# 2023 MAEOE CONFERENCE

Alpena, MI | 9.29.2023 - 10.1.2023



## **Conference Maps**

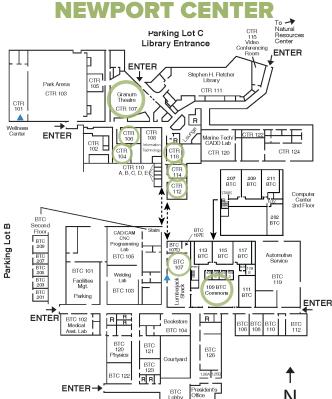


ONE: Ramada Inn, 1000 U.S 23 North

TWO: Alpena Community College, 665 Johnson St.

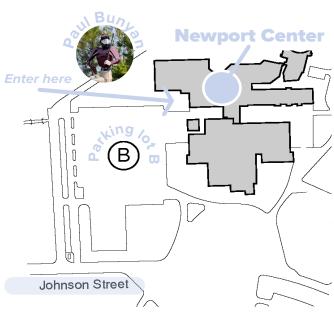
THREE: Great Lakes Maritime Heritage Center, 500 Fletcher St.

FOUR: Art in the Loft, 109 N, 2<sup>nd</sup> Ave, Suite 300



## ALPENA COMMUNITY COLLEGE CAMPUS





## Conference at a Glance

## Friday, September 29th

7:30 a.m. – 4:00 p.m. 8:00 a.m. – 11:30 a.m.

10:00 a.m. – 4:00 p.m.

11:30 a.m.

1:00 p.m - 1:50 p.m.

2:00 p.m. – 2:45 p.m.

3:00 p.m. – 3:45 p.m.

4:00 p.m. – 4:45 p.m.

5:00 p.m.

6:30 p.m.

On-Site Registration/Check-In at Alpena Community College

Morning Workshops Alpena Community College (ACC)

Morning Field Trips (Meet at Paul Bunyan/ACC)

Exhibits/bookstore/rock shop/silent auction open

Lunch on your own

Welcome to Alpena/MAEOE Conference (Granum Theatre)

**Breakout Sessions** 

**Breakout Sessions** 

**Breakout Sessions** 

Adjournment

MAEOE MASH, Great Lakes Maritime Heritage Center

## Saturday, September 30th

7:00 a.m.

7:30 a.m.

8:00 a.m.

8:30 a.m. - 8:45 a.m.

9:00 a.m.

10:00 a.m.

11:00 a.m.

12:00 p.m.

1:00 - 4:00/4:30 p.m.

5:30 p.m.

6:00 p.m.

6:30 p.m.

9:00 p.m.

Optional Birding at Island Park Sanctuary (Meet at Covered Bridge)

Breakfast at your hotel

Registration opens at ACC

Morning announcements/reminders (Granum Theatre)

Breakout and Extended Breakout sessions

**Breakout Sessions** 

General Assembly: Conference Keynote (Granum Theatre)

Lunch at ACC (The Commons) provided by MAEOE

Field Trips off site

Past Presidents Reception, Art in the Loft

Pre-banquet reception, Art in the Loft

Awards Banquet, Art in the Loft

MAEOE Meltdown: The Fresh Palate, Nucleus Lounge, Thunder Bay

Winery (all located on ground floor at center building)

## Sunday, October 1st

7:30 a.m. 9:00 a.m.

10:00 - 11:45 a.m.

10:00 a.m.

12:45 p.m.

Breakfast at Your Hotel

Coffee with the Board (ACC - the Commons)

**Extended Breakout Sessions** 

Lake Huron Beach Clean-up – Off site



# MAEOE,

Welcome to the sunrise side of the state.

I first visited Alpena in 1982, travelling with my father to visit my great grandparents who resided just outside of the city. I had not returned until last year, and now, through the eyes of an environmental and outdoor educator, I really regret not visiting more often.

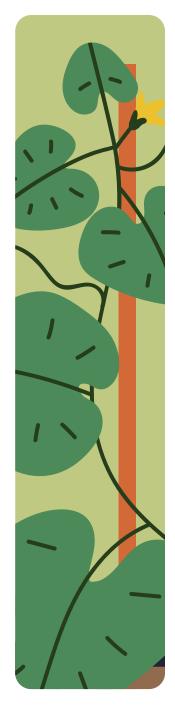
Alpena offers extraordinary, unique adventures in the areas of geology, biology, history, and more. Our field trips are going to immerse you in one-of-a-kind explorations that you can use to enhance your own instruction. And, as I get older and see more of our state, I realize that we are blessed to have so many great locations to explore the outdoors. MAEOE hopes to keep visiting new locations to enhance your learning, much like you encourage your outdoor and environmental students to explore their outside world. Why? Because once we get everyone in our state outside to experience Michigan parks, lakes, rivers, and forests, they will fall in love with them, and if they fall in love with them, they will protect them.

MAEOE is growing, but we do not have enough members to reach every person in our state. Make no mistake, our aim is to reach every person. In today's world, not everyone has equal access to the outdoors, and MAEOE is working hard to fix that. But, we need your help. Sell the idea of MAEOE to colleagues and friends who work in schools, universities, nature centers, zoos, soil conservancies, and other environmental fields and help expand our web of support for one another so we can continue to develop programs that reach every Michigander. You are our best ambassador.

New members, I welcome you to some of the most extraordinary educators in our state. While I have always been amazed at our membership's depth of knowledge, I am even more proud at how willing they are to share their expertise and time, treating everyone as equals.

Experienced members, take time out from renewing old friendships and say hello to some people you have not met before. Hear their stories, why they came, and what they have to offer. The power of MAEOE is that we have people from such diverse environmental and outdoor educational experiences that everyone is an expert on some things, and we can all learn new things from one another.

It has been my pleasure to serve as your president for the past two years. This experience has allowed me to give back to the people who shaped my ideals as an educator, helped me refine skills and learn new ones, and allowed me to meet many new friends who seek to make Michigan a better place. Thank you for the great two years.





Bill Hodges
Bill Hodges
MAEOE President

## Things You Need to Know!

## Conservation Corner: Rooms 104 & 106

Opens 9:00 a.m. Friday through Sunday morning. Closed Saturday afternoon

**MAEOE Book Fair:** A great opportunity to pickup classroom and nature center resources. Dozens and dozens of titles and topics with proceeds going to MAEOE. Coordinated by volunteer, and avid reader, Jon Gray

**Exhibit Alley:** Stop and learn about programs, and materials, available from EE/OE partners. A great way to network with your colleagues. Board candidates may also be on hand.

**Silent Auction:** Bring your treasures to donate and find others to purchase. All proceeds fund MAEOE small grant and scholarship programs.

**MESTA Rock Shop!** The Michigan Earth Science Teachers Association will be on hand with their traveling rock shop. Pick up fantastic fossils, impressive igneous, amazing metamorphic, sensational sedimentary samples. The prices are rock bottom.

## Provide Leadership! Vote for the next Board of Directors.

Voting takes place beginning at 8:00 Friday, September 29 through Saturday noon. Log into your MAEOE account at <a href="https://www.maeoe.com">www.maeoe.com</a> to vote.

No sure who to vote for? Check out their bios on the MAEOE website before you pull the lever. You may find additional candidate material in the exhibit area.

Best yet, stop by and hello to candidates at the MAEOE MASH Friday Evening.



## **Lake Huron Sponsors**

\$1,000



### WASTE SOLUTIONS FOR A SUSTAINABLE TOMORROW.

WM has over 70 Wildlife Habitat Council certified sites, several of which are in Michigan. Our landfills provide over 15,000 acres of wildlife habitat across the U.S. and Canada.

NOTE: Many of WM's landfills provide wildlife habitat, even though not certified by WHC. <a href="https://sustainability.wm.com/">https://sustainability.wm.com/</a>



## **Lake Huron Sponsors**



EGLE protects Michigan's environment and public health by managing air, water, land, and energy resources



Learn about Michigan's **Environment** 



Get recognized for stewardship actions



Borrow handson education materials



**Explore** environmental career paths



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



Michigan.gov/EGLEclassroom





# Friday at a Glance

## September 29th

Start Time	End Time	Activity	Room
7:30 a.m.	4:00 p.m.	Registration/Check-In	Newport Center, Alpena CC
8:00 a.m.		Voting Opens	Online
8:00 a.m.	11:30 a.m.	Workshops/Field Trips Fisheries Heritage at Besser Museum North Point Nature Preserve Project Wet Workshop MEECS Workshop	Meet at Paul B. Meet at Paul B. Room 112 ACC Room 116 ACC
10:00 a.m.	5:00 p.m.	Silent Auction, Exhibits and Bookstore, Rock Shop	Rooms 104/106
11:30 a.m.	1:00 p.m.	Lunch on Your Own	
1:00 p.m.	1:45 p.m.	Opening Ceremony	Granum Theatre
2:00 p.m.	2:45 p.m.	Breakout Sessions EEC Capstone Projects Ancient Ecosystems Lets go Outside Taking Action for Climate Change	Granum Theatre 116 114 112
3:00 p.m.	3:45 p.m.	EEC Capstone Projects Ancient Ecosystems Continued Make and Take Projects Environmental Stewardship	Granum Theatre 116 112 114
4:00 pm.	4:45 p.m.	EEC Capstone Projects Raptor Migration Teaching Network Make and Take Projects continued Taking a bite our of Lunchroom Waste	Granum Theatre 116 112 114
6:30 p.m.	8:30 p.m.	MAEOE MASH	Thunder Bay Great Lakes Maritime Heritage Center

Enjoy Alpena on your own!

## **Lake Huron Sponsors**

\$1000

# HOLCIM





### Friday, September 29

Morning Field Trips and Workshops | 8:00 - 11:30 a.m.

## Fisheries Heritage at Besser Museum Meet at Paul Bunyan for short walk | Fee: \$0

Explore the riches of the Lake Huron fisheries - past, present, and future - with the Besser Museum for Northeast Michigan, Michigan Sea Grant, and sponsored by the Center for Great Lakes Literacy. Learn about Great Lakes fisheries history and heritage through recreational, commercial, and fisheries science vessels and exhibits. The museums outdoor fossil park is also an amazing sight to see. Group size limited to 25. Pre-registration is required.

#### North Point Nature Preserve | Meet at Paul Bunyan for carpool | Fee: \$0

Just minutes from downtown Alpena—jutting out into the waters of Lake Huron—is an astonishing area known as the North Point Peninsula. One of the most ecologically significant regions in the Great Lakes basin, the peninsula provides critical habitat for rare species and is an important stopover point for migratory birds. North Point and the surrounding area is so valuable for biodiversity that a bi-national analysis identified it as one of only 26 "Biodiversity Investment Areas" in the Great Lakes region. Wear shoes appropriate for walking along boardwalks, sand, gravel, and uneven wooded trails. Group size limited to 20. Pre-registration is required.

#### Project WET Workshop | Room 112, Newport Center, ACC | Fee \$40

Project WET (Water Education for Teachers) is nationally renowned and one of the most popular supplemental natural resources curriculums in America. WET offers engaging activities for educators to use in their classrooms and outdoors. Interdisciplinary activities will explore water through seven water literacy themes and will be presented in a fun, collaborative, and hands-on way, preparing participants to directly implement Project WET into their classrooms or educational programs. Whether you are a currently trained WET educator or participating for the first time, you will enjoy this chance to learn about our planet's most precious resource. Pre-registration required.

## MI Environmental Education Curriculum Support (MEECS) Room 116, Newport Center, ACC | Fee \$0

Join us for a hands-on workshop exploring the new Michigan Environmental Education Curriculum Support (MEECS) units. This workshop will highlight the Water Quality and Ecosystem and Biodiversity units demonstrating how they can be used in the classroom. Participants will receive free material kits to support their implementation. Don't miss this opportunity to learn about the latest Michigan-based environmental education resources and how to engage your students in meaningful learning experiences. This workshop also fulfills a Strand 2 requirement for the Michigan Environmental Educator Certification (EEC). Pre-registration required.

## **Lake Michigan Sponsors**

\$500





# Friday Breakout

### 2:00 - 2:45 p.m.

#### **EEC Capstone Projects: Granum Theatre**

#### **Tree Journal**

Using a yearlong tree journal, students are guided though a way to develop the roles that trees play in our community. Students walk away with a better sense of stewardship for our natural resources, even if is just one tree at a time. Claudia Foerg

#### Go with the Flow

Implementing Equitable Watershed 3P STEM Across the District through Nature Center Partnership with School Administration.
Bonnie Hollander

#### **Regular Sessions**

## Let's Go Outside: Starting an Outdoors Club in Your School | Room 114

Kim Koilpillai, independent presenter

To create more equitable access to nature for our students, start an after school outdoor club. There is no fee to join, and all materials and experiences are provided through donations and grants. The year culminates with a family campout on school property in partnership with community organizations who provide equipment and programming. Our motto is "Let's Go... OUTSIDE!"

# **Taking Action for Climate Change | Room 112**Bridget Booth, Haslett Middle School, MAEOE Past President

Learn about MAEOE's partnership with the Michigan Climate Action Network and the collaborative work of the Climate Education Action Team. Participants will learn how to get involved in this important work and will participate

in some sample interdisciplinary lessons that can be implemented in both formal and nonformal educational settings.

## Ancient Ecosystems & The Story a Rock Can Tell Note: Double Session | Room 116

Dave Chapman, Okemos HS Retired, MAEOE Past President

Alpena's current ecosystems sit atop ancient ecosystems, the story of which can be found in local rocks. Participate in a series of activities to discover not only what those ecosystems were like, but also the connections these rocks have with: glacial history, sinkholes, regional geology, history of Great Lakes and more.

### 3:00 - 3:45 p.m.

#### **EEC Capstone Projects: Granum Theatre**

#### **College and Community Collaboration**

Through the existing MiCorps resources in Michigan, this EEC action project created a volunteer stream monitoring program in Eaton County, providing an environmental education opportunity for college students and community scientists. Erin Pavloski

## Education for Sustainability: Project, Place & Justice-Based Learning

Learn how this 1-credit course engaged University of Michigan graduate students in exploring methods for engaging learners of all ages with the interdisciplinary concept of sustainability. Course framework and activity and assignment examples will be shared. Emily Schaller

# Session Descriptions

#### **Regular Sessions**

## **Environmental Stewardship: Activating Student Voices | Room 114**

June Teisan, Belle Isle Aquarium

Project-Based Learning and Place-Based Education are instructional strategies that center teaching and learning on challenges and problems students may face in the real world. Hear specific examples of student action focused on place – lands and waters, people and organizations, history, and indigenous culture – and current ecological challenges – deforestation, threats to our Great Lakes ecosystems.

## Make and Take Projects Note: Double Session Room 112

Mike Mansour, retired formal and nonformal educator, MAEOE Past President

This potpourri of hands-on activities is an Earth Day Extravaganza. It includes making bluebird houses, cone feeders with lard and sunflower seeds, flowerpots and plants, environmental justice handouts and examples of great Earth Day stations. If you are looking for creative student projects and Earth Day ideas, come create these hands-on projects and walk away with ideas AND finished projects.

4:00 - 4:45 p.m.

#### **EEC Capstone Projects: Granum Theatre**

#### **Forest Fridays**

Through the work of researchers, we can better understand the connections and quantify the benefits of being engaged in outdoor learning in terms of their impact on physical, mental, and social health and a variety of co-benefits including improved learning. Initiating Forest Fridays is one step. Amy Sayers

#### **Training the Next Generation of Ag Whisperers**

Private landowners control the majority of the land in Michigan, thus having a major impact on the current and future state of Michigan's Natural Resources. This project gathered perspectives from farmers and "ag whisperers" to create a training that could be used to help new technicians be more effective. Andrea Stay

#### **Regular Sessions**

## Michigan Raptor Migration Teaching Network Room 116

Kara Hass, K-12 Partnership Coordinator, KBS and Josh Hass, Hawk Migration Assn. of N.A.

Migration behavior is an important scientific phenomenon, and the counting of these birds is an intriguing community science project that you can bring to your students through learning physics, chemistry, math and more!

## Taking a Bite out of Lunchroom Waste Room 114

Tracy D'Augustino, STEM Educator MSU

This is an NGSS aligned K-12 curriculum designed to provide you and your students with the information and tools to help prevent marine debris at a system level. Participants will explore marine debris prevention through hands- on activities with the designers and learn tips.



# Saturday at a Glance

September 30th

Start Time	End Time	Activity	Room
7:30 a.m.	12:00 p.m.	Registration/Check-In	Newport Center, Alpena CC
8:30 a.m.	8:45 a.m.	Morning Announcements	Granum Theatre
8:30 a.m.	12:45 p.m.	Silent Auction, Exhibits, Bookstore Open	Rooms 104/106
9:00 a.m.	10:45 a.m.	Extended Breakout Sessions (105 minutes) Teaching Climate Change w/PLT/Wet/WILD Get Wild with EE and Adaptive Recreation	112 114
9:00 a.m.	9:45 a.m.	Breakout Sessions (45 minutes) Why Water Matters Grant Me Three Wishes	Granum Theatre 116
10:00 a.m.	10:45 a.m.	Breakout Sessions (45 minutes) Nature Based Learning in a Nutshell Creating Meaningful Watershed Ed Experiences	Granum Theatre 116
11:00 a.m.	11:45 a.m.	Keynote Speaker: Hannah MacDonald	Granum Theatre
12:00 p.m.	12:45 p.m.	Lunch	The Commons
1:00 p.m.	4:30 p.m.	Field Trips Fossil Dig at Rockport State Recreation Area Place-Based Stewardship Education at Alcona Community Schools Explore Negwegon State Park by bike Historical Tour of Alpena	Offsite
5:30 pm.	6:00 p.m.	Past Presidents Reception	Art in the Loft
6:00 p.m.	4:45 p.m.	Pre-Banquet Reception	Art in the Loft
6:30 p.m.	8:30 p.m.	Awards Banquet	Art in the Loft
8:30 p.m.		MAEOE Meltdown	The Fresh Palate Nucleus Lounge Thunder Bay Winery

## **Lake Michigan Sponsors**

\$500







# Saturday Highlights

#### From Michigan to Maine and back: An Anadromous Journey

Hannah MacDonald, Fisheries Engagement Program Manager | Gulf of Maine Research Institute | Keynote Presentation | 11:00 – 11:45 a.m. Granum Theatre





Growing up in Alpena, Michigan, Hannah MacDonald did not let her distance from the ocean prevent her voice from being heard regarding marine conservation issues. In fact, she used her connection to the Great Lakes to link her to the ocean - and in turn - her career. Growing from being a student in place-based environmental education classes in northeast Michigan, she has grown a career in marine conservation and stewardship.

Today, Hannah is dedicated to developing solutions for ocean challenges in the Gulf of Maine, drawing on her experiences of the interconnectedness between communities and marine resources on the shores of Lake Huron.

In her keynote, Hannah will discuss the transformative education programs she participated in while at Alpena High School and Thunder Bay National Marine Sanctuary. Her presentation will highlight the importance of place-based education in her personal growth and for inspiring her career in marine conservation. Hannah will also share her journey from being a student to becoming an educator and finally a professional in marine conservation.



**Past Presidents and Board Reception** 5:30-6:00 | Art in the Loft

**Pre-Banquet Reception** 6:00-6:30 | Art in the Loft

Awards Banquet 6:30-8:30 | Art in the Loft MAEOE Meltdown 8:30 | On your own downstairs at the Nucleus lounge or The Fresh Palate or The Thunder Bay Winery or all three

## Saturday Breakout Session Descriptions

#### **Extended Sessions**

9:00 - 10:45 a.m.

## Teaching Climate Change w/PLT/Wet WILD Room 112

Andrea Stay, Volunteer and Engagement Specialist MDNR

Understanding climate, and how that impacts the environment, is crucial to making informed decisions and building resilience. Environmental education is not isolated to water, forests or animals. It connects everything. This hands-on session will demonstrate PLT, WET, and WILD activities and adaptions to empower you to teach climate change in fun and factual ways.

## Get Wild with EE and Adaptive Recreation Room 114

Courtney Prout, Naturalist, Genesee County Parks

This session includes projects with the Flint River Watershed Coalition, the Disability Network, and Genesee Health Systems in coordinating outdoor EE and recreational opportunities for disabled Genesee County residents of all ages.

### **Regular Sessions**

9:00 - 9:45 a.m.

#### Why Water Matters | Granum Theatre

Carol Trembath, educator and author

The "Why Water Matters" program will present the history of Native People's protection of water through their ongoing efforts—walking over 20,000 miles the perimeter of the Great Lakes plus waterways and rivers in the United States and Canada.

#### **Grant Me Three Wishes | Room 116**

Christine Kelly, Michigan educator
Improve your science program and gain some
exciting materials to make your most excellent
science wishes to come true! Tie in STEM,
climate change and more. Examples of activities
include: GreenRoof & LiveWall; Car Idle Exhaust:
Analyze the Air; and Shaded Riparian Habitats of
the Streams

### **Regular Sessions**

10:00 - 10:45 a.m.

## Nature Based Learning in a Nutshell Granum Theatre

Sweta Joshi, Oakland University Dr. Sinsery Gardner, Oakland University

Learn how the Scandinavian nature-based education system and nature-based experiential learning minimizes the achievement gap, making them distinct and world-class education systems. This presentation is research-based, with videos showing what the nature-based classroom of these countries looks like and the role of the educators.

## Creating Meaningful Watershed Ed Experiences Room 116

Nicole Ferguson, Naturalist, Genesee County Parks

Join the Genesee County Parks & the Flint River Watershed Coalition as we explore how you can create Meaningful Watershed Educational Experiences (MWEE) for youth in your community. Dive into two different watershed education programs developed for Out of School time educators; the new 'Water Wonders Curriculum' and the "Floating Bloom Camp".



## Saturday, September 30 Field Trips | 1:00-4:00/4:30 p.m.

#### Fossil Dig at Rockport State Recreation Area

Tour an abandoned limestone quarry where historic mining exposes the 360-million-year-old ancient Devonian Sea. Explore the geology of this unique recreation area and even collect a few fossils along the way. Corals and crinoids, stromatolites and sponges, brachiopods and gastropods, trilobites and even some of the most ancient fishes reflect examples of living organisms that once thrived in these shallow ocean seas and now preserved in northeast Michigan rock formations. Wear shoes appropriate for uneven, rugged trails. Carpools leave from Paul Bunyan sculpture in the ACC Parking Lot. Distance – 20 minutes north of Alpena.

#### Place-Based Stewardship Education at Alcona Community School

Place-based education shines at Alcona Community Schools where students, from elementary to high school, are engaged as learners and leaders in local agricultural and environmental stewardship projects. Field trip leaders will showcase a variety of student stewardship projects from elementary to middle/high school, s share how strategic school-community partnerships bring this work to life and explore how you might bring this type of work back to your school or community. Alcona Community Schools is also a pioneering leader among the Northeast Michigan Great Lakes Stewardship Initiative, a regional place-based education network and partnership. Carpools leave from Paul Bunyan sculpture in the ACC Parking Lot. Distance- -40 minutes south of Alpena.

#### **Explore Negwegon State Park by Bike**

Nestled along the shores of Lake Huron, Negwegon State Park is rich in diverse coastal habitats, rare species, and cultural connections throughout human history including early European, Native Americans, and even prehistoric peoples. Grab your bike for this tour where you will pedal your way through time to experience how people have connected with this place - past, present, and future - while immersing yourself in the scenic beauty and natural features of Negwegon State Park. A Recreation States Park Pass required for entry. Bring your own bike. Carpools leave from Paul Bunyan sculpture in the ACC Parking Lot. Distance- - 40 minutes south of Alpena.

#### **Historical Tour of Alpena**

Embark on a historical tour of downtown Alpena, immersing yourself in its captivating riverfront and architecture. Begin along the scenic banks of the Thunder Bay River, where Alpena's early settlers arrived by boat. Stroll along the riverfront promenade, taking in the views and learning about Alpena's role as a bustling shipping port in the past. Learn about the historic buildings lining the streets, showcasing a range of architectural styles, from Queen Anne to Italianate. This historical tour of downtown Alpena promises to transport you back in time, revealing the city's industrial and architectural splendor and its deep connection to its waterfront roots. Wear comfy shoes. Meet at Paul Bunyan to carpool to Downtown.

## **Lake Superior Sponsors**

\$250

# JOIN MICHIGAN EDUCATORS USING PROJECT LEARNING TREE!

"It gives students who struggle in traditional classroom environments a chance to succeed. Plus it's fun!"

"My students get really involved in their learning.

The activities are laid out nicely."

"Lesson planning is made easier with these resources"

"Teaching children about the natural world and instilling a love for the outdoors as soon as possible is one of the most important things we can do for them."

"The projects are fun and incorporate good science."



Great Lakes Educators of Aquatic and Marine Science



Collaborate with aquatic educators from around the Great Lakes.

Share resources, attend events, and network.

WWW.MICHIGANPLT.ORG





## Lake Erie Sponsor

GRAND VALLEY
STATE UNIVERSITY,
ROBERT B. ANNIS
WATER RESOURCES INSTITUTE

# Sunday at a Glance

October 1st

Start Tin	ne End Time	Activity	Room
9:00 a.m.	. 10:00 a.m.	Coffee with the Board	Lumberjack Shack, ACC
10:00 a.m	n. 11:45 a.m.	Nonformal NAAEE Guidelines Session Focus on your Watershed Huron Beach Cleanup	112 116 Offsite



#### Coffee with the Board

9:00 a.m. sharp Lumberjack Shack, Alpena Community College

- » Morning Announcements
- » Introduction of New Board Members
- » 2024 Conference Presentation



## Sunday Morning Breakout Sessions Descriptions

Extended Breakouts | 10:00 - 11:45 a.m.

#### Nonformal NAAEE Guidelines Session | Room 112

Cass Arsenault, Interpretive Naturalist, Johnson Nature Center

How do you design, implement, and evaluate programming to best suit the needs of your audience? We'll explore program development and assessment using the framework of the North American Association for Environmental Education's Guidelines for Excellence, the Nonformal Environmental Education Programs guide. Participants are encouraged to bring a lesson plan or program outline with them to use during the workshop. Participants will receive a copy of the Nonformal Education Guidelines.

#### Focus on your Watershed | Room 116

Trisha Smrecak, Education Coordinator, Inland Seas

We all live in a watershed - in fact several, including the Great Lakes basin! Immersive "locations" for environmental education that connect biotic and abiotic components; humans and nature. Led by NOAA BWET facilitators, a rich variety of ideas and resources will be shared. You'll also learn about programs available to expand your knowledge. Participate in take-away activities, gain perspective on watershed issues, and leave with ideas for using your watershed as a classroom

#### Huron Beach Cleanup | Meet at Paul Bunyan

Meag Schwartz, MAEOE Director at large, will lead a cleanup along Starlite beach in Alpena Sunday Morning. Meag founded Great Lakes Great Responsibility in 2020 targeting one million pieces of trash removed from the Great Lakes. Here is the environmental service project you have been waiting for: picking up trash on a Lake Huron beach in October! Carpool to Starlite beach before you head home and cap off your weekend by making a

difference. Data collected will be counted towards the Great Lakes Educators of Aquatic and Marine Science (GLEAMS) 2nd Annual Coastal Cleanup happening September 7th-October 7th.



An adult get away weekend to escape the winter blues. Learn new things and enjoy the warm and embracing atmosphere of the RAM Center. Food, fires and festivity all in one weekend while you pick skills and education in one of three classes.

Arrive Friday, February 9 around 5:00 p.m., get settled and have a light meal before meeting your classmates and instructors Friday evening. Continue your adventure Saturday and Sunday through noon. Have a full lunch before hitting the road. Two nights lodging and six meals

MAEOE Member: \$295/person plus your class

materials fee

Non-Member: \$345/person plus class materials

fee

#### **Snowshoe Making 101**

Enjoy Michigan winters with a pair of snowshoes that YOU make yourself. Craig Kasmer, Interpreter at Hartwick Pines State Park, has been offering amazing snowshoe workshops for many years but this one includes an opportunity to go snowshoeing at one of Michigan's favorite state parks. After a brief introduction to snowshoes, you will learn the step-by-step process to lace your own Green Mountain snowshoes with a kit that includes everything but patience. In the afternoon Saturday, take a break from weaving and make the short trip to Hartwick Pines State Park where Craig will allow you to borrow park "shoes" to traverse the trails. You will be back in time for a hot meal, a fire and refreshments on Saturday night. Sunday wraps up the workshop as you continue to create your own snowshoes. Workshop Supply Fee for snowshoes/lacing/ bindings: \$180

#### **Geology Potpourri**

This session is perfectly designed for a Michigan winter learning weekend with a mixture of amazing education and hands on activities. The RAM's almost Geologist In Residence, Steve Tchozeski, will take you on a billion year timeline. Learn how Native Americans in the Great Lakes region used and traded rocks and minerals. Go on a simulated Arkansas quartz dig and keep what you find. Dig for fossils as well and learn the secret behind selecting and cracking geodes. This class even shows you the finer art of jewelry making with the materials you have mined in class. Steve's energy, style and information have kept him an alluvial fan favorite for years. Learn geology, be entertained and take stuff home! Workshop Supply Fee: \$15

#### **Finding Your Way**

Learning an exciting and efficient way to use a compass, test your skills with a course through the North woods and learn how maps and compasses are used together to prevent a navigational nightmare. This isn't a 2-hour compass class, but a 10-12-hour exploration of true/magnetic North, using a map with a compass, how the Land Ordinance of 1785 shaped the world we live in today, how to write the legal description and much more. A combination of outdoor compasses exercises, map and compass activities, a navigational road trip and yes, a woodland experience in the snow, combine for an educational and skill driven weekend course. Instructor Kevin Frailey, long-time navigation instructor says, "take this class or get lost." Workshop Supply Fee: \$35 for Silva Compass (optional)



## **2023 MAEOE Board of Directors**

President: Bill Hodges, Holt High School

Vice President: Jennifer Dubey, Certified Interpretive Guide

Secretary: Tori Reibel, Appalachian Bear Rescue

Treasurer: Brittany Burgess, Univ. of Mich. Museum of Natural History

Director at Large: Mike Reed, Detroit Zoological Society **Director at Large:** Misty Klotz, Kellogg Biological Station

Director at Large: Bridget Booth, Haslett Middle School

**Director at Large:** Meaghan Gass, Michigan Sea Grant (MSU)

Director at Large: D'Nae Hearn, Detroit Zoological Society

Director at Large: Meag Schwartz, NE MI Great Lakes Stewardship Director at Large: Lauren Westerman, PhD Student, Prescott College

MAEOE Advisor: Eileen Boekestein, EGLE MAEOE Advisor: Kevin Frailey, Michigan DNR

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