

Photo by Scott Brown

Welcome to the Michigan Waterfront Alliance Update for Monday, January 16th, 2023



Michigan Waterfront Alliance (MWA) is a 501(c) 4 non-profit corporation formed over twenty years ago in order to effectively advocate for the creation or preservation of state laws, and/or policies designed to protect, preserve, and promote the sustainable and wise use of our state's immense treasure of high quality freshwater resources. Our primary mission will be accomplished by pro-active participation in Michigan's legislative process (lobbying), by participating in court cases whose outcomes may have significant statewide ramifications, and/or by direct involvement with natural resources management, or environment focused state agencies or departments.







Bythotrephes, a water flea with a long, spiny tail, eats other zooplankton and competes with fish for food. It's now widespread in the lakes.

ILLUSTRATION BY FIORELLA IKEUE

Highly Invasive Exotic Spiny Water Flea Pose a 'Clear and Present'

Threat to the Aquatic Food Webs that Sustain our Freshwater Ecosystems

by Scott Brown MWA e-Newsletter Editor

First observed in the waters of Lake Huron in the late fall of 1984, aquatic biologists suspect that exotic invasive spiny water flea (scientific name: *Bythotrephes longimanus*) entered the Laurentian Great Lakes region via the ballast water discharge of a commercial freighter that had entered the freshwater inundated North American continent after navigating from Europe. A native of the Ponto-Caspian Sea region of Eastern Europe and western Asia, the predatory zooplankton species commonly referred to as spiny water flea likely spread via currents, inter-lake ballast water transfers, and recreational boaters to Lake Ontario by September of 1985, to Lake Erie by October of 1985, to Lake Michigan by September of 1986, and to Lake Superior by August of 1987.

Characterized by a distinctive black eye spot, a single long spiny tail, and an opaque body that ranges from one quarter (.635 cm) to five eights (1.59 cm) of an inch in overall length, spiny water flea are capable of explosive rates of population growth due their inordinate capacity to reproduce asexually by cloning themselves in relatively warm waters that are present in late spring and summer, and by reproducing sexually in the cold waters of late fall by producing and fertilizing eggs that are capable of remaining viable for long periods of time due to their inherent resistance to freezing and drying.

The presence of exotic aquatic invasive spiny water flea represents a 'clear and present' danger to the freshwater ecosystems that they invade due to the fact that they make their living by aggressively preying upon often abundant and highly beneficial native zooplankton species such as Daphnia that serve as the primary food source for juvenile fish, and that help achieve and sustain clear water in most of our lakes by grazing upon unicellular green algae phytoplankton species that are generically referred to as diatoms. Aquatic biologists fear that declines in the abundance of Daphnia and other native zooplankton species that are heavily preyed upon by spiny water fleas will significantly alter the food web of the Great Lakes, and therefore reduce the number of young phytoplankton eating fish that are capable of surviving their highly vulnerable first year of life. Researchers have also observed that some valuable Great Lakes species such as chinook salmon, walleye, white bass, alewife, yellow perch, white perch, and lake whitefish often consume spiny water flea. It is not currently known, however, how nutritional the exotic spiny water flea is for fish, given the significant portion of the species overall biomass that is comprised of exoskeleton, and the namesake long spiny tail that are known to possess little or no value nutritional value.

The substantial threat posed to invaded freshwater ecosystems is amplified by the fact that spiny water flea deploy a highly effective survival strategy that allows them to avoid being preyed upon by migrating into deeper, cooler, light deprived waters

during the day, and by returning to the upper layers of the water column to feed at night under the cover of darkness. The capacity of spiny water flea to disrupt the aquatic food webs that help sustain a myriad of fish species is also enhanced by the fact that many of the fish that inhabit our inland lakes such as bluegill and red eared sunfish are incapable of eating the highly invasive exotic zooplankton species due to their long spiny tails.

The telltale existence of the highly invasive exotic zooplankton species within a particular lake is usually initially detected by sport fisherman whose fishing rod eyelets become clogged with spiny water fleas, or downrigger cables that become inundated with the black eyed, spiny species.

In addition to becoming aware of the fact that this highly invasive exotic zooplankton species continues to spread from lake to lake in the Great Lakes region, recreational boaters and sport fisherman can help prevent the species from entering your favorite lake by remembering to 'Clean - Drain - Dry' before transporting their boat and trailer to a new lake.

To learn more about the Michigan State University Extension Clean Boats, Clean Waters program <u>click here</u>



We are not afraid to admit that

>>> We Need Your Help!!!

Why <u>You</u> Should Join Michigan Waterfront Alliance today?

Do you care about your favorite lake, river, or stream?

Do you care enough to contact your state senator or representative about issues that may affect the quality of your waterbody?

Do you keep track of the bills that are important to your lake, river, or stream that may have been introduced in the Michigan House or Senate?

The good news is that Michigan Waterfront Alliance (MWA) is doing this for you.

And while we're at it - we will remind you that the activities and efforts of the Michigan Waterfront Alliance are conducted entirely by passionate volunteers who donate their own time and personal resources to helping preserve and protect Michigan's extraordinary freshwater lakes, ponds, rivers, stream and wetlands.

Did you know that not a single person who works directly on behalf of our non-profit organization receives compensation of any sort - financial or otherwise?

Did you know that with the exception of paying our attorneys to represent your interests, and the best interests of preserving our freshwater resources in court, that the majority of the relatively modest amount

of revenue we generate from memberships is entirely dedicated to paying our Lansing-based lobbyist to work on your behalf and on behalf of protecting Michigan's water resources in our state capitol??

Did you know that Michigan Waterfront Alliance is a proactive member of the collaborative lake conservation focused organization known as the <u>Michigan Inland</u> <u>Lakes Partnership</u>???

Did you know that Michigan Waterfront Alliance was a 'platinum' level sponsor of the 2022 Michigan Inland Lakes Convention??

Did you know that Michigan Waterfront Alliance is a founding member of the Michigan Aquatic Invasive Species Task Force, a collaborative effort that is comprised of the Michigan Department of Environment, Great Lakes and Energy (EGLE), the Michigan Department of Natural Resources, and several statewide non-profit organizations that is dedicated to stopping the introduction and spread of exotic aquatic invasive plants and animals??

Did you know that our volunteers often reach out to elected members of the <u>United States House of Representatives</u>, the <u>United States Senate</u>, and to the <u>United States Environmental Protection Agency in regards to resolving federal government level issues that pertain to protecting Michigan's freshwater resources??</u>

Why not become a pro-active part of our efforts to help preserve and protect Michigan's incredible freshwater resources for future generations by becoming a member today??

Please remember that we rely entirely upon membership dues to fund the operating costs of our organization...

TO BECOME A MEMBER OF MICHIGAN WATERFRONT ALLIANCE VISIT OUR >>>>> MEMBERSHIP PAGE <>>>>

Annual Dues are:

\$50 for an individual;

\$100 for a lake association; and

\$200 for a corporation

With support from individuals like you, lake associations, and corporations, we can continue to work together as a unified voice choosing to protect Michigan's water resources for future generations. Thank you for your consideration!!!



Photo by Scott Brown



MICHIGAN STATE | Extension

December 2022

For additional information, visit extension.msu.edu

Identifying and managing invasive Eurasian and hybrid watermilfoils in Michigan lakes: A response to differential sensitivity to herbicides

Jo Latimore¹, Erick Elgin², James McNair³, Syndell Parks³, and Ryan Thum⁴

¹Michigan State University, ²Michigan State University Extension, ³Grand Valley State University, ⁴Montana State University

Summary

We genetically analyzed hybrid watermilfoil collected from lakes across Michigan and tested the hybrid plants' susceptibility to a common herbicide, fluridone. We made two important determinations. First, there are many different genetic strains of hybrid watermilfoil in Michigan lakes. Second, these strains respond differently to fluridone, and some are highly resistant to it. Therefore, knowledge of what strain(s) of watermilfoil are present in a lake is very important when developing a management plan that includes control with herbicides.

To download and read the complete article, <u>click here</u>



Shoreline & Shallows Conference 2023 Registration Open! In Person

Date: Thursday, March 9th

Location: Kellogg Hotel & Conference Center, East Lansing

Time: 9:30 AM - 4:00 PM

Registration Information

Cost: Early Bird - \$50 (until February 26) Regular: \$65 (Starts February 27)

REGISTER NOW

This year's Conference will include topics on the current state of Michigan's shorelines through the National Lake Assessment, why woody structure is good for lakes and how it can be used for In-Lake Habitat Improvements such as "fish sticks" and "turtle logs", highlights of one of the largest projects in Michigan to install woody structure for shoreline erosion control, discussion about the future state of bioengineering, aquatic plants and an overview of the best management practices associated with the updated shoreline permits.

Registration Questions: Contact Lois Wolfson 517-230-9281 E-Mail: wolfson1@msu.edu

MORE INFORMATION





State parks, trails, and waterways

Do you like to spend your summers outdoors? What if you could get paid for it, too? We've got just the thing! We're hiring!

Starting rate is \$15/hour.

Know someone that might be interested?

To learn about these opportunities, visit



Midwest Glacial Lakes Partnership Request for Proposals:

2024 Lake Conservation Grant

The Midwest Glacial Lakes Partnership (MGLP) is accepting proposals for their 2024 Lake Conservation Grant. Projects should benefit glacial lake fish habitats, which include addressing the chemical, physical, and biological components of the habitats that fishes found in glacial lakes use throughout their lives. Projects considered for funding must align with the goals and objectives of the MGLP and can range in scale from projects that affect one or more sites, from individual or multiple lakes to entire watersheds. Projects should address the processes that cause fish habitat impairments as opposed to managing or treating the symptoms of those causes. Applications are due on Friday, February 17, 2023.

If you have any questions, please contact Joe Nohner at nohnerj@michigan.gov or 517-599-6825 or John Hiebert, MGLP Steering Chair, at john.hiebert@state.mn.us.



NotMISpecies Webinar Series

Invasive species pose a threat to Michigan's environment, economy, and sometimes even human health. What is at stake? What is being done? This webinar series explores how agencies, universities, and locally led organizations are working together to protect Michigan's natural resources through the Michigan Invasive Species Program. If you are concerned about the impacts of invasive species or interested in the techniques used to control them, join us as we examine species-specific actions, innovations in research and technology, and programs designed to help communities prevent and manage harmful invasive species. A question-and-answer period will follow each presentation. Recorded versions of all previous NotMISpecies webinars are available at Michigan.gov/EGLE/Outreach under "Featured Webinar Series."

Upcoming webinars in the series

Wednesday, January 18, 9:00 - 10:00 AM

If you can't beat 'em, find something that will eat 'em: Biological control for invasive knotweeds. When infestations of invasive species become too large to control chemically and mechanically, biological control can be a cost-effective alternative. Marianna Szucs from the Department of Entomology at Michigan State University will provide a brief background on the practice of classical biological control and share her lab's efforts to establish two host races of the knotweed psyllid

(jumping plant lice) that are adapted to different knotweed species.

Serve the curve: Stopping invasive species early. Presented by Audrey Menninga, Northwest Michigan Invasive Species Network. Host: Northwest Michigan Invasive Species Network. Register.

Tuesday, February 7, 9:00 - 10:00 AM

<u>Lobster mobsters: An update on Michigan's red swamp crayfish response</u>

Though sometimes called "mini-lobsters," invasive red swamp crayfish are anything but sweet. Once they show up in an ecosystem, they quickly take over, leaving little or nothing for the locals. Dr. Lucas Nathan, aquatic invasive species coordinator for the Michigan DNR, is intent on turning the tide of infestation in southeast Michigan. Join him to hear about recent advances in research and management of this combative crustacean.

Tuesday, March 21, 9:00 - 10:00 AM

Rowing the boat: The Michigan Invasive Species Program 2022 year in review

The hearty crew of staff, partners and volunteers that make up the MISP navigated through some rough waters in 2022 with new detections of beech leaf disease and spotted lanternfly in the state, but they also managed to make a lot of headway. The program's communications coordinator, Joanne Foreman, will highlight response efforts, prevention, outreach and survey work undertaken in 2022 to protect Michigan's natural resources from the effects of invasive species.

Michigan.gov/EGLEevents

REGISTRATION QUESTIONS:

Joel Roseberry: <u>RoseberryJ@michigan.gov</u>

Alana Berthold: <u>BertholdA@michigan.gov</u>









MISSION

Michigan Environmental Council drives the environmental agenda in Michigan. We develop innovative policy ideas; communicate them to key audiences in a compelling fashion; and engage our members, community leaders and residents as effective local advocates for shared goals. By leading powerful, diverse collaborations, we inspire state leaders to adopt pioneering solutions that set a global standard for environmental leadership.

Michigan Environmental Council—a 501(c)(3) charitable organization—is a coalition of over 80 organizations created in 1980 to lead Michigan's environmental movement in achieving positive change through public policy solutions.

MEC combines deep environmental policy expertise with close connections to key state and federal decision-makers, decades of experience getting things done in the political process, and an ability to rally broad and powerful alliances in support of reforms. With our member groups and partners in the public health and faith-based communities, MEC promotes public policies to ensure that Michigan families will enjoy clear waters, clean beaches, beautiful landscapes and healthy communities for years to come.

To learn more about the mission and goals of the Michigan Environmental Council

Click here



Clean Boats, Clean Waters Grants

Clean Boats, Clean Waters grants supply up to \$3,000 to organizations communicating aquatic invasive species prevention information through outreach materials and in-person educational events to boaters. This funding opportunity is competitive, and applications will be subject to a review process and ranked based on program eligibility, project significance, and overall strategy. Examples of previous grant funded projects can be found at the bottom of this webpage.

Applicants are highly encouraged to partner with other conservation organizations and to conduct boater outreach on a regional scale. Organizations qualified for the <u>Michigan Invasive Species Grant Program</u> (MISGP) (e.g., CISMAs) should pursue MISGP funds to perform boater outreach activities. CISMAs can provide support to organizations in their area that are applying for this funding.

CBCW is a joint effort between Michigan State University Extension and the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Funding for CBCW and this grant opportunity is provided by a short-term grant through the Great Lakes Restoration Initiative in partnership with EGLE.

2023 Grant Opportunity

The grant application period has been extended! Applications will now be accepted until

Friday, January 20, 2023.

Applicants will be informed by March 2023 of funding decisions.

Examples of eligible projects

- Interpretive signage at a county or township park, nature center or boat launch about proper cleaning techniques to prevent AIS.
- Clean Boats, Clean Waters <u>boat decontamination station</u> with plant removal tools, sponges, and signage.
- Educational booth during weekends at a popular boat launch or community event.

• Educational presentations to anglers taking part in a fishing tournament.

Eligible expenditures

- Producing existing state approved AIS outreach materials (e.g., printed materials (brochures, rack cards), banners, flags, floating key chains and towels) and/or designing and producing new materials with approved messaging consistent with outreach campaigns in use in Michigan. Proposed outreach materials will be reviewed within 14 days of submittal to grant administrators. View the Clean Boats, Clean Waters website for examples of approved materials.
- AIS removal supplies such as plant removal tools, sponges, wrenches for removing drain plugs, towels, and plastic scrapers.
- Event supplies including tables, chairs, and tents.
- Clean Boats, Clean Waters volunteer recognition apparel items (i.e., lanyards, shirts, aprons, hats).
- Staff time to perform watercraft inspections, demonstration of boat cleaning techniques and/or outreach to boaters.
- Outreach activities can take place at various locations including but not limited to bait and tackle shops, county fairs, public and private boat launches and waterbodies that do and do not have public access.

Ineligible expenditures include but are not limited to the partial purchase, upkeep and/or the maintenance of a mechanical boat washing station (i.e., boat cleaning systems using high pressured water, waterless decontamination systems) and indirect costs and fringe for staffing.

NOTE: Permission of boat launch owners and/or managers needs to be obtained prior to any project implementation. For example, the Michigan Department of Natural Resources (DNR) Parks and Recreation Division may require a use permit for any events held at DNR owned/managed boating access sites.

Eligible organizations

- Local or tribal units of government
- Lake associations/watershed protection groups
- Non-profit 501(c)(3) organizations

Funding amount

- The grant request amount should range from \$1,000 to \$3,000 per grantee.
- There is no match or cost sharing requirement.
- Funds will be distributed via a one-time reimbursement of eligible expenses.
- Any budget or project changes after a grant has been awarded must be approved in writing.

Required grant activities

Grantees must complete all of the following activities:

- Grantee agrees to host a minimum of three outreach events with CBCW approved outreach materials.
- Grantee and/or volunteers will review required CBCW training materials (approximately 1 hour of educational instruction).
- Grantee and/or volunteers will collect and report data on the number of people contacted, volunteer hours (if applicable), number of outreach materials distributed, and latitude/longitude of locations (minimum of waterbody name, county, and township) for all events and signage.
- Grantee will submit one narrative report of all grant funded activities and expenditures to MSU Extension. A template will be provided to assist with narrative report creation.
- The narrative report must contain a minimum of five photos of products and/or outreach conducted. Narrative report is due October 31, 2023, or at the time of reimbursement request.
- Grantee will submit all receipts/invoices for reimbursement by October 31, 2023.
 MSU Extension will not issue payment to the grantee until all receipts have been submitted. One-time payment will be issued within 60 days of receiving receipts and report of grantee activities.

Note: The grant application will download as a Microsoft Word file. If you have accessibility issues, please contact Kelsey Bockelman at bockelm4@msu.edu

CBCW Grant Application (Microsoft Word file)

To learn more about this outstanding grant opportunity click here



Photo by Scott Brown



Virtual Lake Learning Opportunities

January 18, 11:00 AM: Serve the curve: Stopping invasive species early. Presented by Audrey Menninga, Northwest Michigan Invasive Species Network. Host: Northwest Michigan Invasive Species Network. Register.

January 18, 1:00 PM: Creating healthy, natural habitats for freshwater fish: How community groups can help local lake trout, walleye, brook trout, bass, pike, and perch. Presented by Melissa Dakers, Watersheds Canada. Host: Watersheds Canada. More details.

January 18, 2:00 PM: The Blue Ribbon AIS *(aquatic invasive species)* Commission: Process, participation, and final report. Presented by Chris Macaluso, Theodore Roosevelt Conservation Partnership; and Clay Crabtree, National Marine Manufacturers Association. Register.

January 25, 2:00 PM: Updates to US EPA's "How's My Waterway" tool. Host: US Environmental Protection Agency. Register.

February 7, 9:00 AM: Lobster mobsters: An update on Michigan's red swamp crayfish response. Presented by Lucas Nathan, Michigan Department of Natural Resources. Host: Michigan Invasive Species Program. <u>More details</u>.

February 27, 6:00 PM: Understanding conservation easements. Presented by Chase Heise, Leelanau Conservancy. Host: Grand Traverse Conservation District. <u>More information</u>.

March 21, 9:00 AM: Rowing the boat: The Michigan Invasive Species Program 2022 year in review. Presented by Joanne Foreman, Michigan Department of Natural Resources. Host: Michigan Invasive Species Program. More details.

April 24-28: 13th National Monitoring Conference. (*hybrid conference with limited virtual format*) Host: National Water Quality Monitoring Council. <u>More details</u>. \$



ATTENTION READERS!!!

In order to add your friends, neighbors, and/or fellow lake or watershed conservation focused association member e-mails to our growing list of water resource conservation minded people who would like to receive

this Michigan freshwater resources focused twice monthly newsletter, contact Editor Scott Brown at scottb1952@gmail.com



Join Michigan Waterfront Alliance!

- Are you tired of funding the management of aquatic invasive species on your lake that were introduced by recreational boaters using the local MI Department of Natural Resources public boating access site?
- Are you just a bit angry that recreational boaters using your lake are not being asked to contribute their fair share to combat the negative influences of aquatic invasive species?
- Are you worried about the fact that your lakefront residential property values are being negatively influenced by the steadily increasing presence of aquatic invasive species?
- Are you concerned about the fact that it is nearly impossible to find an inland lake in Michigan that does not currently host one or more potentially harmful aquatic invasive species?
- Are you aware of the fact that inland lakes are Michigan's most valuable natural resource, and that our state legislature has thus far appropriated almost nothing in the way of budget resources to help ensure they remain healthy and viable?

If your answer is yes to any of these important questions, please help ensure that your voice is heard in Lansing by joining Michigan Waterfront Alliance today.

Click here to Join MWA