

46th MEETING OF THE MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY



Explore

February 9 - 12

2026

Hyatt Regency

Indianapolis, Indiana

PROGRAM + ABSTRACTS



THE MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY

OUR VISION

To be the leading regional resource for the sound management of aquatic plants and algae.

OUR MISSION

To promote the exchange of science-based technologies for the management of aquatic resources.

OUR CORE VALUES

Discovery and Innovation Integrity
Professionalism Stewardship
 Outreach

OUR STRATEGIC GOALS

In five years, MAPMS intends to successfully:

- Expand engagement in MAPMS through improved communication and outreach to key partners.
- Increase member diversity, development, and engagement.
- Broaden the areas of expertise represented in the annual conference and overall society.
- Foster relationships with state and regional universities to promote research and student development.

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**AND HELP US WITH OUR OUTREACH EFFORTS BY COMMENTING, LIKING, AND SHARING.
THE MORE INTERACTION WE HAVE THE MORE PEOPLE WE REACH.**



PAST PRESIDENTS & MEETING SITES

2025 LONDON WIET Chicago, Illinois	2013 MATTHEW JOHNSON Cleveland, Ohio	2001 EDWARD BRAUN Grand Rapids, Michigan	1989 RICHARD HINTERMAN South Bend, Indiana
2024 AMY KAY Columbus, Ohio	2012 DICK PINAGEL Milwaukee, Wisconsin	2000 BILL RATAJCZYK Indianapolis, Indiana	1988 JAMES SCHMIDT Columbus, Ohio
2023 GARRETT MCCLAIN Grand Rapids, Michigan	2011 JIM KANNENBERG Grand Rapids, Michigan	1999 ROBERT JOHNSON St. Charles, Illinois	1987 CAROLE LEMBI Grand Rapids, Michigan
2022 MATTHEW JOHNSON Lake Geneva, Wisconsin	2010 DAVID ISAACS Indianapolis, Indiana	1998 JOE BONDRA Huron, Ohio	1986 DAVID EISENTROUT Fontana, Wisconsin
2021 RYAN THUM Virtual	2009 JASON BROEKSTRA Lisle, Illinois	1997 SHANE ORR Madison, Wisconsin	1985 NICK GOWE Ft. Wayne, Indiana
2020 JAKE BRITTON Indianapolis, Indiana	2008 JOE BONDRA Sandusky, Ohio	1996 STEVE METZER Battle Creek, Michigan	1984 RICHARD HINTERMAN Indianapolis, Indiana
2019 NATHAN LONG Chicago, Illinois	2007 KEVIN DAHM Milwaukee, Wisconsin	1995 SCOTT JORGENSON Indianapolis, Indiana	1983 ROBERT JOHNSON Ft. Wayne, Indiana
2018 PAUL HAUSLER Cleveland, Ohio	2006 ROBERT JOHNSON Grand Rapids, Michigan	1994 GREG CHEEK St. Charles, Illinois	1982 RICHARD SOPER Midland, Michigan
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2014 TYLER KOSCHNICK Lombard, Illinois	2002 RAY VANGOETHEM Milwaukee, Wisconsin	1990 HOWARD KROSCH Indianapolis, Indiana	



HONORARY MEMBERS

An honorary member is someone who has contributed significantly to the field of aquatic vegetation management. They must be a voting member of MAPMS for no less than five years. An honorary member has actively promoted the Society and its affairs during their membership and have been elected by unanimous vote of the Board of Directors. Honorary Members shall hold all rights of Active Members in perpetuity.

JOE BONDRA

RICHARD HINTERMAN

DR. CAROLE LEMBI

ED BRAUN

DAVID ISAACS

EVERETT LIENHART

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JIM SCHMIDT

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THE JOE BONDRA DISTINGUISHED SERVICE AWARD

Awarded at the President's discretion. Successful completion of a project taking considerable effort and time resulting in advancement of plant management science, educational outreach and performance above and beyond the call of duty as an officer, chair or special representative of MAPMS; or member or non-member achievement in the science of aquatic plant management and/or participation in MAPMS leading to the advancement of its members, goals, and objectives. Award may be used for an individual, agency, corporation, institution, or other organization in recognition of service.

2025 DICK PINAGEL

2017 LEAH RUST-ESSEX

2024 MATT JOHNSON

2014 DAVID ISAACS

2022 CARLTON LAYNE

2012 JOE BONDRA

2019 DR. MICHAEL D. NETHERLAND



ROBERT L. JOHNSON MEMORIAL RESEARCH GRANT RECIPIENTS

Grants are competitively awarded to qualified graduate students pursuing a degree in aquatic plant management or related field at any accredited university or college, or independent research which contributes to the mission of the Society. MAPMS considers all applications pertaining to research on aquatic plant and algae management, including ecology or biology, and chemical, mechanical, or biological control of aquatic vegetation. Winners are announced at the awards banquet each year. Recipients are required to present their research findings at the annual conference the following year.

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University of Florida**

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**2015
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**2025
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University**

**2019
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North Carolina State
University**

**2015
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Clemson University**

**2024
MAXWELL GEBHART
Mississippi State
University**

**2018
GREGORY CHORAK
Montana State University**

**2014
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University**

**2023
ZHAOZHE CHEN
Ohio State University**

**2018
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University of Michigan**

**2013
JUSTIN NAWROCKI
North Carolina State
University**

**2022
SYDNEY VANFROST
University of Wisconsin**

**2017
RYAN VAN GOETHEM
Michigan Technological
University**

**2020
HANNAH HOFF
Montana State University**

**2016
JEFF PASHNICK
Montana State University**

**2020
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University-Mankato**

**2016
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SILENT AUCTION & RAFFLE

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Casey Thompson

INTERNAL AUDIT

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TIME & PLACE 2028 (MI)

Leif Willey



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Our annual conference is made possible by the generous contributions from our sponsors. We extend our sincerest gratitude to the following organizations for their sponsorship donations to the Society in 2026.

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Our annual conference is made possible by the generous contributions from our Sponsors. The Diamond and Platinum Level Sponsors cosponsor conference events.

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Thank You!!



2026 SUSTAINING MEMBERS

The Midwest Aquatic Plant Management Society is a society mainly comprised of small businesses and recognize that they are a very important part of the aquatics industry. Sustaining Memberships are opportunities for small companies and their key employees to provide donations to the MAPMS general fund.

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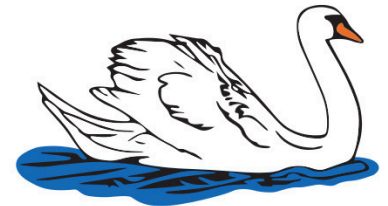


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2026 CONFERENCE EXHIBITORS





2026 CONFERENCE AGENDA AT-A-GLANCE



MONDAY, FEBRUARY 9, 2026

- 1:00 PM - 5:00 PM MAPMS PRE-CONFERENCE BOARD MEETING (CONCEPT A-D)
- 1:00 PM - 5:00 PM EXHIBITOR SETUP (EXHIBIT HALL - REGENCY C-F)
- 3:00 PM - 5:30 PM CONFERENCE REGISTRATION
- 5:30 PM - 6:30 PM STUDENT + NEW MEMBER MIXER (TOM'S WATCH BAR)
- 6:30 PM - 10:00 PM PRESIDENT'S RECEPTION (TOM'S WATCH BAR)

TUESDAY, FEBRUARY 10, 2026

- 6:30AM - 7:30AM EXHIBITOR SETUP (EXHIBIT HALL- REGENCY C-F)
- 7:30AM - 8:10AM CONTINENTAL BREAKFAST (EXHIBIT HALL- REGENCY C-F)
- 7:00 AM - 5:00 PM EXHIBITS OPEN (EXHIBIT HALL- REGENCY C-F)
- 7:30 AM - 4:00 PM CONFERENCE REGISTRATION
- 8:10 AM - 9:40 AM SESSION A: MAPPING TECHNOLOGY FOR AQUATIC PLANT MANAGEMENT (REGENCY AB)
- 9:40 AM - 10:20 AM REFRESHMENT BREAK + EXHIBITS (EXHIBIT HALL- REGENCY C-F)
- 10:20 AM - 11:40 AM SESSION B: HAB'S & CYANOBACTERIA (REGENCY AB)
- 11:40 AM - 1:20 PM LUNCH (ON YOUR OWN)
- 11:40 AM - 1:20 PM PAST PRESIDENTS' LUNCHEON (CONCEPT A-D)
- 1:20 PM - 2:20 PM SESSION C: STRATEGIES & TECHNOLOGIES FOR AQUATIC PLANT MANAGEMENT (REGENCY AB)
- 2:20 PM - 2:40 PM REFRESHMENT BREAK + EXHIBITS (EXHIBIT HALL- REGENCY C-F)
- 2:40 PM - 4:20 PM SESSION D: WATER QUALITY, PHOSPHORUS MANAGEMENT, & RESTORATION (REGENCY AB)
- 4:20 PM ADJOURN

WEDNESDAY, FEBRUARY 11, 2026

- 7:30 AM - 8:30 AM CONTINENTAL BREAKFAST (EXHIBIT HALL- REGENCY C-F)
- 7:30 AM - 4:00 PM EXHIBITS OPEN (EXHIBIT HALL- REGENCY C-F)
- 7:30 AM - 12:00 PM CONFERENCE REGISTRATION
- 8:30 AM - 10:20 AM SESSION E: INVASIVE SPECIES MANAGEMENT, RESEARCH, AND UPDATES (REGENCY AB)
- 10:20 AM - 10:40 AM REFRESHMENT BREAK + EXHIBITS (EXHIBIT HALL- REGENCY C-F)
- 10:40 AM - 11:40 AM SESSION F: MANAGING AQUATIC PLANTS (REGENCY AB)
- 11:40 AM - 1:20 PM LUNCH (ON YOUR OWN)
- 11:40 AM - 1:20 PM STUDENT + GOVERNMENT AFFAIRS LUNCHEON (CONCEPT A-D)
- 1:20 PM - 2:40 PM SESSION G: INVASIVE SPECIES MANAGEMENT (REGENCY AB)
- 2:40 PM - 3:00 PM REFRESHMENT BREAK + EXHIBITS (EXHIBIT HALL- REGENCY C-F)
- 3:00 PM - 4:00 PM SESSION H: REGULATORY & INDUSTRY PARTNER UPDATES (REGENCY AB)
- 4:00 PM - 5:00 PM MAPMS MEMBERSHIP MEETING - **ALL MEMBERS REQUESTED TO ATTEND (REGENCY AB)**
- 6:30 PM - 10:00 PM RECEPTION + 46TH ANNUAL MAPMS AWARDS BANQUET (REGENCY AB)

THURSDAY, FEBRUARY 12, 2026

- 8:30 AM - 10:30 AM POST CONFERENCE BOARDING MEETING (CONCEPT A-D)

The opinions expressed by presenters, speakers, discussion panelists, committee members, and exhibitors are those of said individuals and are not necessarily those of The Midwest Aquatic Plant Management Society, its Board of Directors, or sponsors.



MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY 2026 TECHNICAL PROGRAM + ABSTRACTS



TUESDAY FEBRUARY 10, 2026

Session A: Mapping Technology for Aquatic Plant Management

LOCATION: REGENCY AB

TIME: 8:10 AM – 10:00 AM EST

MODERATOR: MAPMS President Pete Pilpansick

8:10 AM Welcome and Opening Announcements

Pete Pilpansick, MAPMS President

8:20 AM Keynote Address: The Past, Present, and Future of Aquatic Plant Management

Dr. Tyler Koschnick, MAPMS Past President, SePRO, Carmel, IN

9:00 AM Precision Mapping and Volume Measurement for Pesticide Applications

Harry Knight, Optix Technologies, Cullman, AL

9:20 AM Using BioBase as an Aid for Lake and Pond Management

Jordan Holmes, Aquatic Control, Seymour, IN

9:40 AM - 10:20 AM Refreshment Break & Exhibits: Exhibit Hall

Session B: Cyanobacteria and HAB's

LOCATION: REGENCY AB

TIME: 10:20 AM - 11:40 AM EST

MODERATOR: MAPMS Secretary Brian Isaacs

10:20 AM Algae Identification Tips & Tricks for the Midwest Lake Manager

Grace Patchett, Aquatic Control, Seymour, IN

10:40 AM Integrating Peroxide Chemistries into Management Programs and Understanding Impacts

West Bishop, SePRO, Kings Mountain, NC

11:00 AM Peroxide Algaecides, Mindful & Seasonal Solutions to Cyanobacteria

Tom Warmuth, BioSafe Systems, Kure Beach, NC

11:20 AM Initiating Management of Microseira (aka Lyngbya) Wollei in Lake Wateree, SC

John Rodgers, Professor Emeritus Clemson University, Clemson, SC

11:40AM - 1:20 PM MAPMS Past Presidents Lunch & Lunch Break

All MAPMS Past Presidents are invited to a private lunch in the CONCEPT A-D room.

For all other members and attendees, lunch is on your own and we encourage you to explore the local eateries.



MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY 2026 TECHNICAL PROGRAM + ABSTRACTS



Session C: Strategies and Technologies for Aquatic Plant Management

LOCATION: REGENCY AB

TIME: 1:20 PM - 2:20 PM EST

MODERATOR: MAPMS Director Cory Richmond

1:20 PM Embracing Technology in the Field: AI Applicator Assistant
Scott Finn, Airmax, Armada, MI

1:40 PM Back to Basics Aquatic Management
Justin Nawrocki, UPL NA Inc., Raleigh, NC

2:00 PM STUDENT PRESENTATION: Curly-leaf Pondweed (*Potamogeton crispus* L.): Effect of Mechanical Harvesting on Turion Production
Anna Agi, North Carolina State University, Raleigh, North Carolina

2:20 PM - 2:40 PM Refreshment Break & Exhibits: Exhibit Hall

Session D: Water Quality, Phosphorus Management, AND Restoration

LOCATION: REGENCY AB

TIME: 2:40 PM - 4:20 PM EST

MODERATOR: MAPMS Vice President Leif Willey

2:40 PM Using Integrated Sampling and Interpretation for More Informed Management Decisions on Water Quality and Nutrients.
Landon Wiet, Natural Lake Biosciences, Madison, WI

3:00 PM Turning Science into Action: EutroPHIX Case Studies Demonstrating Scalable Phosphorus Management Across the United States
Scott Shuler, EutroPHIX, Westfield, IN

3:20 PM The Role of Dissolved Oxygen in Stormwater Ponds
Cory Richmond, Kasco, Columbus, OH

3:40 PM Restoring a Hyper-Eutrophic Trophy Fishery: The Slab Lab Reset
Heather Newhart, Natural Waterscapes, Williamsport, PA

4:00 PM Eutrophication, Internal Phosphorus Loading, and HABs; A Summary of Different Phosphorus Inactivation Strategies to Combat These Issues.
Paul Gantzer, Clarity Resources Group, Madison, WI

4:20 PM - 5:00 PM Adjournment & Exhibits: Exhibit Hall



MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY 2026 TECHNICAL PROGRAM + ABSTRACTS



WEDNESDAY, FEBRUARY 11, 2026

Session E: Invasive Species: Management, Research, and Updates

LOCATION: REGENCY AB

TIME: 8:30 AM – 10:20 AM EST

MODERATOR: MAPMS Immediate Past President Landon Wiet

- 8:30 AM Welcome and Opening Announcements**
Landon Wiet, MAPMS Immediate Past President
- 8:40 AM “Twenty Years Ago Today” – Part 1, Starry Stonewort Update**
Douglas Pullman, Aquest Corp, Clearwater, FL
- 9:00 AM Supporting Local Action: Minnesota’s Approach to Funding Invasive Aquatic Plant Management**
Angelique Dahlberg, Minnesota Dept. of Natural Resources, St. Paul, MN
- 9:20 AM Managing Non-Native Milfoil for the First Time in Silver Lake, Pinckney, Michigan.**
Jared Laughlin, Progressive Companies, Grand Rapids, Michigan
- 9:40 AM STUDENT PRESENTATION: Investigating Surface-Applied Submersed Treatments of Endothall and Florpyrauxifen-benzyl for Crested Floating Heart Control**
Corrina Vuillequez, Student, University of Florida, Gainesville, FL
- 10:00 AM Understanding and Preventing Herbicide Resistance**
Paul Conti, MAPMS Director, Alligare, South Portland, ME

10:20 AM - 10:40 AM Refreshment Break & Exhibits: Exhibit Hall

Session F: Managing Aquatic Plants

LOCATION: REGENCY AB

TIME: 10:40 AM - 11:40 AM EST

MODERATOR: MAPMS Director Jake Britton

- 10:40 AM Virtual Speaker - STUDENT PRESENTATION: Preliminary Morphological Trends of Vallisneria in North America**
Maxwell Gebhart, Mississippi State University, Starkville, MS
- 11:00 AM STUDENT PRESENTATION: Comparing the Competitive Ability of Three Vallisneria Taxa Grown with Dioecious Hydrilla Verticillata and Potamogeton Nodosus.**
Delaney Davenport, Student, North Carolina State University, Raleigh, NC
- 11:20 AM STUDENT PRESENTATION: Macrophyte Community Groups in Michigan**
Olivia Coskie, Student, Michigan State University, East Lansing, MI

11:40AM - 1:20 PM MAPMS Student & Government Lunch & Lunch Break

Student and government members are invited to a private lunch in the CONCEPT A-D room.

For all other members and attendees, lunch is on your own and we encourage you to explore the local eateries.



MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY 2026 TECHNICAL PROGRAM + ABSTRACTS



Session G: Invasive Species Management

LOCATION: REGENCY AB

TIME: 1:20 PM - 2:40 PM EST

MODERATOR: MAPMS Director Michael Hiatt

- 1:20 PM** ***Virtual Speaker*** - **Aquatic Use and Select Non-Aquatic Use Herbicide Efficacy on Vallisneria × Pseudorosulata**
Dr. Gray Turnage, Mississippi State University, Starkville, MS
- 1:40 PM** **Considerations for the Evaluation of Aquatic Vegetation Community Health and Treatment Outcome.**
Douglas Pullman, Aquest Corp, Clearwater, FL
- 2:00 PM** **Responding to Michigan's First Hydrilla Detection**
Billy Keiper, Michigan EGLE, Lansing, MI
- 2:20 PM** **Operational Fluridone Use for Invasive Watermilfoil Control: Treatment Timing, Target Efficacy and Non-target Impacts**
April Londo, Minnesota Department of Natural Resources, Saint Paul, MN

2:40 PM - 3:00 PM Refreshment Break & Exhibits: Exhibit Hall

Session H: Regulatory & Industry Partner Updates

LOCATION: REGENCY AB

TIME: 3:00 PM - 4:00 PM EST

MODERATOR: MAPMS Director Tim Holt

- 3:00 PM** **Here we go Again**
Carlton Layne, AERF
- 3:20 PM** **Aquatic Plant Management Society (APMS) Update**
Matt Johnson, APMS Vice President
- 3:30 PM** **Responsible Industry for a Sound Environment (RISE) Update**
Matt Johnson, RISE
- 3:40 PM** **Aquatic Ecosystem Restoration Foundation (AERF) Update**
Garrett McClain, AERF Treasury
- 3:50 PM** **Indiana Association of Aquatic Managers (IAAM) Update**
Ed Spanopolous, IAAM
-
-
- 4:00 PM** **MAPMS 2026 Annual Business Meeting - ALL MEMBERS REQUESTED TO ATTEND (REGENCY AB)**
Pete Filpansick, MAPMS President
- 5:00 PM** **Temporary Adjournment - Reconvene at the 45th Annual MAPMS Awards Banquet**
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-
- 6:30 PM** **Reception (REGENCY AB)**
- 7:00 PM - 10:00 PM** **46th Annual MAPMS Awards Banquet (REGENCY AB)**
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MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY 2026 TECHNICAL PROGRAM + ABSTRACTS



Keynote Address: Approaching 50 years – The “Perfect” Society (MAPMS Past, Present and Future)

Dr. Tyler Koschnick, President and CEO of SePRO Corporation
Former MAPMS President, Director, Committee Chair and Grant Recipient

Nearly 30 years have passed since I first became a member of MAPMS and attended my first conference. At the time, I did not fully appreciate that the Society itself was only 18 years young. Even then, MAPMS stood apart as one of the strongest APMS chapters—defined by high-quality technical content, applicator workshops, strong attendance, integrity, industry engagement, fiscal responsibility, and a deep commitment to mentorship. Above all, what has remained constant is passionate leadership and an unwavering dedication to the future of our industry.

Over the years, I have had the privilege of experiencing MAPMS from many perspectives, including being a member, serving as a Director, later returning as a graduate student, and then President. During that period as a student, I was honored to receive the MAPMS Research Grant, support that proved invaluable to me as an aspiring researcher and reinforced the Society’s longstanding commitment to investing in students and young professionals as a cornerstone of its mission.

As our industry continues to evolve, new challenges have and will continue to undoubtedly emerge. Yet the importance of water resources—and our responsibility to steward them wisely—has never been greater. This keynote will reflect on where we have been, examine the challenges ahead, and offer perspective on the leadership, engagement, and commitment required to ensure MAPMS and our industry remain strong and relevant for the next 50 years.

Ultimately, the future of MAPMS will not be shaped by any single event, innovation or regulation, but by the people in this room. The call to action is simple: remain engaged, mentor the next generation, uphold the values that have defined this Society, and lead with purpose. If we do that together, the next 50 years will be even stronger than the first.

Precision Mapping and Volume Measurement for Pesticide Applications

Harry Knight, Optix Technologies, Cullman, AL

Introduction of new hardware and software not utilized before within the aquatic industry. Detail reporting, mapping and volume measurement within treatment zones providing cost savings for both you and your customers as well as improved stewardship for our industry.

Using BioBase as an Aid for Lake and Pond Management

Jordan Holmes, Aquatic Control, Seymour, IN

Using off-the-self sonar equipment and BioBases’ online processing platform we are able to gather more accurate waterbody data which in turn allows for more accurate calculations in herbicide management, better placement of artificial fish structure, easier installment of aeration lines and diffusers and the ability to offer high quality bathymetric maps to our customers. While it is possible to do most of these things without fully mapping a waterbody, being able to do so in a largely passive manner while on a fish or vegetation survey can increase data accuracy while keeping time on the water the same. I will be discussing how Aquatic Control has used the data processed through Biobase in of some of the waterbodies we manage.

Algae Identification Tips & Tricks for the Midwest Lake Manager

Grace Patchett, Aquatic Control, Seymour, IN

Gain a deeper understanding for the key distinctions between the different kinds of nuisance algae commonly encountered in Midwest lakes, both under the microscope and from the shoreline. This presentation will highlight practical visual cues, growth patterns, and field observations that help lake managers confidently identify problem algae and more more informed management decisions.



MIDWEST AQUATIC PLANT MANAGEMENT SOCIETY 2026 TECHNICAL PROGRAM + ABSTRACTS



Integrating Peroxide Chemistries into Management Programs and Understanding Impacts

West Bishop, SePRO, Kings Mountain, NC

As cyanoHABs continue to increase and impede water usages, options to rapidly restore the system are critical. A scalable and rapid acting option to mitigate HABs that has gained increased awareness is use of USEPA registered peroxide or peroxide/PAA technologies. Recent research initiatives have greatly informed use patterns, efficacy, and the understanding of cyanobacterial cell density on peroxide degradation and subsequent efficacy. Multiple other research topics including efficacy of different formulated peroxide products at controlling *Microcystis aeruginosa* (MA) across different starting densities has also been conducted. In multiple other studies, control of MA (> 90% decrease in cell densities) and decrease in total toxins were measured while tracking release of other algal organic matter. Non-target bacterial communities decreased short-term after treatment though they recovered by 48HAT and eukaryotic algae increased. Peroxide/peroxide+PAA use for HAB mitigation is a potential ecologically compatible, scalable and fast-acting approach, that can be incorporated into integrated water management programs. Laboratory and field data, as included herein, can assist in designing an effective program for a site-specific infestation to achieve objectives for the system.

Peroxide Algaecides, Mindful & Seasonal Solutions to Cyanobacteria

Tom Warmuth, BioSafe Systems, Kure Beach, NC

Peroxide based algaecides have been shown to be effective in mitigation and control of cyanobacteria in various methods of application for "in-season" active blooms and activity. Lab scale and field use of liquid Peroxyacetic acid (PAA)/hydrogen peroxide and solid SCP (sodium carbonate peroxyhydrate) on cyanobacteria give direction on developing effective dosing for cyanobacterial harmful algal blooms (cHAB) for in-season as well as early season/overwintering benthic populations from which planktonic blooms develop later in the spring and summer. More recently, extensive research through private and federal (ACOE) researchers have shown that overwintering treatments appear to be potentially effective options to minimize the impacts, severity, or frequency of cyanobacterial blooms.

Initiating Management of *Microseira* (aka *Lyngbya*) *Wollei* in Lake Wateree, SC

John Rodgers, Professor Emeritus Clemson University, Clemson, SC

Benthic algae [e.g. *Microseira* (aka *Lyngbya*) *wollei* in the southern US, and *Nitellopsis obtusa* (aka Starry Stonewort) in the north] have expanded their ranges and produced problematic populations in a variety of lentic ecosystems. Relatively recent invasion and expansion of *Microseira* in Lake Wateree, a reservoir in central South Carolina, prompted the Lake Wateree Association to initiate a management program. Important for initiation of this program were: 1) a threat assessment for *Microseira* in Lake Wateree vs. the risk of remedy (the management program), 2) appraisal of Lake Wateree as habitat for *Microseira* (for projection of risk potential), and 3) development and implementation of an adaptive management strategy. These activities were important for fund raising to support the program as well as managing expectations by stakeholders in light of the severity of infestation (spatially and density) relative to the funds available to accomplish programmatic goals. The "lessons learned" in the development of the management program are widely applicable and likely useful as the need for management expands in critical water resources.

Embracing Technology in the Field: AI Applicator Assistant

Scott Finn, Airmax, Armada, MI

The rapid evolution of artificial intelligence is reshaping how aquatic managers diagnose, plan, and execute treatment strategies in the field. This presentation explores the intersection of innovation, change management, and practical application by demonstrating how AI-driven tools can enhance accuracy, efficiency, and decision-making for pond and lake professionals. Attendees will examine the factors that spark innovation, the historical progression of technology adoption in related industries, and the growing capabilities of modern AI systems. Through this lens, the session highlights how the "AI Applicator Assistant" concept streamlines plant identification, regulatory compliance, dosage calculation, product selection, and cost analysis while reducing training time and improving consistency.

Building on real-world scenarios and live simulations, the presentation provides a step-by-step framework for designing, refining, and implementing an AI assistant tailored to an applicator's workflow. Participants will learn how to engineer effective prompts, incorporate treatment labels and safety data, and iteratively improve system outputs. Additional examples showcase broader organizational opportunities—from service operations and equipment maintenance to employee onboarding and website development—demonstrating how AI can deliver lasting value across aquatic management businesses. This session equips attendees with practical strategies to confidently adopt and leverage AI technologies in their daily operations.



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Back to Basics Aquatic Management

Justin Nawrocki, UPL NA Inc., Raleigh, NC

With every new technology we can lose reliance and understanding of the tools of the past. This loss of knowledge is further exacerbated by the retiring of the old guard and their institutional knowledge, on products and techniques, that escapes into the ether. We strive to apply the “Best Management Practices” but must remember some old ways are still the best. Herbicide technology in Aquatics has been quite stagnant in recent history, but product selection can quickly change with price, waterbody goals or state regulatory directives. While not the only factor in product selection, science-based solutions should be a significant selection criteria.

STUDENT PRESENTATION: Curly-leaf Pondweed (*Potamogeton crispus* L.): Effect of Mechanical Harvesting on Turion Production

Anna Agi, North Carolina State University, Raleigh, North Carolina

Curly-leaf pondweed (*Potamogeton crispus*, CLP) is an invasive aquatic weed species that is commonly found in cool, eutrophic lakes. CLP begins to grow in the fall with rapid growth in the spring and senescence in the summer. Mechanical harvesting is a common aquatic plant management technique and may either be used directly on CLP or used to control Eurasian watermilfoil with CLP co-occurring. This research evaluates the impact of harvesting actions in a June time frame when CLP will be beginning senescence. Specifically, CLP stems will be fragmented to determine impacts on turion production. CLP was established in 17L mesocosms under controlled greenhouse conditions and was subjected to the following treatments: no mechanical fragmentation, fragmentation of all stems into 20cm apical segments, and fragmentation of all stems into 10cm fragments (segment size adjusted based on initial stem lengths). All treatments were replicated three times. Following treatment, plants were monitored weekly and final turion production was measured after natural CLP senescence. This work is currently ongoing. At trial completion, results will be statistically analyzed and differences in turion production between treatments will be determined. This research will help to gain understanding in the potential effects mechanical harvesting could be having on turion production and support management decisions for CLP.

Using Integrated Sampling and Interpretation for More Informed Management Decisions on Water Quality and Nutrients.

Landon Wiet, Natural Lake Biosciences, Madison, WI

Effective lake and pond management for water quality improvement and harmful algal bloom (HAB) prevention depends on correctly diagnosing the dominant nutrient sources and biological responses. Routine water quality monitoring alone can miss key information needed to distinguish external loading from internal cycling, or to identify which algal groups are driving risk. This presentation describes the value of combining three complementary sampling approaches—(1) sediment phosphorus fractionation to characterize potentially mobile and active P pools, (2) water quality measurements that capture nutrient availability and bloom-favoring conditions, and (3) algal identification. Using a management-oriented framework, we show how integrated interpretation can improve confidence in selecting interventions and in setting realistic expectations for response time.

Turning Science into Action: EutroPHIX Case Studies Demonstrating Scalable Phosphorus Management Across the United States

Scott Shuler, EutroPHIX, Westfield, IN

Excess phosphorus remains a primary driver of harmful algal blooms, aquatic plant overgrowth, and impaired water uses across lakes, reservoirs, and river systems throughout the United States. EutroPHIX is a science-based water quality management platform that integrates targeted phosphorus control technologies, real-time monitoring, automated delivery, and adaptive management to provide measurable and defensible water quality improvements.

This presentation highlights a series of EutroPHIX case studies from diverse geographic regions, including projects from the Midwest. Case examples include aquatic ecosystems impacted by both internal and external phosphorus loading and how EutroSORB® technologies, GreenEYES™ NuLAB™ units, and SATT™ systems are being utilized to reduce bioavailable phosphorus from the water column and sediments.

The core component of EutroPHIX is its collaborative delivery model. Projects are implemented in partnership with Stewards of Water as well as public and private stakeholders. These partnerships integrate local expertise with applied science to ensure treatments are compliant, scalable, and aligned with long-term management objectives.

By sharing performance outcomes, monitoring data, and lessons learned, this presentation demonstrates how integrated nutrient management can complement watershed BMPs to accelerate water quality restoration to support more resilient and sustainable aquatic ecosystems throughout the Midwest and beyond.



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The Role of Dissolved Oxygen in Stormwater Ponds

Cory Richmond, Kasco, Columbus, OH

Stormwater retention ponds are essential components of urban infrastructure, designed primarily to mitigate flooding and improve water quality by capturing runoff. However, these systems often struggle with ecological instability and limited intended functionality, largely driven by reduced levels of dissolved oxygen (DO). This presentation will explore the fundamental importance of maintaining adequate DO concentrations for the long-term efficacy and health of these vital systems.

We will discuss how sufficient DO levels are crucial for supporting aerobic microbial processes that break down organic matter and nutrients like nitrogen and phosphorus. These aerobic processes prevent premature eutrophication, harmful algal blooms, noxious odors and increased maintenance costs.

Restoring a Hyper-Eutrophic Trophy Fishery: The Slab Lab Reset

Heather Newhart, Natural Waterscapes, Williamsport, PA

The Slab Lab, a private fishery on the verge of a world-record coppernose bluegill, suffered collapse under extreme nutrient loading, organic accumulation, and low dissolved oxygen. Through a targeted restoration approach combining MetaFloc phosphorus binding, MuckBiotics organic digestion, and Kasco surface aeration, the system was rehabilitated without draining or dredging.

Within 24 hours of treatment, reactive phosphorus levels fell below detection limits, water clarity increased to 74 inches, and cyanobacteria populations were depleted without chemical application. Continuous monitoring confirms the restoration plan was a success. Early results also show recovery of invertebrate and zooplankton communities—the foundation of a balanced food web.

This project demonstrates how precise nutrient control and oxygenation can transform even the most degraded, hyper-eutrophic pond into a clear, productive fishery capable of supporting accelerated trophy-class growth.

Eutrophication, Internal Phosphorus Loading, and HABs; A Summary of Different Phosphorus Inactivation Strategies to Combat These Issues.

Paul Gantzer, Clarity Resources Group, Madison, WI

Eutrophication, the enrichment of a water body with nutrients, has been observed as a growing problem in lakes and ponds around the world. When it comes to nutrient (phosphorus) loading to the water column there are two sources, internal and external. Internal comes from phosphorus stored in the sediment while external comes from runoff; water flowing in from the watershed. Eutrophication in stratified water bodies predominantly results in loss of dissolved oxygen (DO) in bottom waters (hypolimnion). Anoxic conditions result in the release of redox sensitive (iron-bound) phosphorus from the sediments, which in turn promotes and subsequently sustains harmful algal blooms (HABs). This form of internal nutrient (phosphorus) loading (from sediments) is often the target of water quality management strategies specifically related to phosphorus inactivation.

Phosphorus inactivation has been used as a method to mitigate internal nutrient loading to minimize and ultimately prevent HABs. This form of internal nutrient control is typically achieved in one of two ways: phosphorus binding applications or oxygen management (aeration). Phosphorus binding involves dosing of a phosphorus absorbent such as lanthanum or aluminum-based products. Oxygen management involves artificial enhancement of oxygen via mechanical means. In this presentation, we will provide an overview of the science behind controlling HABs using internal nutrient management strategies. Additionally, we will discuss the similarities and differences phosphorus binding strategies have in reducing HABs and improving overall water quality.

“Twenty Years Ago Today” – Part 1, Starry Stonewort Update

Douglas Pullman, Aquest Corp, Clearwater, FL

Twenty years ago, live samples of starry stonewort (*Nitellopsis obtusa*) were distributed at a Midwest Aquatic Plant Management Society workshop in Grand Rapids, Michigan. At that time, this invasive species was relatively unknown in the Midwest, but early observations in Lobdell Lake (Genesee and Livingston Counties, MI) indicated its potential to become a significant aquatic weed. Starry stonewort, likely introduced via the St. Lawrence Seaway, had probably existed in Michigan’s inland lakes for years but was misidentified due to its resemblance to other charoid species. In 2010, Pullman and Crawford published an article in *LakeLine* warning of the threat posed by starry stonewort to Midwest lakes.



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For much of the following decade, starry stonewort severely impacted inland lake ecosystems, outcompeting native benthic species and spreading rapidly. However, its dominance has declined in recent years. While it still covers large areas in some lakes, it is now often found mixed with other charoid species and no longer constitutes a major nuisance. This “boom to bust” pattern is typical of many exotic species invasions. Lake vegetation managers should consider these long-term observations when planning future management strategies. Understanding the invasion cycle of starry stonewort can help anticipate and mitigate similar threats from other exotic species

Supporting Local Action: Minnesota’s Approach to Funding Invasive Aquatic Plant Management

Angelique Dahlberg, Minnesota Dept. of Natural Resources, St. Paul, MN

The Minnesota Department of Natural Resources (MN DNR) administers annual grants to support local and Tribal-led management of priority invasive aquatic plants, including curly-leaf pondweed, Eurasian watermilfoil, flowering rush, and starry stonewort. Eligible recipients include lake associations, watershed districts, cities, counties, and Tribal governments. Grant funding is provided on a reimbursement basis for expenses incurred during permitted invasive aquatic plant management (IAPM) activities and is supported by Minnesota’s invasive species account, which is largely funded through watercraft registration surcharges and nonresident fishing license fees. This presentation examines recent trends in grant distribution, including how funding is allocated across recipient types and regions, and evaluates what these investments accomplish in terms of invasive species management efforts. Findings provide insight into the role of state-funded grants in supporting coordinated, local-scale responses to aquatic invasive species and inform future program planning and prioritization.

Managing Non-Native Milfoil for the First Time in Silver Lake, Pinckney, Michigan.

Jared Laughlin, Progressive Companies, Grand Rapids, Michigan

Eurasian and hybrid watermilfoil are long-established invasive aquatic plants in Michigan, with verified records of Eurasian watermilfoil dating back to the early 1960s. Although a range of management strategies exist, aquatic herbicides remain the most widely used tool among lake managers. Despite this, many infested waterbodies still receive no active management, often due to limited awareness, financial constraints, or stakeholder misinformation. This presentation highlights the first management effort targeting a non-native milfoil population in Silver Lake (Big Silver Lake) in Pinckney, Michigan, using a combination mixture of floryprauxifen-benzyl and diquat dibromide. The presentation aims to demonstrate how effective stakeholder communication, structured project initiation, and strategic treatment planning can lead to successful large-scale outcomes. Early results from this initiative show encouraging signs of long-term control, offering a model for improving invasive milfoil management in newly established programs.

STUDENT PRESENTATION: Investigating Surface-Applied Submersed Treatments of Endothall and Floryprauxifen-benzyl for Crested Floating Heart Control

Corrina Vuillequez, Student, University of Florida, Gainesville, FL

Crested floating heart (*Nymphoides cristata*; CFH) is an invasive aquatic plant present in the Southeast United States. The species has floating leaves and extensive submersed biomass, including large root systems embedded in the hydrosoil. Crested floating heart reproduces prolifically through ramets, which are propagules produced at leaf-petiole junctions at or below the water’s surface. Due to the species’ resilience, achieving long-term control using herbicides has been challenging. To address this, mesocosm studies were conducted to investigate surface-applied treatments of dipotassium endothall and floryprauxifen-benzyl (FPB) at concentrations typically used in submersed applications across a range of exposure times. Endothall at 3 ppm and FPB at 29 ppb were applied using three different application methods: a foliar spray at 187 L ha⁻¹, a foliar spray at 467.70 L ha⁻¹, and a subsurface injection. Destructive harvests took place 12 weeks after treatment, in which all ramets were counted, and above and belowground biomass were dried and weighed. The static endothall treatment (12 weeks of exposure) reduced ramets and biomass by 97 – 100% compared to the non-treated control. The 96-hour exposure to endothall reduced ramet count and aboveground biomass by 61 and 41%, respectively. Exposure times to endothall less than 96 hours (12, 24, and 48 hours) were ineffective for long-term control. For FPB, all exposure times and application methods tested resulted in 98 – 100% reduction in ramets and biomass. For both herbicides, the effect of application method was minimal. This research provides valuable insights into achieving long-term control of CFH using submersed concentrations of endothall and FPB.



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Understanding and Preventing Herbicide Resistance

Paul Conti, MAPMS Director, Alligare, South Portland, ME

Understanding and Preventing Herbicide Resistance: Herbicide Resistance is a plant's ability to survive and reproduce after exposure to herbicide at a dose that would be lethal to typical individuals of that species. It is rare phenomenon that typically occurs in individual plants but can be spread throughout entire populations when best management practices are not followed. This can result in economic and environmental damage that can be troublesome for plant managers, water users, and the environment. Through best management practices such as proper application rates, tank mixing, and herbicide rotation, applicators can safely and effectively apply herbicides and reduce the risk of herbicide resistant genes being spread while still achieving their management goals. A thorough understanding of herbicide groups and modes of action are critical for this exercise.

STUDENT PRESENTATION: Preliminary Morphological Trends of Vallisneria in North America

Maxwell Gebhart, Mississippi State University, Starkville, MS

Identifying an invasive aquatic plant species is a key step in preventing new invasions and informing necessary steps for invasive plant management. Non-native *Vallisneria*, a genus of submersed macrophytes, has been introduced to several waterbodies, with most populations becoming aggressive invaders. *Vallisneria* conserves many morphological traits between species and without clear research, these issues can cause misidentification and slow management response time. Therefore, the aim of this study is to describe morphological trends in *Vallisneria* using traits found on the leaf tissues. This study is occurring in tandem with a phenology study, which morphological specimens are collected from. At each monthly collection, five leaves are collected from each phenological specimen and are photographed. Then, the serration density in the top 2 cm of the leaf (apex down) is recorded for all five leaves and returned to the associated phenological specimen. From the photograph, leaf width, lacunal band width, and leaf tip angle are recorded using the ImageJ software. All collected data will be subjected to a two way ANOVA to determine if significant differences are present between taxa and time followed with a Tukey's Honest Significant Difference post-hoc test to determine statistical groups. Additionally, a linear discriminant analysis (LDA) was conducted to determine taxa grouping trends and traits that may describe interspecific differences. Initial data shows monthly differences between species suggesting traits may be dependent on the collection period of specimens. However, interspecific differences are present, with the LDA displaying 79% accuracy in identifying taxa with the given traits. Once completed, this study will progress to field verification of traits and may provide resource managers a means of in-field identification of *Vallisneria*.

STUDENT PRESENTATION: Comparing the Competitive Ability of Three Vallisneria Taxa Grown with Dioecious Hydrilla Verticillata and Potamogeton Nodosus.

Delaney Davenport, Student, North Carolina State University, Raleigh, NC

Vallisneria is a genus of submersed aquatic macrophytes that have been historically prioritized for revegetation projects across the Eastern United States due to the wide variety of ecosystem services it can provide. Previously, all populations within the United States were classified as *Vallisneria americana*, however, recent genetic evaluations have revealed that there are two native species (*V. americana* and *V. neotropicalis*) and more concerningly, three non-native populations (*V. australis*, *V. spiralis*, and *V. x pseudorosulata*). The establishment of these non-native taxa presents challenges for management due to a lack of knowledge surrounding their ecology and competitive abilities. The main objective of this work is to compare the competitive potential of one native and two non-native *Vallisneria* taxa (*V. neotropicalis*, *V. spiralis*, and *V. x pseudorosulata*). This comparison was investigated by placing each *Vallisneria* taxa in direct competition against dioecious *Hydrilla verticillata* and *Potamogeton nodosus* in an outdoor mesocosm setting. The study was organized as a randomized complete block design, with five treatments for each species of *Vallisneria* and competitor species it was placed against. Treatments followed a replacement series design that contained *Vallisneria*:competitor species-proportions of 100:0, 75:25, 50:50, 25:75, 0:100. All treatments were replicated three times. After 16 weeks, above- and belowground biomass was destructively harvested and was dried and weighed. Without competitive pressure, all tested *Vallisneria* taxa had comparable mean leaf lengths, ranging from 39.81 to 40.43cm. In the presence of competition, leaf length was statistically different amongst treatments, and amongst *Vallisneria* taxa. Competitive pressure also appeared to influence both ramet and biomass production for all tested taxa. *V. spiralis* demonstrated the most aggressive ramet production when grown in a monoculture, producing an average of 74 ± 12 ramets over the course of 16 weeks.



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STUDENT PRESENTATION: Macrophyte Community Groups in Michigan

Olivia Coskie, Student, Michigan State University, East Lansing, MI

In the state of Michigan, the Michigan Natural Features Inventory lumps all aquatic macrophyte communities into a single class. Our experience from sampling 120 lakes across a diverse gradient of conditions suggests that there are distinct groups of communities, which may have implications for how these communities are managed. The purpose of this study is to have a better baseline knowledge of macrophytes in the state of Michigan that going forward can be used to inform management and further research. Preliminary results of multivariate analysis suggests there are three major plant community groups. We plan on refinement to these analyses to further describe these clusters by determining the relation of rare species and of AIS species, along with environmental conditions to potentially differentiate macrophyte community groups. Defining these different macrophyte community groups can inform aquatic management and conservation decisions long term to benefit Michigan's lakes.

Aquatic Use and Select Non-Aquatic Use Herbicide Efficacy on *Vallisneria × pseudorosulata*

Gray Turnage, Mississippi State University, Starkville, MS

Submersed macrophytes such as *Vallisneria* fulfill critical roles in their native ecosystems and provide important forage and shelter for a variety of organisms. However, *Vallisneria × pseudorosulata* is a recent, aggressive invader of waterbodies in the southeast U.S., with little known about the management of this eelgrass hybrid. Therefore, mesocosm studies were conducted to assess the herbicide efficacy of 13 herbicides labelled for aquatic use and 14 herbicides not labelled for aquatic use. Plant biomass and ramet density were collected at 6 and 12 weeks after treatment (WAT). Data were analyzed using a generalized linear model with a post-hoc Tukey's Honest sum of differences test at the $\alpha = 0.05$ significance level. Of the 27 tested herbicides, PPO, STPP, and ALS inhibiting herbicides effectively reduced above and belowground biomass and ramet density at 12 WAT. These results suggest several effective chemistries for use in *V. × pseudorosulata* management and their efficacy will be studied further in long-term concentration exposure time trials; however, some will require 24c labelling prior to availability for operational use.

Considerations for the Evaluation of Aquatic Vegetation Community Health and Treatment Outcome.

Douglas Pullman, Aquest Corp, Clearwater, FL

Characterizing submersed aquatic plant communities is challenging due to the complexity and variability of lake ecosystems. While high species richness is generally considered positive, measuring diversity is difficult because traditional evenness-based biodiversity indices developed for terrestrial systems do not apply well to aquatic environments.

Since the 1990s, LakeScan™ has used various metrics to assess submersed aquatic plant communities. Many existing approaches have proven inadequate, as their results often do not match direct lake observations. To address this, it is proposed that multiple metrics be combined to generate biodiversity values that better reflect actual conditions. These metrics include:

- Lake Species Richness: Total number of species present in the lake.
- Mean Species Richness at Observation Sites: Average number of species found at surveyed locations.
- Mean Density/Distribution Estimates: Average abundance and spread of species at each site.

Adopting a multi-metric approach can provide a more accurate and meaningful assessment of aquatic vegetation health, guiding effective management and conservation efforts

Responding to Michigan's First Hydrilla Detection

Billy Keiper, Michigan DNR, Lansing, MI

Hydrilla (*Hydrilla verticillata*) was first discovered in Michigan in September 2023. Since the discovery, significant efforts have been made to eradicate the population, including several herbicide applications and mechanical removal. Complete excavation of the site was even conducted yet hydrilla has persisted. Staff from Michigan's Department of Environment, Great Lakes, and Energy will share response efforts and results to date, lessons learned along the way, and next steps toward eradication.



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Operational Fluridone Use For Invasive Watermilfoil Control: Treatment Timing, Target Efficacy and Non-target Impacts

April Londo, Minnesota Department of Natural Resources, Saint Paul, MN

Eurasian watermilfoil (*Myriophyllum spicatum*) is an invasive aquatic plant introduced in the United States by the 1940s. It was first confirmed in Minnesota in 1987, in a large metropolitan lake. Since its introduction, EWM has spread to more than 400 Minnesota lakes, creating challenges for lake users across the state. Invasive milfoils (*Myriophyllum spicatum* and *Myriophyllum spicatum* x *M. sibiricum* hybrids) can create dense monotypic mats that impede navigation and outcompete native plant species, ultimately changing Minnesota waters. The primary methods for controlling EWM in Minnesota are spot treatments using auxin-mimic herbicides such as 2,4-D, triclopyr, and florypyrauxifen-benzyl to control plants in limited, specific parts of lakes where nuisances occur. An alternative to these standard methods is the lakewide use of the herbicide fluridone in lakes where widespread milfoil occurs. Lake managers have used fluridone at various rates ranging from 6 to 20 ppb for the past three decades, noting control of invasive milfoil but adverse changes in native plant communities at higher rates. Currently, the Invasive Species Program at the Minnesota Department of Natural Resources permits lake-wide fluridone treatments with target concentrations between 2 and 4 ppb. These concentrations are maintained for 60-90 days and treatments can be done in the spring or the fall. In the management region around the Twin-Cities metro area, as of April 2025, there have been 30 lakes that have been treated with fluridone, some of which have been treated for multiple years. Twenty-three of those 30 lakes have started their fluridone treatment in the spring and seven in the fall. In recent years, there has been an effort to understand target species efficacy and non-target impacts of these treatments, and how these differ among treatment seasons. There is a lack of summative research on these lower rates of fluridone, and this research uses data collected during operational control projects to assess these gaps. In this study, we evaluated submersed aquatic vegetation communities across fourteen lakes in the Twin Cities metropolitan region of Minnesota that received whole lake, low dose fluridone treatments. Seven lakes initiated fluridone application during the spring period of early macrophyte growth, while the remaining seven began treatment in the fall. Our analysis focused on quantifying how the timing of initial fluridone exposure influenced the response trajectories of invasive and native submersed taxa, as well as associated changes in water clarity metrics.

Here we go Again

Carlton Layne, AERF Executive Director, GA

The presentation will address federal requirements regarding the use of pesticides and the consequences of misuse. There will also be a brief update on the federal WOTUS rule.

Aquatic Plant Management Society (APMS) Update

Matt Johnson, APMS Vice

Responsible Industry for a Sound Environment (RISE) Update

Matt Johnson, RISE

Aquatic Ecosystem Restoration Foundation (AERF) Update

Garrett McClain, AERF Treasury

Indiana Association of Aquatic Managers (IAAM) Update

Jonathon Hill, IAAM



2025 MAPMS BUSINESS MEETING MINUTES



Annual Business Meeting Minutes
Chicago, Illinois
Wednesday, February 26th, 2025 – 4:00p.m.

Call to order (4:03p.m.) - Wiet

Roll Call – Goidosik

Landon Wiet (President) Present	Amy Kay (Past President) Present
Pete Filpansick (President Elect) Present	Casey Thompson (Vice President) Present
Steve Zulinski (Treasurer) Present	Leif Willey (Editor) Present
John Goidosik (Secretary) Present	Jason Euchner (Director) Present
Emily Henrigillis (Director) Not Present	Brian Isaacs (Director) Present
Michael Hiatt (Director) Present	Cory Richmond (Director) Present
Jake Britton (Director) Present	Ashley Wolfe (Student Representative) Present

Additions/deletions to the agenda, (motion to accept the agenda):

-Thompson = Motion, Filpansick = second, Motion carries

Review of previous Annual Business Meeting Minutes – 2024 minutes are in the program:

None to review.

Presidential Report:

-Wiet = No report

Financial Report (Zulinski) – Treasurer

-Zulinski = Recognized the increased cost of the venue and thanked the membership for their support. General Fund balance as of 9/30/24 = \$64,984.31. Robert L. Johnson Memorial Research Grant balance as of 9/30/24 = \$33,908.05.

Report of the Secretary (Goidosik)

-Goidosik = No report

Motion to approve the Officers Reports

-Thompson = Motion, Kay = second, Motion carries

Standing Committee Reports:

Nominating (Kay):

-Kay = Shared with the membership that the committee decided to do some additional information collecting relative to those who asked to be included in the ballot to vet the candidates. Amy shared with the group the additional data collected. Vice President = Leif Willey, Secretary = Brian Isaacs, Board of Directors = Paul Conti, Tim Holt, Gregg Zink, Jonathan Hill, and Alex Forsthoefel. Amy shared a bio of each candidate. Each candidate stood and introduced themselves. Amy shared the responsibilities of each position. Distribute ballots and collect (nominations from the floor if any, None) (motion to accept the ballot), Zulinski = Motion, Thompson = second, Motion carries

Membership (Hiatt):

-Hiatt = Asked the membership to scan a QR code to take the Society survey, the BOD values the memberships feedback. 189 total members, 27 single day, 17 virtual, 53 new members. Looking to implement a more formal nominations process. Look for a post-conference survey being sent via email.

Editorial (Willey):

-Willey = Conducted security/software update. Updated banner images on the website. Thanks to Hausler and Henrigillis for submitting lots of photos.



2025 MAPMS BUSINESS MEETING MINUTES



By Laws (**Vacant**):

-?? = No report

Internal Audit (**Thompson**):

-Thompson = Announced that all bank documents were reviewed and are in order.

Governmental Affairs (**Euchner**):

-**Euchner** = 36 government employees registered, 5 were in-person the others were remote.

Exhibits (**Richmond**):

-**Richmond** = This year was down from last year by 6. 30 vs 36 last year. Thanked all the exhibitors. Encouraged the membership to look for new exhibitors as the exhibitors are a very important revenue stream.

Publicity (**Henrigillis**):

-**Henrigillis** = New banners secured and Amy Giannotti. doing a great job.

Past Presidents Advisory (**Kay**):

-**Kay** = Spoke about the Past President's lunch (10) in attendance. Reviewed tax benefits of being a 501(c)(3). Discussed the Strategic Plan which is to be reviewed every 3-5 years.

Program (**Filpansick**):

-**Filpansick** = Thanked the membership for their attendance and a special thanks to all the presenters. Asked for feedback from the membership to help make the event better moving forward. Thanked Cory Richmond and Amy Kay for going above and beyond the call of duty.

2025 Local Arrangements (**Richmond**):

-**Richmond** = Thanked Bill Torres for all his work behind the scenes to make the event a success.

Student Affairs Committee (**Filpansick**):

-**Filpansick** = See Pete's slide. Thanked Ashley Wolfe for her 2 years of service as a Student Representative on the Board of Directors. Announced Maxwell Gebhart and the 2024 Robert L. Johnson Memorial Research Grant. Winners to be announced at the banquet later this evening.

Finance (**Zulinski**):

-**Zulinski** = The purpose of the Committee is to secure the longevity of the Society. MAPMS Longevity Fund as of 12/31/24 = \$87,829.00. Robert L. Johnson Memorial Research Grant Longevity Fund as of 12/31/24 = 17,978.71.

Special Committee Reports:

Silent Auction/Raffle (**Britton**):

-**Britton** = Thanked the Committee for their help. The purpose of the Committee is to generate funds to support the \$10,000 Robert L. Johnson Memorial Research Grant. 5 box raffle items = ~\$7,000 in value. BioBase Subscription, Aquatic Control Lab Services, Yeti Bundle, Cash, and a Kasco ¾ hp Aerator. Encouraged all to buy box raffle tickets.

2026 & 2027 Time and Place (**Filpansick/Thompson**):

-**Filpansick/Thompson** = 2026 = Indianapolis, Indiana, 2027 = Milwaukee, Wisconsin.

Strategic planning (**Kay**):

-**Kay** = 2022 was the last Strategic Planning session. We are looking to conduct another session within the next couple of years to assist the BOD during a Fall meeting to examine the goals and update as needed.



2025 MAPMS BUSINESS MEETING MINUTES



Sponsorship (**Kay**):

-**Kay** = Great year, 33 sponsors. 7 Diamond level sponsors, 2 more vs any other year. 3 Platinum, 7 Gold, 6, Silver and 10 Bronze. Amy thanked all sponsors for their generous support.

Isaacs = Motion to accept the Committee reports as presented, Jorgenson = second, Motion carries.

Old Business:

No old business.

New Business:

No new business

Temporarily Adjourn until Banquet (Motion to temporarily adjourn):

Thompson = Motion, (Temporarily Adjourned, 4:59p.m.)

Meeting called back to order by Wiet at 7:40pm

-**Wiet** = Thanked everyone for their support and participation. Spoke about the importance of the event and Society. Recognized all Honorary Members of the Society in attendance. Recognized all Past Presidents of the Society in attendance. Recognized all Sustaining Members of the Society in attendance. Recognized all outgoing Board Members: Amy Kay, John Goidosik, Emily Henrigillis, Jason Euchner, and Ashley Wolfe. Announced the winners of the election: Leif Willey (Vice President), Brian Isaacs (Secretary), Tim Holt (Director), and Paul Conti (Director).

-**Richmond** = Read off all exhibitors and thanked them for their support. Announced the winner of the Exhibitor Excellence Award = Agro-Shield

-**Kay** = Thanked and awarded all the Diamond sponsors with a Plaque. Thanked all other sponsors for their support.

-**Filpansick** = Recognized Justin Nawrocki and Dalton Sink (in attendance) as past recipients of the Robert L. Johnson Memorial Research Grant. He also recognized Maxwell Gebhart as the 2024 recipient. This year there were 2 applicants: Corrina Vuillequez, University of Florida, Dr. Benjamin Sperry, Evaluation of novel herbicide application techniques for control of Crested Floating Heart and Anna Agi, North Carolina State University, Dr. Rob Richardson, Curly-leaf Pondweed (*Potamogeton crispus* L.): Effect of mechanical harvesting on turion production and potential nutrient release at senescence. Both received \$5,000. There were 4 student papers this year, in chronological order of presentation: Kara Foley, North Carolina State University, Evaluation of herbicide efficacy on *Hottonia palustris* (Water Violet). Ashley Wolfe, Montana State University, Characterizing fluridone response variation in Eurasian Watermilfoil strains using small-scale rapid herbicide assays. Maxwell Gebhart, Mississippi State University, Herbicide efficacy on invasive *Vallisneria x Pseudorosulata* and *Vallisneria Spiralis*. Delaney Davenport, North Carolina State University, Response of *Vallisneria* taxa to combination herbicide treatment. 1st place = Delaney Davenport, 2nd place = Maxwell Gebhart, and 3rd place = Kara Foley. Delaney Davenport was named the new Student Director on the Board of Directors.

-**Wiet** = Presented the Joe Bondra Distinguished Service Award to Dick Pinagel.

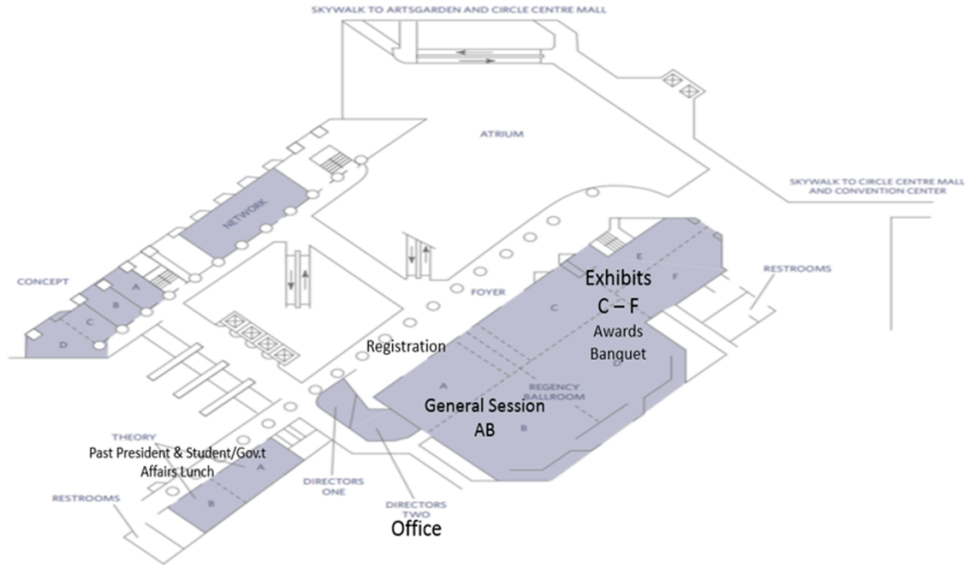
-**Wiet** = Welcomed Pete Filpansick as the new MAPMS President.

-**Filpansick** = Presented outgoing President, Landon Wiet with the Past President plaque.

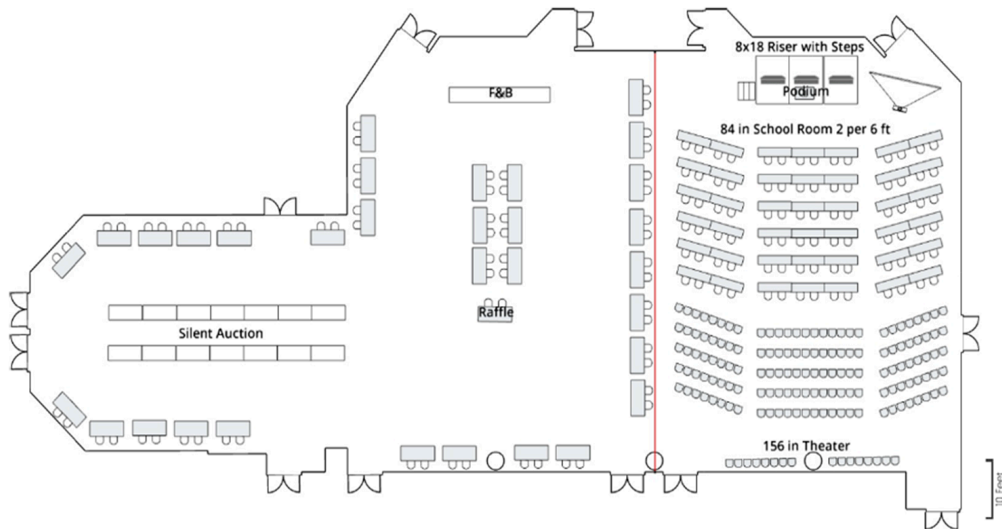
-**Filpansick** = Called for a motion to approve, **Johnson** = Motion, meeting adjourned at 8:29pm.



Hyatt Regency Layout



Exhibits and Conference Room Layout





UPCOMING MAPMS ANNUAL CONFERENCES

2027

**February 22 - 25
HYATT REGENCY
MILWAUKEE, WI**



2028

**MICHIGAN
TBD**

2026

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