

# Upper Peninsula Invasives Council Newsletter January and February 2016 Edition

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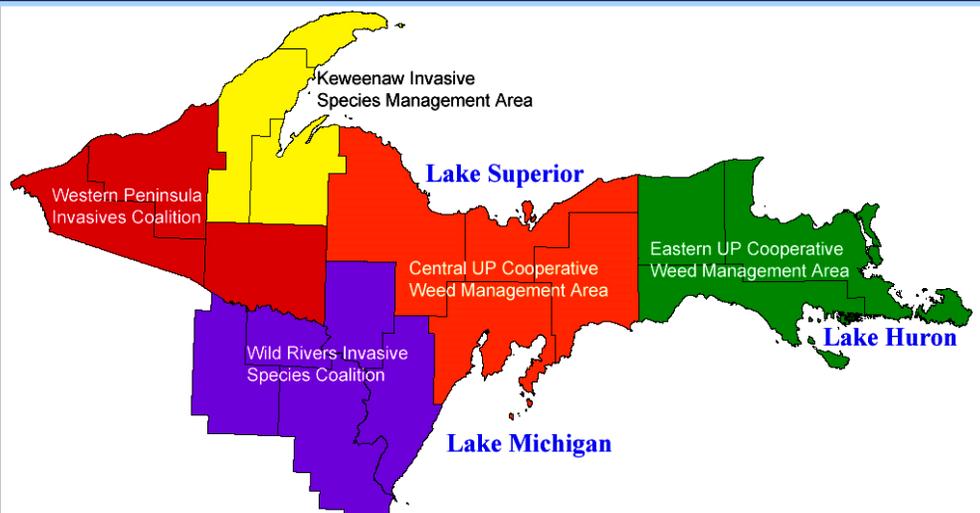
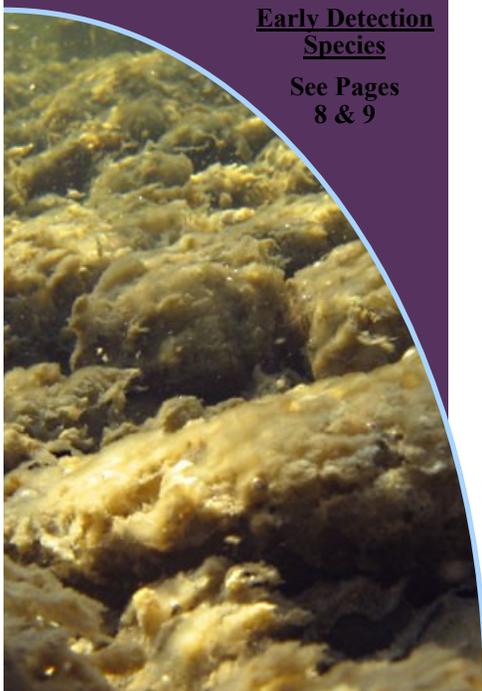
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### Early Detection Species

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*Serving 18 counties in the UP and northern Wisconsin*

**Central UP Cooperative Weed Management Area-CUPCWMA,**

[www.cupcwma.org](http://www.cupcwma.org)

Contact: Mindy Otto—[cupcwma@gmail.com](mailto:cupcwma@gmail.com)

**Three Shores CISMA,**

[www.clmcd.org](http://www.clmcd.org)

Contact: Nick Cassel—[nick.cassel@macd.org](mailto:nick.cassel@macd.org)

**Keweenaw Invasive Species Management Area-KISMA,**

[www.kisma.org](http://www.kisma.org)

Contact: Sigrid Resch—[scresh@mtu.edu](mailto:scresh@mtu.edu)

**Western Peninsula Invasives Coalition-WePIC,**

[www.wepic.org](http://www.wepic.org)

Contact: Jen Ricker—[ironconservationdistrict@gmail.com](mailto:ironconservationdistrict@gmail.com)

**Wild Rivers Invasive Species Coalition-WRISC,**

[www.wrisc.org](http://www.wrisc.org)

Contact: Emily Anderson—[wildriverscwma@gmail.com](mailto:wildriverscwma@gmail.com)

# CALENDAR OF EVENTS

January & February 2016

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## January

- 13th** — CUPCWMA Research, Inventory and Monitoring Meeting from 9AM-Noon (ET)  
@ the UPRC&D Conference Rm, 129 W Baraga Ave, Marquette  
\* Contact Darcy Rutkowski for more information at [darcy.rutkowski@uprcd.org](mailto:darcy.rutkowski@uprcd.org)
- 21st** — CUPCMWA Steering Committee Conference Call from 9:00 AM - 10:00 AM (ET)  
\* Contact Mindy Otto for more information at [cupcwma@gmail.com](mailto:cupcwma@gmail.com)
- 23rd** — The Dickinson Conservation District's 66th Annual Meeting and Conservation Fair  
9am to Noon (CT) at Bay College West's Fornetti Hall in Iron Mountain, MI  
\* Contact Emily Anderson for more information at [wildriverscwma@gmail.com](mailto:wildriverscwma@gmail.com)
- 26th** — Three Shores Cisma Steering Committee Meeting at 10:00 am (ET)  
at the CLM Conservation District.  
\* Contact Nick Cassel for more information at [nick.cassel@macd.org](mailto:nick.cassel@macd.org)

## February

- 3rd** — WRISC Board of Director's Meeting @ Dickinson Conservation District/USDA Service Center, 420 N Hooper St Kingsford, MI  
\* Contact Emily Anderson for more information at [wildriverscwma@gmail.com](mailto:wildriverscwma@gmail.com)
- 22nd & 23rd** — Wisconsin Wetlands Association Conference in Green Bay, WI  
<http://conference.wisconsinwetlands.org/>.  
\* Contact Emily Anderson for more information at [wildriverscwma@gmail.com](mailto:wildriverscwma@gmail.com)
- 25th** — Three Shores Cisma Open House in Luce County from 2:00 PM—7:00PM (ET)  
In Newberry, MI, Exact Location TBD  
\* Contact Nick Cassel for more information at [nick.cassel@macd.org](mailto:nick.cassel@macd.org)

Well, this is my last UPIC eNews everybody... What a great 11 months it has been. I've met so many wonderful people up here in da UP. I can't even begin to thank you all enough for the help and support I received while being an AmeriCorps member. It has been an absolute pleasure working alongside everyone fighting this crazy fight against invasives. I've learned so much about hard work, collaboration, persistence, and dedication. You all are one of the hardest working groups of people I've ever been around and I am so lucky that I got to spend as much time as I did with you. Thank you for all of your efforts to keep this amazing place what it is; I will always consider this a second home. Keep up the good work, I'll be checking in periodically to see how things are going. Off to Minnesota!

-Quinn

# New KISMA Coordinator! SIGRID RESH

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Hello fellow invasive species enthusiasts?, victims?, people trying to do the right thing. I'm joining you as the new coordinator for the Keweenaw Invasive Species Management Area or KISMA. I feel like I've come into an amazing group of dedicated, knowledgeable folks from whom I wish I could just get a mind download. As I get acclimated to my new job, I look forward to gaining bits and pieces from all who have time to share.

My background is in forest ecology, and for 15 years my research has focused specifically on the effects of differing tree species and management on soil carbon storage. Currently, I am also a Research Assistant Professor at Michigan Technological University. My Ph.D. research included forest age and species effects on soil carbon stocks and fluxes of subalpine forests of the Western US and subtropical forest plantations of Puerto Rico and Hawaii. In Tasmania, Australia my post-doctoral research focused on the effects of forest management (irrigation and fertilization) on *Eucalyptus* coarse root biomass and distribution. Most recently, along with Tech colleagues, I am using special wood harvested from the Wisconsin Free Air CO<sub>2</sub> Enrichment (FACE) site to determine the importance of wood as a contributor to soil organic carbon. This wood is isotopically labeled, which allows the use of stable carbon isotope techniques to track the transformation of woody biomass into long-lived SOC pools.



I am also co-advising a Ph.D. student on an international NSF research project to address the soil sustainability of bioenergy production in Mexico, Argentina, Brazil, and Wisconsin.

Why am I working on invasive species? Well, I am hoping that applying ecological principles to the control of invasive species may be a good way to use my talents in my local community. Giant knotweed near my house has been a pet-peeve of mine that I would like to take action on, so with that as an instigator and with the guidance of the KISMA partners and any of you, I'm hoping to control invasive species and help rebuild native ecosystems.

—Sigrid Resh

# THREE SHORES

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Danielle (Dani) King, the new Invasive Species Assistant at Three Shores CISMA

## EUPCWMA Changes Name To Three Shores CISMA

On October 14th, the EUPCWMA held its annual Fall Partnership Meeting at Straits State Park in St. Ignace, MI. A variety of folks showed up from partner organizations, such as the Michigan DNR, Bay Mills Indian Community, UP RC&D Council, and the Sault Tribe of Chippewa Indians. One of the main goals of this meeting was to vote on a new name to replace the current acronym, EUPCWMA. Here's what the coordinator Nick Cassel had to say about it, "With the State of Michigan's encouragement of CISMA creations/expansions, we as the EUPCWMA thought it was time for an updated name. The term "Weed Management" does not truly define this partnership's activities, and seems a bit outdated. Several members of our group had thought of the concept of using our unique geography within the name. We sit within the only region of the state that touches 3 of our 5 Great Lakes. Following a majority vote at our Fall Partner Meeting, we became Three Shores CISMA. We continue our mission with all the Three Shores partners to manage and control invasive species as well as provide outreach and education around invasives in Chippewa, Luce, and Mackinac counties."

## Danielle (Dani) King: Invasive Species Assistant

Greetings! My name is Danielle King, but people always called me Dani. I am the newest member of the Chippewa Luce Mackinac Conservation District team as the Invasive Species Assistant! I have two kids and generally keep very busy. I enjoy volunteering and am often involved in more than one project at a time. My education is in Natural Resource Technology and Recreation Management at Lake Superior State University. I have worked on and off at my education and I hope to button that up next year. Over the years as a student, I have had several internships in Natural Resources. Three of my seasonal positions were with the US Fish and Wildlife Service as a Biological Technician mostly with Endangered Species. One USFWS internship was at Shiawassee National Wildlife Refuge where I worked on biological control of Purple Loosestribe raising *Galerucella* beetles in netted plants for release. Also I was an AmeriCorps volunteer for Michigan Groundwater Stewardship Program where I helped homeowners identify environmental risks from the home site to ground and surface water.

I am joining at an exciting time here as we are recently re-named the EUPCWMA to Three Shores CISMA! My role as Invasive Species Assistant is to take care of the administrative side of the program. I will help organize events, do reporting, schedule meetings, presentations and grant work. I will be in the office more than out in the field, so you can contact me with questions or comments or for planning. Anything I can do to help! I really enjoyed my first Northern Great Lakes Invasive Species Conference in Marquette this October. It was great to meet many professionals with unique strengths and talents, bringing the issues of Invasive Species to the public. It was inspiring! I'm glad to be joining the team!

-Dani



## 6<sup>TH</sup> ANNUAL NORTHERN GREAT LAKES INVASIVE SPECIES CONFERENCE

# ON THE HORIZON: INNOVATION INTEGRATION MOTIVATION

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With over 100 people from all over the Midwest and Canada in attendance, The Great Lakes Invasive Species Conference at Northern Michigan University in Marquette was truly a great collaborative success on the invasive species front. Presentations at the conference touched on many themes in the fight against invasives, including: citizen science, treatments, mapping, volunteerism, and alternative management options. On October 21st, the day prior to the actual conference, 37 people attended a workshop on herbicide sprayer equipment at Van Riper State Park lead by Lee and Simon Shambeau from 4-Control Inc. During the workshop, Lee and Simon instructed the group on all sorts of subjects relating to backpack sprayer mechanics, maintenance, troubleshooting, assembly and disassembly, and even a demonstration on how to calibrate your backpack sprayer for proper herbicide coverage. Dave White from The Michigan Department of Agriculture and Rural Development (MDARD)'s Pesticide and Plant Pest Management Division, also spoke at the workshop about regulatory updates as they pertain to herbicide treatments in the state of Michigan. Those in attendance at the pre-conference workshop, were also eligible for 4 recertification credits for pesticide applicators in numerous categories.

The next day, the 6th annual Great Lakes Invasive Species Conference was underway, starting with coffee, conversation, and a chance to look over the wonderful display boards brought by those in attendance. Our fabulous MC, Teri Grout of the Alger Conservation District, kicked the conference off with a friendly welcome and introduced the attendees to all that there would be offered at the conference. Art Wagner of the USDA –Animal and Plant Health Inspection Service, was the first speaker at the conference, addressing how to incorporate citizen science and how to get the public more involved in the efforts. It was a great way to get the ball rolling. Following Art's talk, conference participants were then given the choice of choosing between two different presentations being given simultaneously throughout the rest of the conference. Here is a list of the presentations at the conference:

**10:30am:** Map that Data! Invasive Plant Roadside Surveys and Mapping Using the Free QGIS Software

*Emily Anderson of WRISC*

Lessons from the Boat Launch: A Panel Discussion on AIS Education at Boat Washing Stations

*Ann Hruska, WRISC; Jen Ricker, WePIC; Christine Scott, Invasive Species Control Coalition of Watersmeet*

**11:15am:** Engaging Volunteers through Citizen Science and the EcoStewards Program

*Cacia Lesh, Little Traverse Conservancy*

Fire and Invasive Species: Improving Our Understanding and Use of an Imperfect Tool

*Jack McGowan-Stinski, Lake States Fire Science Consortium*

**1:00pm:** Eyes on the Forest – How to Recognize Common Forest Pests

*Bill Cook, MSU Extension*

Herbicide Options for Selected Invasive Plants

*Lee Shambeau, 4-Control*

**1:45pm:** Innovative and Multifaceted Control of Invasive Eurasian and Hybrid Water Milfoil Using Integrative Pest Management Principles

*Kevyn Juneau, Michigan Technological University*

Japanese Knotweed Control Panel Discussion: Learning from Our Successes and Failures

*Lee Shambeau, 4-Control; Emily Anderson, WRISC; Nick Cassel, EUPCWMA*

**2:45pm:** Communication... Behavior Change... Success (Michigan)

*Tim Campbell, Wisconsin Department of Natural Resources*

Overall, the conference was a great triumph. This was very clear to me by all of the smiles and conversations I witnessed throughout the day. Really, it was incredible to see it all come together. On behalf of all those present at the conference, I'd like to thank all the speakers for putting their presentations together and sharing their knowledge with everyone, the planning committee, who dedicated loads of time to making the conference as great of an experience as we all hoped it would be, to Northern Michigan University for supplying a great venue and scrumptious food and drink, to the UPRC&D Council for supplying a large majority of the funding through their Pulling Together grant, to Marilyn Shy and Darcy Rutkowski, two magnificent women, who have been apart of making this possible for years, AND thank you to all those who attended, it's amazing to me that all of you are so committed to this cause. Till Next Time!



# 6<sup>TH</sup> ANNUAL NORTHERN GREAT LAKES INVASIVE SPECIES CONFERENCE

## ON THE HORIZON: INNOVATION INTEGRATION MOTIVATION

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Photos courteous of Emily Anderson of WRISC

## Confirmed Detections of New Zealand Mudsnails and Didymo in Michigan Waters

*Michigan Department of Natural Resources  
Michigan Department of Environmental Quality  
September 2, 2015*

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The Michigan Department of Natural Resources (DNR) and Michigan Department of Environmental Quality (DEQ) recently received reports and confirmed the presence of New Zealand mud snails and Didymo (*Didymosphenia geminata*) in Michigan waters. The confirmed occurrence of these two organisms is of great concern for the State of Michigan's natural resource agencies because these species have the ability to reach nuisance densities that can cause negative impacts to Michigan's aquatic ecosystems.

Didymo, commonly called "rock-snot" was detected in June in the St. Marys River near Sault Ste Marie, MI by the Department of Fisheries and Oceans Canada during their annual invasive sea lamprey removal efforts. The detection was later confirmed by the DEQ and Lake Superior State University personnel. Didymo is a type of algae that has previously been identified in the Great Lakes Basin, but this recent detection in the St. Marys River marks the first time that this algae has reached nuisance bloom levels in Michigan waters. In areas where nuisance blooms commonly occur (e.g., western and eastern states) the algae attaches to rocky substrate and covers the bottoms of cold, clean freshwater streams and rivers that recreationally popular trout species generally inhabit. It is debatable whether this species is invasive to MI. Regardless, this is the first bloom ever detected in MI and it is a nuisance species that can negatively impact fishing.

New Zealand mud snails were detected and confirmed more recently in August, 2015 in the Pere Marquette River near Baldwin, MI by DEQ personnel. New Zealand mud snails are an invasive snail that is small in size (1/8" long) and therefore can be difficult to identify. Similar to most other invasive species, New Zealand mud snails reproduce in massive quantities and are extremely resilient (can live out of water for up to 24 hr). Where established, these snails dominate the bottoms of rivers and streams and exhibit invasive qualities, outcompeting and displacing macro-invertebrates that are vital as food sources for many fish species. In addition, these invasive snails have no nutritional value for fish.

The introductions of both Didymo and New Zealand mud snails have been linked to recreational uses, such as angling. These two organisms have the ability to hitch-hike rides on recreational gear, especially waders, which can then be transported to uninvaded waterbodies if disinfection approaches are not taken between locations. This highlights the importance to take steps to inspect and disinfect gear to protect Michigan's waters and their world-class fisheries. The DNR and DEQ have begun to communicate and partner with local stakeholder groups on steps moving forward in an attempt to limit the spread of harmful invaders. Unfortunately, control options for these nuisance organisms are limited and have low effectiveness; therefore, outreach targeted at prevention measures are the most effective management tool. In 2014, the DNR-Fisheries Division initiated conversations with trout angling groups to construct and maintain wader washing stations to promote prevention and outreach for aquatic invasive species. To date, multiple wader wash stations have been constructed and are being maintained on the Au Sable River near Grayling, MI. The plan moving forward is to increase the number of these wader washing stations in Baldwin, MI and adjacent areas. Furthermore, the DNR and DEQ continue to increase outreach campaigns to promote prevention actions such as cleaning, draining, and drying all gear and equipment before and after use in lakes, rivers, and streams. In addition to outreach activities, the DNR and DEQ plan to increase survey efforts to determine the status and distribution of these two organisms.

### **For further information or questions please contact:**

Seth Herbst  
Aquatic Invasive Species Coordinator  
Michigan DNR-Fisheries Division  
[Herbsts1@michigan.gov](mailto:Herbsts1@michigan.gov)

Bill Keiper  
Aquatic Invasive Species Biologist  
Michigan DEQ-Water Resources Division  
[KeiperW@michigan.gov](mailto:KeiperW@michigan.gov)

\* This article was reprinted from the press release originally published by the Michigan DNR & Michigan DEQ on 9/2/15 \*

# Invasive Species Alert

**TO REPORT:** Contact Seth Herbst with Michigan DNR at [herbsts1@michigan.gov](mailto:herbsts1@michigan.gov) or Bill Keiper with Michigan DEQ at [keiperw@michigan.gov](mailto:keiperw@michigan.gov).

## New Zealand Mudsnail

(*Potamopyrgus antipodarum*)

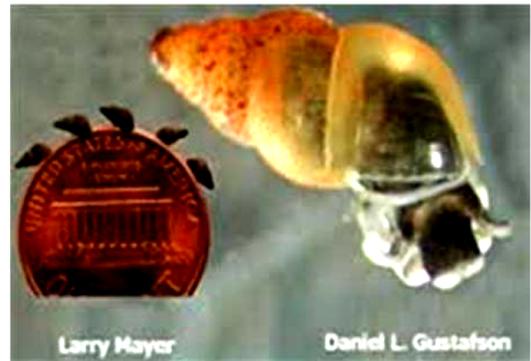
\*Established in some Michigan waters\*

### Identification:

- Average of 1/8 inch long
- 5-6 whorls on shell
- Shells vary from light brown to black
- Difficult to identify

**Habitat:** New Zealand mud snails can tolerate a wide variety of habitats, including reservoirs, estuaries, rivers, and lakes. They are most prolific in water bodies with a constant temperature and flow, but are highly adaptable.

**Diet:** Diet consists of diatoms, detritus, and plant and animal matter attached to submerged debris.



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**Native Range:** New Zealand

**Local Concern:** While mudsnails are able to reproduce sexually, it is not always necessary. Populations in the U.S. are made up almost entirely of self-cloning parthenogenetic females. In a matter of one year, a single female could result in a colony of 40 million snails. They hold no nutritional value for native fishes, so populations in the U.S. do not fall subject to predation.

**U.S. Distribution:** Western United States, Great Lakes, and the Chesapeake Bay

**Means of Introduction:** Possibly via ballast water of transoceanic vessels or game fish imports



NPS/Yellowstone National Park

\* Taken from Michigan DEQ Website \*

# Invasive Species Alert

**TO REPORT:** Contact Seth Herbst with Michigan DNR at [herbsts1@michigan.gov](mailto:herbsts1@michigan.gov) or Bill Keiper with Michigan DEQ at [keiperw@michigan.gov](mailto:keiperw@michigan.gov).

## Didymo (“rock snot”)

(*Didymosphenia geminata*)

\*Present in some Michigan waters\*

### Identification:

- Looks and feels like white or tan/brown wet wool
- Ranges from small cotton ball sized patches to thick blankets and long ropy strings that flow in currents
- Although often referred to as “rock snot”, Didymo is not slimy



**Habitat:** Didymo thrives in low nutrient cold water systems. It is a microscopic single-celled freshwater diatom whose cells can form stalks that attach to hard substrates such as rocks. Under the right conditions, prolific growth patterns result in thick mats that can cover river and stream bottoms.



**Native Range:** Likely native to Lake Superior and parts of Canada.

**Local Concern:** Didymo mats alter habitat and food sources for fish and can make recreation difficult or unpleasant. Mats can also foul water intakes and fishing gear as well as impact fishing access and wading.

**Distribution:** Didymo cells have been documented in the Great Lakes Basin and Michigan waters in low abundance, but nuisance blooms have not been documented in Michigan until recently in the St. Marys River.

**Means of Introduction/spread:** Didymo can incidentally be transported on boats, anchors and fishing gear such as waders, felt soled boots and nets.

\* Taken from Michigan DEQ Website \*