make real changes on their land.

Presenter: Wade Moder, Director of the Upper Sugar River Watershed Association

#### 8:50-9:50am — Woodland/Trillium Room - Healthy Lakes

#### Native Plants and Rain Gardens

This presentation will include before and after photos (and the designs) of 9 Healthy Lakes Projects on the Cloverleaf Lakes. Lisa will talk about the process used to go from interested landowner to installed project, and explain what must go into a successful Healthy Lakes shoreline restoration or rain garden (i.e. certain plants, using trees and shrubs, erosion control, and local zoning permits, etc.). Participants will see how projects can be created that they will really enjoy and maintain.

Presenters: Lisa Reas, Consultant, LJ Reas Environmental Consulting Corp. and Bill Foley, Beaver Dam Lake Improvement Association

#### Visit the Wisconsin Lakes booth to purchase these helpful publications!







#### 8:50-9:50am

#### 8:50-9:50am — Sands/Frontier Room - Ecology

#### High Water Pants at Ripon High

Seeing is believing! Twenty-two charter school students roll up their pants and wade into Big Green's problems. Learning about everything from road salt to fall leaves, the class issues a "report card" on watershed management. The report card forces them to start making connections and seeing the big picture and leads them to notice how many aspects of their lives -- from lawn care to cow manure to a neighbor's high capacity well -- impact Green Lake. Water quality monitoring, storm drain stenciling and the watershed report card are great excuses for media coverage. Come learn about this experience and gather a few tips for multiplying the impact of our work by making sure our communities know about it!

Presenters: Kat Griffith and Danika Steggall, Lumen Charter High School, Ripon, WI

#### **High School Outreach**

Citizen involvement needs to start with the younger people of communities. Bill Nye said, "Everyone you know, knows something you don't". This quote drives my teaching, and, through the idea of networking, students have made strong connections between their actions and their neighbor's actions and how it can affect the environment. What can you do? A lot of people are aware, but are not too sure what steps they need to take to get involved. One of the biggest and best connections can be with your local schools. You can help mold the youth to be stewards.

Presenter: Jesse Schwingle, Lumen Charter High School, Ripon, WI

### 8:50-9:50am — Stonefield Room - Community-driven Resource Management Using Social Marketing to Improve Shoreland Health

Many strategies have been employed over the years to reach out to property owners about the management of healthy shorelands. Some strategies have included regulations, while others have focused on educational efforts. Most efforts were "expert driven" with professionals sharing their knowledge. The social marketing campaign conducted during summer 2015 tested the concept of volunteers having conversations with their neighbors about healthy shorelands. A partnership comprised of citizen volunteers and county and university staff worked together to develop materials and the tailored strategies needed to carry out this experimental effort on 22 lakes in central Wisconsin. The 36 volunteers reported they were well received by neighbors, which allowed for good conversations about their lake and shorelands. We will provide an overview of this project, a summary of its outcomes, and recommendations for future similar projects.

Presenter: Nancy Turyk, Water Resource Scientist, UW-Stevens Point

### Nature is not a place to visit. It is home.

~ Gary Snyder





### **Friday Sessions**

10:30-11:30am

#### 10:30-11:30am — Expo 1 Room - Citizen Science

#### Moving from Monitoring to Management

More than 1,000 volunteers collect valuable data about Michigan's lakes and streams each year. One outcome of their efforts is hundreds of thousands of data points describing such features as water clarity, nutrient levels, habitat quality, and the organisms that make these aquatic ecosystems home. This data set is broad-scale (over 220 lakes and hundreds of stream sites were monitored in 2015) and long-term (lake monitoring began in 1974). But, what good would all this careful monitoring be if the data were never used? In this presentation, I will share some outstanding success stories that illustrate how we can move from monitoring to management – putting all that monitoring effort to good use! Examples will explore how individual volunteers, communities, natural resource agencies, and researchers are using volunteer monitoring data to protect, restore, and better understand our freshwater resources.

Presenter: Jo Latimore, Citizen Lake Monitoring Program Manager, Michigan State University

#### **CLMN Survey Results: The Future of CLMN**

In the fall of 2014, a survey was sent out to all Citizen Lake Monitoring Network (CLMN) volunteers to seek their feedback on the Network. The results of this survey will be reviewed, as well as what has been done so far in response to the survey results. Additional changes are being considered for the Network, and your thoughts are valuable to help us change CLMN for the better. Please join us in discussing new ideas and future directions for CLMN.

Presenters: Katie Hein, Water Resources Management Specialist, Wisconsin DNR and Paul Skawinski, Statewide Citizen Lake Monitoring Coordinator, UW-Extension Lakes

#### 10:30-11:30am — Expo 2 Room - Aquatic Invasive Species

#### Wisconsin's Rapid Response to the Introduction of Starry Stonewort and a Case Study Using Diver Assisted Suction Harvesting on Silver Lake, Washington County

This presentation will focus on the steps taken over the last year in response to an aquatic invader new to Wisconsin waters, starry stonewort (*Nitellopsis obtusa*). Following rapid response guidelines, we will outline the actions taken to delimit the population in Wisconsin, as well as within infested waters. We will highlight the roles of Wisconsin lake partners that stepped up to the challenge of managing a new and obscure invasive species. Many partners were integral in the management of starry stonewort within Silver Lake in Washington County. Silver Lake has effectively employed a newer management technique, Diver Assisted Suction Harvesting (DASH), with the partnership of Wisconsin Department of Natural Resources, Washington County, Silver Lake Protection and Rehabilitation District, and Eco Waterway Services.

Presenters: Tim Plude, Aquatic Invasive Species Specialist, Wisconsin DNR and Bradley Steckart, Aquatic Invasive Species Coordinator, Washington County Land and Water Conservation Division

### Water is the driving force of all nature.

~ Leonardo da Vinci





#### 10:30-11:30am

### <u>10:30-11:30am</u> — Evergreen Room - Streams, Rivers and Watersheds Volunteer Monitoring to Evaluate Improvements in Quality of Agricultural Runoff from

Installation of Conservation Practices

Agricultural runoff is a source of suspended sediment and nutrients that degrade water quality in the Pheasant Branch Conservancy and tributary to Lake Mendota. The Friends of Pheasant Branch, along with other partners, completed a two-part project in 2012 to remove nutrients and sediment entering the marsh and Lake Mendota. The farm also installed runoff control and conservation practices during 2009. The Friends evaluated the effectiveness of sedimentation ponds and conservation practices by monitoring the ephemeral stream water quality. Monitoring was funded by Wisconsin Department of Natural Resources river grants and Water Action Volunteer stream monitoring program. Learn more about the key findings of this monitoring collaboration. *Presenter: Herb Garn, Board of Directors, Friends of Pheasant Branch* 

#### A Partnership that Strives for Clean Water and the Role of Citizen Monitors

The Rock River Coalition (RRC) manages a successful (and award winning) citizen-based stream monitoring program. This program trains, equips, and supports citizens throughout the basin to sample the water quality in local streams. The Rock River and many of its tributaries have been designated as impaired waters for both sediment and phosphorus. In the Yahara River watershed, 120 stream miles are impaired. A partnership of municipalities, nonprofits, and government agencies (Yahara WINs) is working on an adaptive management project to reduce sediment and phosphorus pollution through rural and urban conservation practices. Enhancing the citizen/decision-maker relationship is critical if adaptive management is to become the next generation of water quality compliance. The RRC monitoring program is playing a critical role in creating a robust database of water quality conditions. This session will cover the RRC/Yahara WINs partnership, the basics of adaptive management, and the RRC citizen stream sampling program.

Presenters: Patricia Cicero, Water Resource Management Specialist, Jefferson County Land and Water Conservation Department and Nancy Sheehan, Stream Monitoring Program Coordinator, Rock River Coalition

### Three Years of Warm-Season Monthly Data on Nitrate, Phosphorus, E. Coli, and Coliform at Respective Sources/Mouths of the Kewaunee, Ahnapee, and E. Twin Rivers

The subject citizen-science study will include certified-analysis data obtained by Kewaunee CARES / Water Action Volunteer monitors, National Weather Service rainfall data, and graphical representations of key data correlations and comparisons. The presented results will enhance the publicly available record of research findings that can be used for inclusion and comparison with historic data on the three (and other similar) rivers. The relative extents of major, and occasionally minor, river impairment will be highlighted and compared with (sparse) available historic data. Finally, the presentation will address the role and importance of applied "citizenscience" studies of key water and air pollution problems that otherwise would not be monitored, quantified, understood, and reported for public consideration.

Presenter: Gerald Pellett, Research Scientist and Kewaunee CARES Volunteer

#### 10:30-11:30am — Woodland/Trillium Room - Healthy Lakes

#### **Diversion and Rock Infiltration**

Rock infiltration is a Healthy Lakes practice that can be incorporated into an aesthetically-pleasing landscape design to capture runoff from hard surfaces. Learn how to use the new Healthy Lakes Decision Tool to choose an appropriate practice and place it on your property. Absorb detailed descriptions of rock infiltration practice design along with step-by-step installation instructions. See before and after photos which illustrate rock infiltration installed on Wisconsin lakefront property.

Presenter: Cheryl Clemens, Harmony Environmental





10:30-11:30am

#### 10:30-11:30am — Sands/Frontier Room - Ecology

#### Frogs and Toads

The Wisconsin Frog and Toad Survey (WFTS) is a citizen-based monitoring project geared towards tracking population trends of Wisconsin's 12 frog and toad species. Citizen scientists throughout the state take to the roads three nights each year, during the spring and summer, to listen for and report all of the species they hear. Results are used by the Wisconsin Department of Natural Resources to efficiently and effectively monitor long-term trends on a local, regional, and statewide level. In addition to the value it brings towards species conservation, volunteering for the WFTS is a fun way for individuals and families to experience frogs throughout the spring and summer months!

Presenter: Andrew Badje, Conservation Biologist, Wisconsin DNR

#### **Snapshot Wisconsin**

Let's discover our wildlife together! Snapshot Wisconsin is a new, year-around, statewide effort to monitor Wisconsin's wildlife with a network of trail cameras. The goals of the project are to improve the spatial and temporal resolution of wildlife monitoring to help inform management decisions, and to engage citizens, including educators and their students, in that process. We expect to recruit thousands of volunteers to place and monitor > 3,000 trail cameras across Wisconsin, and these volunteers will be indispensable to project success. As Snapshot Wisconsin is just beginning, we will recruit the first volunteers this year. In addition to background on the project, we will talk about the results of our pilot study, how trail camera pictures are used currently, and our hope for how they will be used in the future.

Presenter: Jennifer Stenglein, Natural Resource Research Scientist, Wisconsin DNR

### 10:30-11:30am — Stonefield Room - Community-driven Resource Management Partnerships Working in Minnesota's Dakota County Soil and Water Conservation District

The Dakota County Soil and Water Conservation District (SWCD) works in partnership with federal, state, and local governments to conserve and manage land and water resources across the county. With these partnerships, we work to engage farmers in nutrient management and soil loss reduction programs in the southern, more rural part of the county. In the northern, more urban part of the county, we promote backyard conservation practices by working with homeowners and cities to install rain gardens and plant native shorelines along the many waterbodies in the county. See how education plays a huge part in our work at the SWCD, as we are busy leading 'Landscaping for Clean Water' workshops and outreach events with local school groups.

Presenter: Lindsey Albright, Water Resource Specialist, Dakota County Soil and Water Conservation District, MN

# Friday Luncheon Keynote

11:45am-1:15pm

Friday Keynote – Northwoods Expo – 11:45am-1:15pm Paddle On! Lessons Learned Down the Mississippi Alyssum Pohl, Paddle On Read more about Alyssum on page 19.







### Wisconsin Citizen Lake **Monitoring Network**

The Citizen Lake Monitoring Network (CLMN) provides volunteers with equipment and training to monitor water clarity, water chemistry, lake

temperature, dissolved oxygen, ice cover, aquatic invasive species, native aquatic plant communities, and more. The information gathered by these monitoring activities is used by lake associations/districts, lake management consultants, and a variety of biologists and educators. Over 1000 citizen volunteers currently participate. Find out more at www.uwsp.edu/cnr/uwexlakes/clmn



### Water Action Volunteers Water Action Volunteers **Stream Monitoring Program**

The Water Action Volunteers (WAV) Stream Monitoring Program is a statewide program for Wisconsin citizens who want to learn about and improve the quality of Wisconsin's streams and rivers. The program is coordinated through a partnership between the Wisconsin Department of Natural Resources and the University of Wisconsin - Cooperative Extension. There are three levels of monitoring for citizens who participate in the WAV Program. As the levels increase, monitoring responsibilities and quality assurance and control measures are more intensive, and data uses shift from educational to addressing management and research needs. Find out more at watermonitoring.uwex.edu/wav



### **Citizen-based Monitoring Network of Wisconsin**

The Wisconsin Citizen-based Monitoring Network (CBM) is a comprehensive stakeholder collaboration made up of volunteers that monitor:

- Amphibians/Reptiles
- Birds
- **Invasive Species**
- Fish
- Groundwater
- Invertebrates (mussels, dragonflies, etc.)
- Lakes/Ponds/Reservoirs
- Mammals
- Native Plants
- Rivers/Streams
- Soil
- And more!

CBM also offers small grants for citizen monitoring projects. Citizens and scientists work together as part of CBM to monitor and evaluate Wisconsin's natural resources.

Find out more at wiatri.net/cbm



### **Friday Sessions**

1:30-2:30pm

#### 1:30-2:30pm — Expo 1 Room - Monitoring Beyond the Lake (WAV)

#### History of Water Action Volunteers (WAV) and Citizen Monitoring in Streams

Modeled after the successful Citizen Lake Monitoring Network, the Water Action Volunteers Stream Monitoring Program (WAV) was developed 20 years ago. Co-sponsored by the Department of Natural Resources and the University of Wisconsin-Extension, program staff members work closely with numerous interest groups, organizations, and individuals across the State of Wisconsin to engage volunteers in monitoring the health of their local streams and rivers. The story of WAV's development is rich in collaboration, and the program continues to be powered through benevolence of thousands of caring community members who want to learn more about their local stream or river, or to protect or improve it for the future. In this presentation I will take a walk back in time, stopping along the way to explore some of the stories of how citizen stream monitoring came to exist in Wisconsin, and how WAV, and a few other citizen stream monitoring efforts, have grown and developed over time.

Presenter: Kris Stepenuck, Extension Assistant Professor, Rubenstein School of Environment and Natural Resources at the University of Vermont

#### Using Water Quality Monitoring to Assist Farmers in Developing Best Management Practices

Valley Stewardship Network (VSN) has over 15 years of experience with water quality monitoring and has helped to mobilize a network of 56 Water Action Volunteers (WAV) in the Kickapoo River and surrounding watersheds. In 2014, we initiated a pilot research project where we employed WAV protocols within different types of grazing systems to aid farmers in learning about how different grazing practices can affect water quality and to assist in developing best management practices. Our results from the last two field seasons indicate that some of the parameters used in WAV monitoring are sensitive to different types of grazing practices. This project has relied on contributions by VSN staff, farmers, and citizen scientists. See how this work will continue to extend the project into cropping systems in the 2016 field season and beyond.

Presenter: John Delaney, Water Quality Specialist, Valley Stewardship Network

#### 1:30-2:30pm — Expo 2 Room - CBM Invasive Species

#### No Ordinary Worm Watch!

Charles Darwin loved worms because he knew their tenacity to survive, spread, adapt and prosper was unrelenting. Gardeners (and everyone else) love worms because they simply don't know any better. Earthworms are a lot like a loving relationship - you can't live with them, can't live without them. But is that really true? In Wisconsin we've got worms of all sorts, and they are all non-native. We've always known that we had European species, but the discovery of an Asian species (Jumping worms) in 2013 was a complete surprise. Now, if you're like most people, the arrival of another invasive species is far from a good thing. Sometimes, however, it can really motivate people to get involved, or in this case; JUMP to action! "Citizen Activism" in this case turned to "Citizen Science" when word started to spread about worms that jump. Everyone from backyard gardeners to landscapers, to nurseries got involved and started looking for worms under the "Wisconsin Worm Watch." These grassroots efforts transformed into "Jumping Worms 101," which included everything from identifying and reporting, to how to minimize the spread of Jumping worms. Through these efforts, the unknowing but motivated citizens were turned into dedicated citizen-scientists! Charles Darwin admired the tenacity of worms to survive, but more impressive to me is the insistence of the unrelenting citizen-scientists to get involved in protecting their forests and communities from these non-native invaders.

Presenter: Bernie Williams, Plant Pest and Disease Specialist, Wisconsin DNR Division of Forestry



### 1:30-2:30pm

#### 1:30-2:30pm — Spruce/Evergreen Room - Tools for Engagement

#### Countywide Lake and River Organizations

Join us for a round table exchange with representatives of county lakes and rivers associations. Others involved in county matters or interested in learning more about countywide association operations are welcome too. This round table is an opportunity to network with your peers in an informal setting and bring forward topics that you would like to discuss. Does your organization have an exciting project, success story, or helpful resources to share? We'd also like to hear your perspectives on current issues and challenges your county's lakes and rivers face. Plus, we'll explore ways to collaborate regionally on issues that affect our waters.

Facilitator: Mike Engleson, Executive Director, Wisconsin Lakes

#### 1:30-2:30pm — Sands/Frontier Room - Ecology

#### Wisconsin's Wolf Monitoring Program

Citizen scientists are critical to the success of Wisconsin's wolf monitoring program. Volunteers annually conduct thousands of miles of snow track surveys collecting critical tracking data. This presentation will focus on the methods used to monitor Wisconsin's wolf population, the data the program generates, and the ways in which volunteers contribute to the program's success.

Presenter: David MacFarland, Large Carnivore Specialist, Wisconsin DNR

# Look deep into nature, and then you will understand everything better.

~ Albert Einstein





# **Friday Sessions**

3:00-4:00pm

#### 3:00-4:00pm — Expo 1 Room - Monitoring Beyond the Lake (WAV)

#### Grande Cheese: Partnering in the Rock and Lower Sugar River Watersheds

We all live, work, and play in a watershed. When watershed organizations are looking for partners, they should consider the businesses in the watershed. Conversely, businesses, especially those that have a vested interest in the watershed, should be looking for partners to help leverage their objectives. Grande Cheese is a Wisconsin-based cheese company that has eight facilities in the State. All of the plants that discharge to waters of the State are facing new phosphorus regulations. Water quality trading and adaptive management are two watershed strategies that they may pursue to help meet the new regulations. Both of these strategies require watershed partners to make them happen. This presentation will review how Grande has addressed these in the Rock River and Lower Sugar River Watersheds, as well as the results from their activities.

Presenter: Pat Cardiff, Grande Cheese Company

#### From Monitoring to Planting: Knocking out Knotweed on Badfish Creek in Rock County

In the summer of 2008, members of the Friends of Badfish Creek found a pioneer patch of invasive knotweed on the creek banks while participating in the citizen monitoring program Project RED (Riverine Early Detectors). This presentation charts the successes and challenges of taking a project from the early detection/monitoring stage, through the grant development process and ultimately control and replanting. This talk will review tips for tackling the grant process and strategies for engaging landowners and volunteers, as well as how to cope with the ongoing challenges of an aggressive invasive species. This small but mighty project serves as a great example of how volunteer monitoring can spark community engagement and healthier streams.

Presenter: Lynne Diebel, Chair Friends of the Badfish Creek and member of the River Alliance, Wisconsin

#### 3:00-4:00pm — Expo 2 Room - CBM Invasive Species

#### Awareness of the Unusual: Wisconsin's First Detector Network

Wisconsin's First Detector Network (WIFDN) is a citizen science-based invasive species reporting network designed to provide volunteers with the training and tools to report invasive species. Tony Summers (WIFDN coordinator) will describe the program, the projects, and how to get involved.

Presenter: Tony Summers, Wisconsin First Detector Network

# Are you a Citizen Scientist?

We know you have a deep connection with Wisconsin's land and water, and you are interested in protecting and preserving it for future generations - that's why you're here!

If you want to know more about becoming a citizen scientist, ask one of the folks wearing this button. If you should be wearing one but aren't, stop by the registration desk to pick one up!







### 3:00-4:00pm

#### 3:00-4:00pm — Spruce/Evergreen Room - Tools for Engagement

#### Make a Splash! Leverage Your Waterway to Draw Attention to Lake and River Issues

Water has magnetic, almost magical powers. Lake and river organizations are encouraged to use those powers to their advantage when they are trying to call attention to their issues and concerns. Whether organizing a lakeshore clean-up or making a "big trip" down a river, you can use the waterway to your advantage when connecting with the media and policy makers. We will discuss the different types of events that you and your group can pursue and share some key lessons for maximizing your impact in making news and connecting with elected officials. Presenters: Alyssum Pohl, Executive Director of Paddle On, Washington D.C. and John Sullivan, (Retired) Mississippi River Water Quality Specialist, Wisconsin DNR

#### Testing the Waters: A Paddle and Probe Adventure

Testing the Waters a Paddle and Probe Adventure will combine monitoring with school programs and public education. In May 2016, the Rock River Coalition will debut a new water monitoring probe array during a 119 mile ten day trip down the Rock River, from Mayville to Beloit. The probes, mounted on a kayak, continuously collects pH, temperature, dissolved oxygen and conductivity data. This information is then uploaded via a cell phone and instantly displayed on a web map.

This new Paddle and Probe effort builds on the successful 'Send Your Legislator Down the River' educational event that the Rock River Coalition has hosted for many years. Join the conversation to see how these events can lead to success!

Presenters: Suzanne Wade, Rock River Coalition Member and Patricia Cicero, Jefferson County Land and Water Conservation Department

#### 3:00-4:00pm — Sands/Frontier Room - Ecology

#### Blue-green Algae in Wisconsin

Did you know that blue-green algae (cyanobacteria) live in all of Wisconsin's lakes and rivers? Blue-green algae are everywhere, but only grow to nuisance levels, which are also known as blooms, in certain conditions. Learn how to distinguish blue-green algae from other kinds of algae in our lakes, and learn what conditions cause blue-green algae to bloom at nuisance levels. Some blue-green algae can make toxins. We will discuss the health impacts of these toxins in animals and people who ingest or inhale them in lake water or have skin contact with them. We will review health guidelines for blue-green algal toxins and show you how to determine safe levels of blue-green algae for recreation in Wisconsin's lakes.

Presenters: Gina LaLiberte, Statewide Blue-Green Algae Coordinator, Wisconsin DNR and Jordan Dieckman, Wisconsin Department of Health Services

In all things of nature there is something of the marvelous.

43



# Friday Evening

#### 4:00-5:30pm – Commons

#### Citizen-based Monitoring and Water Action Volunteer Poster Session

Volunteers, coordinators, and specialists will be presenting posters on recent and upcoming projects during this time. Walk around and see what new, exciting things are happening in the world of the Citizen-based Monitoring Network and Water Action Volunteers.

#### 5:00-6:00pm – Spruce

#### Water Action Volunteers Local Coordinators Meet & Greet

Local WAV Coordinators are invited to meet new Statewide WAV Coordinators Peggy Compton (UW-Extension) and Ilana Haimes (WDNR) and each other for a short social hour. There will be program updates, distribution of monitoring supplies and time for Q and A.

#### <u>5:00-6:00pm – Expo 3</u>

#### Citizen-based Monitoring Network and Water Action Volunteers Awards Banquet

6:00 pm - Dinner (awards to follow)

Join us as we present the 2016 Wisconsin Volunteer Stream Monitoring Awards (Adult Volunteer, Student Volunteer, Group Effort, Outstanding Teacher, and Outstanding Employee) and recognize WAV volunteers who have reached 5, 10, 15, and 15+ years of service. The Citizen-based Monitoring Network will present their 2016 awards for Program of the Year, Individual Outstanding Achievement, Individual Youth Outstanding Achievement, and Lifetime Achievement in Citizen-based Monitoring.

When you are inspired to be and do your best, you find everything is right in your world. Your influence is operating at its highest level and it is the time to influence others in gratitude.

~ Tony Ten Fingers Wanbli Nata'u Oglala Lakota



# **Saturday Sessions**



### 8:00-9:30am

#### 8:00-9:30am — Expo 2 Room - Citizen-based Monitoring

#### The Role of the Wisconsin Citizen-based Monitoring Network

The Wisconsin Citizen-based Monitoring Network is a comprehensive stakeholder collaboration designed to improve the efficiency and effectiveness of monitoring efforts in Wisconsin. In this presentation, WDNR Conservation Biologist Lucas Olson will reintroduce the Citizen-based Monitoring Network and will discuss how the Network can help you achieve your monitoring goals.

Presenter: Lucas Olson, Conservation Biologist, Wisconsin DNR

#### The Human Outcomes of Citizen Science: Benefits to Volunteers

How does participation in citizen science affect citizen scientists? Volunteers with citizen science and community monitoring can benefit in many ways, from learning about nature to meeting new people to starting a whole new career! This talk will cover the many ways that both kids and adults can benefit from citizen science.

Presenter: Eva Lewandowski, Citizen-based Monitoring Coordinator, Wisconsin DNR

#### 8:00-9:30am — Trillium Room - Water Action Volunteers

#### **SWIMS Training for Water Action Volunteers**

All Water Action Volunteers Level 1 and Level 2 stream monitors enter their results to the DNR "SWIMS" database. The SWIMS database is used by DNR staff to enter and search for water monitoring information to make management decisions. The database is directly linked to the DNR website and the Surface Water Data Viewer online mapping tool. This training will help WAV volunteers and coordinators understand how to use SWIMS to enter and access data. Data entry will focus on the use of the Level 1 and Level 2 Multi Parameter Single Page Form. If you would like to attend this training, please bring a laptop or wireless internet-capable personal computing device. We will have limited devices available for use at the facility.

Presenters: Jeanne Scherer, Water Resources Management Specialist, Wisconsin DNR and Ilana Haimes, WAV Stream Monitoring Program - Wisconsin DNR Coordinator

#### Water Action Volunteers (WAV) Program Updates

There have been some changes to the Water Action Volunteers program in the last year or so. Come hear about what is new (and what remains the same)! UW-Extension WAV Coordinator Peggy Compton will talk about our database changeover, updates to the monitoring program, our success story, and more.

Presenters: Peggy Compton, WAV Stream Monitoring Program Coordinator - UW-Extension and Ilana Haimes, WAV Stream Monitoring Program - Wisconsin DNR

### Water is life, and clean water means health.

~ Audrey Hepburn





# **Saturday Sessions**

10:00-11:15am

#### 10:00-11:15am — Expo 2 Room - Citizen-based Monitoring

#### Why We Do What We Do: Volunteers Share their Passions

Four volunteers will come together for a moderated discussion on what has influenced their success in the Citizen-based Monitoring Network and the Water Action Volunteers monitoring program. The volunteers will come from WAV, the Wisconsin Bat Program, and the Wisconsin Frog and Toad Survey. Volunteers will be asked a series of questions by the event moderator, Peggy Compton. After the moderator questions, the floor will open up to the audience for questions in the remaining time. The focus of the volunteer panel will be on program support of volunteers and the sustainability of long-term monitors.

Presenters: Wisconsin Citizen Scientists

#### 10:00-11:15am — Trillium Room - Water Action Volunteers

#### **TP** Training for Water Action Volunteers

Phosphorus is the most visible, widespread water pollutant in Wisconsin. High levels of phosphorus can trigger excess algae and plant growth in lakes and streams. When these excess plants die and decompose, oxygen levels drop dramatically and can lead to fish kills. Streams act like conveyor belts, delivering phosphorus directly to lakes. Additionally, phosphorus is associated with excess sediments covering stream bottoms, the most common biological impairment in streams. Phosphorus in streams and lakes originates naturally from rocks, but its major sources today are usually associated with human activities: soil erosion, human and animal wastes, septic systems, detergents, and runoff from farmland or lawns. An analysis of phosphorus often includes both total phosphorus and soluble reactive phosphorus. Volunteers will sample for total phosphorus, which is considered a better indicator of nutrient status because its levels remain more stable than soluble reactive phosphorus. Total phosphorus includes particulate phosphorus -- which is attached to bottom sediments and contained in plant and animal fragments suspended in water -- and soluble phosphorus. Soluble reactive phosphorus dissolves in water and readily aids plant growth, but its concentration varies widely over short time periods as plants take it up and release it. The goal of this monitoring is to characterize the total phosphorus concentrations most commonly occurring in the streams during the primary algae and aquatic plant "growing season" of May through October. If your stream site is selected, in order to be a TP monitor, you must attend a total phosphorus training. Presenter: Ilana Haimes, WAV Stream Monitoring Program - Wisconsin DNR Coordinator

We forget that the water cycle and the life cycle are one.

~ Jacques Cousteau



# **Saturday Sessions**



### 1:30am-12:30pm

#### 11:30am-12:30pm — Expo 2 Room - Citizen Science

#### Which Comes First - the Technology or the Project?

Whether included from project inception or incorporated into existing projects, technological tools can help monitoring programs more effectively engage and equip volunteers and assist with data collection and management. Representatives from several monitoring programs will share how technology has been incorporated into their monitoring programs and how their experiences can be applied to other programs. *Presenter: To be announced* 

#### 11:30am-12:30pm — Trillium Room - Water Action Volunteers

#### Stories from an Old Time River Rat

Join Kenny Salwey for some old-fashioned storytelling as he spins yarns of his days along the Mississippi. Hear about the mighty river and what it takes to live in the rhythms of nature. You're sure to enjoy his signature brand of storytelling, rife with insight, laughter, and woods lore. Kenny is the last of a breed of men who has eked out a living close to nature. He belongs to a tradition, a fabled fraternity of backwoodsmen, whose life has always been intricately bound to the seasonal ebb and flow of the mighty Mississippi River. He has earned his self-sufficient lifestyle as an old-time trapper, hunter, fisherman, root & herb collector, river guide and all-around woodsman. *Presenter: Kenny Salwey, Old Time River Rat* 

### Saturday Specialist Hours

### <u> 12:30-2:30pm</u>

Expo 3

### <u>Saturday Specialist Hours and Lunch Buffet – Expo 3 – 12:30-2:30pm</u>

Questions? Comments? Just want to get involved in a Citizen-based Monitoring project? This is the time to learn more! A variety of monitoring specialists will be available during this two-hour period. Grab your lunch from the buffet and go chat with the specialist of your choice. There will be people from all sorts of organizations just waiting to talk to you.

Rivers & Streams: Ilana Haimes, WDNR Lakes: Paul Skawinski, UW-Extension

Wisconsin Master Naturalists: Becky Sapper, UW-Extension Amphibians & Reptiles: Andrew Badje, WDNR

Rare Plants: Kevin Doyle, WDNR

Freshwater Mussels: Lisie Kitchel & Jesse Weinzinger, WDNR
Snapshot Wisconsin: Camera Trap Monitoring & Crowdsourcing
Jennifer Stenglein & Christina Locke, WDNR

Odonates: Bob DuBois, WDNR

Bats: Paul White & Heather Kaarakka, WDNR Carnivore Tracking: Jane Wiedenhoeft, WDNR

Aquatic Invasive Species: Maureen Ferry & Brock Woods, WDNR

Bumblebees & Pollinators: Jay Watson, WDNR Monarchs: Eva Lewandowski, WDNR CoCoRHaS Sign-up: Mae Colcord, WDNR

WAV Curriculum: Kris Stepenuck, University of Vermont Extension Loons: Erica LeMoine, Loon Watch, Northland College Sigurd Olson Institute



### **Convention Archives**

Not able to attend all of the sessions you'd like? Want to view a specific presentation in depth? You're in luck! Convention archives will be available on the UW-Extension Lakes web site and will include items such as:



- Presentation Materials
- Exit Survey
- Speaker List
- Convention Packet Materials (agenda, stewardship awards, business partner guide, etc.)
- Photo Contest Winners

Check out the 2016 Wisconsin Lakes Partnership Convention Archives

### www.uwsp.edu/uwexlakes

then click Convention 2016 under Events in the left navigation column.

### 2017 Lakes Convention

#### SAVE THE DATE

for next year's Wisconsin Lakes Partnership Convention:

Wednesday through Friday, April 5-7, 2017

Holiday Inn and Convention Center, Stevens Point, WI



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