# Michigan Inland Lakes Convention: Protecting Lakes Today For Tomorrow

#### September 14-16, 2022









# Agenda At-A-Glance

#### Wednesday, September 14

9:00 - 10:10 AM	Keynote: Roger LaBine, Lac Vieux Desert Band of Lake Superior Chippewa and Native Wild Rice Coalition
10:10 - 10:30 AM	Break
10:30 - Noon	Concurrent Sessions
Noon - 1:00 PM	Lunch Break
1:00 - 2:30 PM	Workshops and Concurrent Sessions
2:30 - 3:00 PM	Break
3:00 - 4:30 PM	Workshops Continued and Concurrent Sessions

#### Thursday, September 15

9:00 - 10:10 AM	Keynote: Emily Stanley, Professor, Department of Integrative Biology, University of Wisconsin, Madison
10:10 - 10:30 AM	Break
10:30 - Noon	Concurrent Sessions
Noon - 1:00 PM	Lunch Break
1:00 - 2:30 PM	Workshops and Concurrent Sessions
2:30 - 3:00 PM	Break
3:00 - 4:30 PM	Concurrent Sessions

#### Friday, September 16

9:00 - 10:30 AM	Workshops and Concurrent Sessions
10:30 - 10:45 AM	Break
10:45 - 12:15 PM	Workshops Continued, Concurrent Sessions, and Lightning Talks
12:15 - 1:15 PM	Lunch Break
1:15 - 2:45 PM	Concurrent Sessions
2:45 - 3:00 PM	Break
3:00 - 4:30 PM	Lake Trivia, Contest Winners, and Concurrent Sessions

All times Eastern Daylight Time

#### Wednesday, September 14

Convention welcome by Julia Kirkwood, Convention Co-chair, D Great Lakes, and Energy 9:00 - 10:10 AM			ir, Dept. of Environment,
	Keynote: Roger LaBine, Lac Vieux Desert Band of Lake Superior Chippewa, presents How we talk about our earth: Manoomin		
10:10 - 10:30 AM	Break		
	INVASIVE SPECIES AND RECREATION	COMMUNICATIONS	TECHNOLOGY
	Step aboard Michigan's Clean Boats, Clean Waters program Kelsey Bockelman and Paige Filice, MSU Extension	Utilizing Partners: The Michigan Alphabet Soup Melissa DeSimone, Michigan Lakes and Streams Association	
10:30 - Noon	Advancing the Understanding of the Recreational Boating Pathway and Aquatic Invasive Species in Michigan and Beyond Kevin Walters, Dept. of Environment, Great Lakes, and Energy	Why Don't They Clean, Drain, and Dry? Understanding Boater and Angler Behavior Carrie Meier, Michigan State University	Innovative Applications of Drone Technology for Lake Management Ronald Reimink, Freshwater Solutions, LLC and Dennis Wiand, Zero Gravity Aerial, LLC
		Behind the Scenes at the Michigan Inland Lakes Convention: The Interns' Perspective Lindsey Ruppert and Dan Olree, Northwestern Michigan College	
Noon – 1:00 PM	Lunch Break		

#### Wednesday, September 14

All times Eastern Daylight Time

	WORKSHOP: COMMUNICATIONS	WORKSHOP: AQUATIC PLANTS	FISH MANAGEMENT	CAREER PATHS
1:00 – 2:30 PM	Water Words that Work Part 1. The Perils of Preaching to the Choir Eric Eckl, Water Words That Work, LLC	Aquatic Plant Identification Erick Elgin, MSU Extension; Jo Latimore, Michigan State University; and Paul Skawinski, UW-Stevens Point	Managing Michigan's Fisheries on Inland Lakes Matthew Diana, Brian Gunderman and Seth Herbst, Dept. of Natural Resources	Panel to Explore Natural Resources Careers Speaker Panel: Paul Hausler, Progressive AE; Emily Cook, Benzie Conservation District; Caroline Keson, Tip of the Mitt Watershed Council; and Julia Kirkwood, Dept. of Environment, Great Lakes, and Energy
2:30 – 3:00 PM	Break	1	1	
	WORKSHOP CON'T: COMMUNICATIONS	WORKSHOP CON'T: AQUATIC PLANTS	FISHERIES	SHORELINE PLANTS
3:00 – 4:30 PM	Water Words that Work (con't) Part 2. The Environmental Message Method	Aquatic Plant Identification (con't)	Wood is good! Woody habitat in lakes for fish and more Joe Nohner, Dept. of Natural Resources; Craig Kivi, Natural Shorelines Forever; and Eric Calabro, Dept. of Environment, Great Lakes, and Energy	Choosing the Right Plant for the Right Place Julia Kirkwood, Dept. of Environment, Great Lakes, and Energy and Jennifer Buchanan, Tip of the Mitt Watershed Council

Looking for more details about a session? The Convention abstract web page has a description of each session: <u>www.canr.msu.edu/michiganlakes/convention/2022\_abstracts</u>

### Thursday, September 15

9:00 – 10:10 AM	Speaker introduction, Erick Elgin, Convention Co-chair, Michigan State University Extension Keynote: Emily Stanley, Professor, Department of Integrative Biology, University of Wisconsin, Madison presents Taking a long look at lakes: perspectives from the North Temperate Lakes Long-Term Ecological Research Program			
10:10 - 10:30 AM	Break			
	LAKE PROTECTION, MANAGEMENT, GOVERNANCE	FISHERIES	ALGAL BLOOMS AND HABs	NATIVE MUSSELS
10:30 – Noon	Protecting our Lakes from Natural and Anthropogenic Disasters – Yesterday, Today, and Tomorrow Stacy L. Daniels, Benzie County River improvement Co.	Our Freshwater World Mark Barrow, Beneath British Waters	Interactive Three-Part	Strengthening our
	Reducing management decision uncertainty with lake circulation modeling Mike Foster, Kieser & Associates, LLC	A review of the fishery response over time to continuous aquatic invasive species management in several Michigan lakes Paul Hausler, Progressive AE	Discussion on Harmful Algae Blooms with an Expert Panel Frank Slovenec, Global Water Works; Wayne Carmichael; Melissa Meeker, the Water Tower; and AR El- Khattabi, US	mussels: Science and management of mussels in inland lakes Joe Rathbun (retired) Dept. of Environment, Great Lakes, and Energy; Pete Badra, Michigan Natural Feature Inventory;
	Polycentric governance for change: Comparing how U.S. Midwest lake and watershed governance systems facilitate learning Dane Whittaker, Arizona State		Environmental Protection Agency	Cleyo Harris, Dept. of Natural Resources
	University			
Noon – 1:00 PM	Lunch Break			

#### Thursday, September 15

	ay, september		
	WORKSHOP: LAKES AND DATA	AQUATIC PLANT POLICY AND REGULATIONS	COMMUNICATIONS
1:00– 2:30 PM	Part I & II: Understanding Temperature/ Dissolved Oxygen Data collected by the MiCorps Cooperative Lakes Monitoring Program Erick Elgin, MSU Extension and Jo Latimore, Michigan State University Part III. Aquatic plant restoration post invasive species control Erick Elgin, MSU Extension	Policy and Regulation Surrounding Aquatic Plant Management in Michigan Joe Nohner, Dept. of Natural Resources; Eric Calabro and Ryan Crouch, Dept. of Environment, Great Lakes, and Energy	Are You Looking for an Educational Resource that Fits Your Audience? Julia Kirkwood, Dept. of Environment, Great Lakes, and Energy and Erin Fuller, Van Buren Conservation District
2:30 – 3:00 PM	Break		·
	FISH AND WATERSHEDS	POLICY AND REGULATIONS	WATER LAW AND NATURAL SHORELINES
			(45 min) Current legal issues impacting inland lakes in Michigan
3:00 – 4:30 PM	Helping fish swim into lakes: Fish passage for inland lake fishes	State Regulations Surrounding Construction Activities on Wetlands, Lakes, and Streams	William Carey, Carey and Jaskowski PLLC and Dane Carey, Kuhn Rodgers PLC
	Katelyn King, University of Michigan; Jessica Collier, US Fish and Wildlife Service; and Chris Freiburger, Great Lakes Fishery Commission	Eric Calabro, Kate Kirkpatrick, and Bethany Matousek, Dept. of Environment, Great Lakes, and Energy	(45 min) Portage Lake 2,700' Natural Shoreline Restoration, Protection and Habitat Improvement through introduction of Woody Structure
			Craig Kivi, Natural Shorelines Forever

#### Friday, September 16

	WORKSHOP: ECONOMICS AND LAKES	PLANTS, BACTERIA, AND SNAILS	LAKE PROTECTION	FISHERIES
	An Assessment of the Economic Contributions	Rare Aquatic Plant Species in Michigan: An overview of their Identification, Habitat Preferences, and Status Elizabeth Haber, Michigan Natural Features Inventory		
9:00 – 10:30 AM	of Michigan's Inland Lakes Michigan Lakes: What are the Numbers Ralph Bednarz, MDEQ Limnologist (retired); The Rennie Lake Association Social and Economic Benefits of Shoreline Restoration: Muskegon Lake as a Case Study Alan Steinman, Grand Valley State University	Monitoring enteric bacteria contamination in a freshwater watershed in Northern, MI using qPCR and a community participatory research framework Kelsey Froelich, School of Public Health, University of Alberta A novel schistosome species hosted by Planorbella (Helisoma) trivolvis is the most widespread swimmer's itch-causing parasite in Michigan inland lakes Deanna Soper, University of Dallas	Protecting lakes through watershed management: Examples from Michigan, Wisconsin, and Minnesota Heather Baird, Minnesota DNR; Pamela Toshner, Wisconsin DNR; and Sarah Nelson, Barry Conservation District	Sturgeon in Michigan: Science, Management, and Cultural Importance Ed Baker, Dept. of Natural Resources; Kim Scribner, Michigan State University; Emily Martin, Dept. of Natural Resources; Gary Michaud, Little Traverse Bay Bands of Odawa Indians; and Corey Jerome, Little River Band of Ottawa Indians
10:30 – 10:45 AM	Break	(Texas)		

# Friday, September 16 All times Ed

10:45 – 12:15 PM	WORKSHOP CON'T: ECONOMICS AND LAKES An Assessment of the Economic Contributions of Michigan's Inland Lakes (con't) The Economic Value of Michigan's Inland Lakes: A Literature Review Scott Brown, Michigan Waterfront Alliance Significance of Inland Water and State Parks Ron Olson, Dept. of Natural Resources	<b>CITIZEN SCIENCE</b> Lake Associations and Citizen Science - Protecting Lakes Today For Tomorrow Paul Sniadecki, Michigan Lakes and Streams Association (MLSA); Lori Mroczek and Sue Carmichael, Eagle Lake; and Lon Nordeen and Dr. Charlyn Partridge, MLSA Board Directors	INVASIVE SPECIES Challenges, successes, and lessons learned in surveying for the aquatic invasive species, European frog- bit, in an urban setting Jason Frenzel and Kate Laramie, Huron River Watershed Council; Eric Diesing, Clinton River Watershed Council; and Sam Davis, Friends of the Rouge	LIGHTNING TALKS A series of 5 minute presentations highlighting lake organizations and breaking research. The list of speakers is available on page 11.
12:15 – 1:15 PM	Lunch Break ALGAL BLOOMS AND HABs	SHORELINE TRENDS	LAKE RESTORATION	
1:15 – 2:45 PM	Cyanobacteria monitoring of inland waterbodies in Michigan Aaron Parker, Dept. of Environment, Great Lakes, and Energy and Rick Rediske, Grand Valley State University	Inland Lake Shoreline Trends and Analysis Gary Kohlhepp, Chad Fizzell, and Eric Calabro, Dept. of Environment, Great Lakes, and Energy	Inland Lake Restoration; Establishment of a Lake Management Plan, lake management case studies, phosphorus mitigation for the future Rick Buteyn, Progressive AE; Jason Broekstra, PLM Lake & Land Management Corp; and Pamela Dugan, SePRO Corporation	
2:45 – 3:00 PM	Break			



#### Friday, September 16

All times Eastern Daylight Time

	LAKE TRIVIA AND AWARDS	INVASIVE PLANT SPECIES	LAKE ISSUES	SEPTIC SYSTEMS AND SEWERS
	Lake Trivia Presented by Lindsey Ruppert and Dan Olree, Northwestern Michigan College	Progress toward eradication of Parrot Feather and Yellow Floating Heart in Michigan William Keiper, Sarah LeSage, and Tom Alwin, Dept. of Environment, Great Lakes, and Energy	Could Recent Development of Thick Benthic Microalgal Mats in Oligotrophic Lakes Be Caused by Lower Lake Phosphorus? R. Jan Stevenson, Michigan State University	Wastewater management along inland lakes: impacts, alternative on-
3:00 – 4:30 PM	Showcasing Convention Photography and Creative Arts Contest Winners Presented by Lindsey Rupert and Dan Olree, Northwestern Michigan College	Control Methods for Eurasian Watermilfoil in Lake Leelanau Annalise Povolo, Lake Leelanau Lake Association and Grand Traverse Band of Ottawa and Chippewa Indians; Ronald Reimink, Freshwater Solutions, LLC; and Dan Mays, Grand Traverse Band of Ottawa and Chippewa Indians	Differences in Rural and Urban Lakes and Implications for Management Jennifer Jermalowicz- Jones, Restorative Lake Sciences LLC	Inspaces, and mative of a lot/off-lot systems, and example septic to sewer projects in Michigan Larry Stephens, Michigan Onsite Wastewater Recycling Association and Stephens Consulting Services; Mike Stephens, Milan Engineered Systems/Milan Supply/ Valley Farms Supply; and Joel Kwiatkowski, Bay County Health Department
		Expansion of European Frog-bit in Michigan: Response at Reeds and Fisk Lake Case Study William Keiper, Dept. of Environment, Great	Lawns and Lakes: Managing Lawns while Preserving Water Quality Kevin Frank, Michigan State University	
4:30 PM	Convention adjourned-	Lakes, and Energy		

#### **Give us feedback!**

One challenge of a virtual event is determining the satisfaction of the audience. Please take our survey and share your opinion and recommendations for next time. We greatly appreciate your participation and look forward to successful events in the future with the help of your input. https://bit.ly/MILCsurvey

# Five Minute Lightning Talks Each speaker will have five minutes to present.

Speaker	Organization	Торіс
Ralph Bednarz	MDEQ Limnologist (retired); The Rennie Lake Association	Libraries Love Lakes- The 2022 TADL Event
Elizabeth Belanger	Lake Superior State University	Assessment of Using a Remotely Operated Vehicle for Fish Abundance and their Relations to Habitat
Melissa DeSimone	Michigan Lakes and Streams Association	Michigan Lakes and Streams Association
Paige Filice	Michigan State University Extension	Keeping aquarium and garden pets and plants out of Michigan's inland lakes
Julia Kirkwood	Dept. of Environment, Great Lakes, and Energy	Michigan Natural Shoreline Partnership
Julia Kirkwood	Dept. of Environment, Great Lakes, and Energy	Michigan Shoreland Stewards Program
Julia Kirkwood and Joe Nohner	Dept. of Environment, Great Lakes, and Energy and Dept. of Natural Resources	Grant Fund Options for Inland Lakes
Joe Nohner	Dept. of Natural Resources	Midwest Glacial Lakes Partnership: Science, Outreach, and Conservation funding lake ecosystem management
Jo Latimore	Michigan State University	Introduction to Lakes Online: A course from MSU Extension
Paul Steen	Michigan Clean Water Corps	Cooperative Lakes Monitoring Program Annual Results
Sally Wenczel	West Bloomfield Parks and Recreation Commissioner	Eat Your Freedom Lawn
Lois Wolfson	Michigan State University	McNALMS Promotes Protection of Michigan's Inland Lakes
Katie Fournier	Michigan Recycling Coalition	Stewardship through Boat Cover Recycling



## **Convention Contributors**

Thanks to all our sponsors for helping to make the Michigan Inland Lakes Convention an accessible and successful online event. Visit the convention web page to learn about these organizations.

N-DR

#### Platinum (\$750+)



### Gold (\$500)



Institute of Water Research MICHIGAN STATE UNIVERSITY

# orogressive ae

#### Silver (\$250)





### **Need Continuing Education Credits?**

By attending presentations at the Michigan Inland Lakes Convention, you can earn up to 14 Pesticide Applicator Recertification credits from the Michigan Department of Agriculture and Rural Development. The credits can be used for either Commercial Core or Category 5 (aquatic). Credits available vary depending on the days attended: Sept. 14: 4 credits, Sept. 15: 5 credits, and Sept. 16: 5 credits.

If you would like to receive credit for your participation, please complete this online form within one week of participating in the Convention: <u>https://bit.ly/milc-mdard</u>

#### **Keep in touch!**



Convention participants are added to our mailing list. Check our newsletter for upcoming events and lake news.



Like us on Facebook @michiganinlandlakesconvention



Follow us on Twitter <u>@Mich\_Lakes</u>



### **Convention Committee**

The following individuals served on the organizing committee for the 2022 Michigan Inland Lakes Convention: Ralph Bednarz (MDEQ, retired; The Rennie Lake Association), Scott Brown (Michigan Waterfront Alliance), Eric Calabro (EGLE), Melissa DeSimone (Michigan Lakes and Streams Association), Erick Elgin (Co-chair, MSU Extension), Paige Filice (MSU Extension), Constanza Hazelwood (Northwestern Michigan College), Paul Hausler (Progressive AE), Julia Kirkwood (Co-chair, EGLE), Jo Latimore (MSU), Amy Lounds (EGLE), Joe Nohner (DNR), Dan Olree (intern, Northwestern Michigan College), Lindsey Ruppert (intern, Northwestern Michigan College), Renae Siler (MSU Extension), and Lois Wolfson (MSU).

# Michigan Inland Lakes Partnership

### **Michigan Inland Lakes Partnership**

The Michigan Inland Lakes Convention is organized by the Michigan Inland Lakes Partnership, a collaboration of diverse organizations with a common mission to advance stewardship of Michigan's inland lakes. The Partnership engages state and local agencies, Native American Nations, outreach institutions (universities and other educational institutions), non-governmental organizations, businesses, industries and citizens in a collaborative effort to ensure the quality, sustainability and ecological diversity of lakes, while considering society's needs. The following organizations are the decisionmaking body of the organization.

