



15th Annual MiCorps Conference

EGLE BIOLOGIST

- Marcy Knoll Wilmes
- Aquatic Biologist
- Water Resources Division
- Michigan Department of Environment, Great Lakes and Energy



MICORPS STAFF

- Aquatic Biologist: *Marcy Knoll Wilmes, EGLE*
- Program Administrator: *Laura Kaminski, GLC*
- Program Manager: *Dr. Paul Steen, HRWC*
- Lakes Administrator: *Jean Roth, ML&SA*
- MLSA President: *Mike Gallagher, ML&SA*
- Program Consultant: *Dr. Jo Latimore, MSU*
- Water Resource Educator: *Erick Elgin, MSU Extension*
- Stewardship Coordinator: *Jason Frenzel, HRWC*

15 YEARS OF MICORPS

Outstanding Program Success

1. Remarkable water resources
2. Established lake program base
3. Citizen Volunteers
4. Dedicated Partners



PRIOR KEYNOTE SPEAKERS

- 2005 MiCorps Accomplishments in the First Year
 - Ralph Bednarz, DEQ
- 2006 Current Knowledge of Michigan Waters
 - Mike Wiley, University of Michigan
- 2007 EPA's Perspective on Volunteer Monitoring
 - Pete Jackson, EPA's Volunteer Monitoring Coordinator
- 2008 Ripple Effect of Volunteer Monitoring
 - Linda Green, USDA
- 2009 Critical Role of Volunteer Data Collection
 - Bryan Burroughs, Michigan Trout Unlimited

PRIOR KEYNOTE SPEAKERS

- 2010 Phosphorus in Michigan Waters
 - Alan Steinman, Annis Water Resources Institute
- 2011 Overview of Vulnerable Lake and Stream Taxa
 - Daria Hyde and Mike Monfils, Michigan Natural Features Inventory
- 2012 Kalamazoo River Two Years After Enbridge Oil Spill
 - Steve Noble, DEQ
- 2013 Watershed Management Plans for Restoration and Protection
 - Bob Sweet, DEQ
- 2014 Volunteer Monitoring: A Tool for Change
 - Julie Vastine, Alliance for Aquatic Resource Monitoring

PRIOR KEYNOTE SPEAKERS

- 2015 Telling Our Story
 - David Poulson, MSU Knight Center for Environmental Journalism
- 2016 Does Volunteer Monitoring Really Make a Difference
 - Kris Stepenuck, University of Vermont
- 2017 Inspiring Change With Data
 - Matt Meersman, St. Joseph River Basin Commission
- 2018 Inland Lakes Convention
 - Protecting Michigan's Inland Lakes: Emerging and Future Policy Issues
 - William Creal, retired DEQ
 - A Watershed Moment: Local to Global Collaboration for Healthy Lakes
 - Lisa Borre, Cary Institute of Ecosystem Studies
- 2019 Utilizing Restoration Best Practices and Citizen Science to Protect Coldwater Resources in Michigan
 - Jeremy Geist, Michigan Trout Unlimited

FAMILIAR FACES OF MICORPS

Ralph Bednarz



Bill Dimond



WHO ARE THE PEOPLE IN MICORPS



Group photo of the 2009 MiCorps stream training participants. Photo: Huron River Watershed Council.

WHO MAKES UP MICORPS

- Watershed Councils
- Environmental Groups
- County Conservation Districts
- Conservancies and Nature Preserves
- Local, State and Federal Government
- College and University Educators
- Lake Boards and Lake Associations
- Riparians

NUMBERS SPEAK!

- In 15 years:
 - More than 2400 volunteers sampled 552 lakes
 - More than 60 stream groups sampled 1055 stream locations

WOW! HOW IS THAT POSSIBLE?

YOU!

STREAM PROGRAM (VSMP)

- 50 Full Macroinvertebrate Stream Grants Awarded (2005-2017)
- 27 Start-Up Stream Grants Awarded (2007-2017)
- 7 Road/Stream Crossing Grants Awarded (2014-2017)
- 2 Stream Flow Grants Awarded (2016)



LAKE PROGRAM (CLMP)

- Secchi (2004)
- Spring Total Phosphorus (2004)
- Summer Total Phosphorus (2004)
- Chlorophyll-a (2004)
- Dissolved Oxygen/Temperature (2004)
- Aquatic Plant Mapping (2004)
- Exotic Aquatic Plant Watch (2007)
- Individual Lake Reports (2014)
- Score the Shore (2015)
- Website Training Videos (2016)



INTERESTING MONITORING STATS

- The Watershed Center Grand Traverse Bay has sampled Kids Creek KIDS-1, 25 times over the past 15 years, the most frequently sampled VSMP site in the database
- Upper Hamlin Lake, Mason County has 331 Secchi Readings in 15 years, the most frequent clarity readings on any CLMP Lake





2019 MICORPS PROGRAMS



VSMP – Streams Program

138 Stream Sites
Sampled in 2019



WHY DO WE SAMPLE STREAMS?

- Macroinvertebrates – good indicators of stream condition
 - Diversity and Presence of Sensitive Taxa
 - Changes Over Time
- Assess Habitat
 - Erosion
 - Vegetation Buffers
- Assess and Prioritize Undersized culverts
 - Flooding
 - Fish Passage
- VSMP: Develops or enhances stream monitoring programs





CLMP – Lakes Program

287 Lakes
Enrolled in 2019



WHY DO WE SAMPLE LAKES?

- What's going on in my backyard?
- What is my lake's trophic status?
- Does my lake have invasive aquatic plants?
- What types of native plants does my lake have?
- Why is my lake looking different?
- Am I seeing changes in my lake over time?



How is MiCorps Data Used

Who Looks at the Data?

Lake Associations, Watershed Associations, Townships, Counties, Universities, EGLE, DNR, USFS, USGS

- Watershed planning/resource allocation
- Lake management
- EGLE biosurvey site selection
- DNR inland lake fish stocking



Michigan Clean
Water Corps

<http://micorps.net>



- Information about Lake and Stream Monitoring
- Access to the Michigan Data Exchange Database
- Blog Postings and Calendar Events
- How to Become a Lake Volunteer
- Contact Information for MiCorps Staff

WHY WE LOVE MICORPS

Volunteers Count!

WHY MICORPS IS IMPORTANT

Michigan's lake and stream monitoring volunteers collect accurate, freely available data on the health of our waters. Supported by a team of scientists, their data supports local and state efforts to protect our water quality and freshwater habitats.

744

volunteers collected water quality data on our lakes and streams in 2018.

1600

Michigan lakes and stream sites have been monitored by MiCorps volunteers.

\$151,359

value of Micorps volunteer time in 2018.

CITIZEN SCIENCE IS PROTECTING *our* WATERS

MICORPS VOLUNTEERS
CARE ABOUT OUR

**Freshwater
Ecosystems**

A dark silhouette of the state of Michigan is positioned behind the text in the bottom section of the infographic.

2019 CONFERENCE AGENDA

9:30-10:30am Keynote Speaker:

Jeremy Geist, Trout Unlimited



Utilizing Restoration Best
Practices and Citizen
Science to Protect
Coldwater Resources in
Michigan

2019 CONFERENCE AGENDA

10:50 am: Morning Breakout Session (Mawby, Lakeview Rm)

We're Monitoring Our Lake, Now What? Next Steps After Lake Monitoring

- Using MiCorps Data to Better Understand Your Lake

Erick Elgin



John Bauman



Julia Kirkwood



John Stivers



2019 CONFERENCE AGENDA

10:50 am: Morning Breakout Session (Main Lodge LL, Ford Rm)

In-Stream Monitoring: Emerging Issues and Challenges

- Microplastics Monitoring
- Lake Sturgeon Monitoring

Paul Steen



Marty Holtgren



LUNCH: 12:00-12:50PM
MAIN LODGE, DINING ROOM
TABLE TOPICS

1. Resource Limitations
2. Local Action Successes
3. Knowledge/Training Resources
4. Developing Partnerships
5. Engaging Volunteers
6. Financial Support

2019 CONFERENCE AGENDA

1:00PM Training Workshops

Plants of Michigan's Lakes and Streams (Mawby, Lakeview Rm)

Erick Elgin



2019 CONFERENCE AGENDA

1:00pm Training Workshops

Insect Identification (Main Lodge LL, Ford Rm)

Mayflies



Paul Steen



Stoneflies



2019 CONFERENCE AGENDA

3:05pm Volunteer Recruitment: Planning Ahead Pays Off!

Jason Frenzel (Mawby Learning Center, Lakeview Room)

- Ideas for your organization to improve volunteer recruitment



Long-term Volunteer Recognition – 2019

- Pastor Gerry Koning, Trinity Christian Reformed Church, 5 years
- Kathy Jelsema, Trinity Christian Reformed Church, 5 years
(plus other Trinity CRC volunteers not in attendance here today)
- John Stivers, White River Watershed Partnership, 6 years
- Ray Schinler, White River Watershed Partnership, 7 years
(plus other WRWP volunteers not in attendance here today)



Thank you to all of our volunteers!

JEREMY GEIST

