

**SUNDAY October 16, 2016 - 4:00 PM - 6:30 PM**

**Workshop: *Improvistional Theatre for Science Communication***

Improviseers are experts in storytelling, spontaneity, and using observation skills to adjust to their audiences and team members accordingly. Among other skills, this 2.5 hour workshop will introduce you to exercises that can teach you how to (1) effectively communicate your work to different audiences, (2) adjust your behavior in real time to respond to audience feedback, and (3) manipulate your vocal and physical presence to communicate more effectively. This workshop will build your skills and confidence; enabling you to effectively communicate your work to different audiences. You will develop and improve presentation skills with the objective to distill your message and present your science in a clear, concise, and compelling manner. You will be able to use these skills when giving lectures, presenting abstracts, describing research posters, and talking with mentors and peers.

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**Monday, October 17, 2016**

**MONDAY AFTERNOON I: 1:00 pm-2:40 pm**

**Dreissenid (Zebra and Quagga Mussel) Research and Control -1**

Moderator: James Luoma, USGS Environmental Science Center

1. Effects of Cyanobacteria on Quagga Mussel (*Dreissena rostriformis bugensis*) Reproduction  
Anna Boegehold, Wayne State University
2. Combating Dreissenids in Open Water and in Water Transport Vectors with Zequanox  
Carolyn Link, Marrone Bio Innovations
3. Zebra Mussel (*Dreissena polymorpha*) Eradication Efforts in Christmas Lake, Minnesota  
Keegan Lund, Minnesota Department of Natural Resources
4. Effects of Zequanox Exposure to Non-Target Fish  
James Luoma, U.S. Geological Survey at the Upper Midwest Environmental Sciences Center
5. Pattern of Spread of Zebra Mussel in Minnesota  
Sophie Mallez, Minnesota Aquatic Invasive Species Research Center at the University of Minnesota

**Inspection and Decontamination Policy, Protocols and Effective Data Management**

Moderator: Adam Doll, Minnesota Department of Natural Resources

1. Tracking the Zebra Mussel: Analyzing Watercraft Inspection Data for Effective Lake Monitoring  
Baishali Bakshi, Minnesota Department of Natural Resources Data Governance Unit
2. An Overview of Watercraft Inspections in the State of Minnesota  
Adam Doll, Minnesota Department of Natural Resources

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3. Wisconsin DNR's Decontamination and Disinfection Manual Code  
Maureen Ferry, Wisconsin Department of Natural Resources
4. Clean Boats, Clean Waters: Citizens and Staff Work Together to Protect Wisconsin's Lakes  
Erin McFarlane, UW-Extension Lakes
5. Enhanced Training for AIS Watercraft Inspectors in Cass County MN  
Rima Smith-Keprios, Cass County, Minnesota

### **Invasive Species Management on Tribal Lands -1**

Moderators: Tyler Kaspar, 1854 Treaty Authority & Susan Burks, Minnesota DNR

1. Working with Native American Peoples: Key Tribal Partners and the Work They Do (Part 1) – No individual abstract given, only description of session (above)  
Tyler Kaspar, 1854 Treaty Authority
2. Working with Native American Peoples: Key Tribal Partners and the Work They Do (Part 2)  
Tyler Kaspar, 1854 Treaty Authority
3. Federal Quarantine Regulations and Their Implication for Tribal Lands (Part 1)  
JoAnn Cruse, Plant Protection and Quarantine  
Patrick Pelky, Environmental, Health and Safety Division of the Oneida Nation
4. Federal Quarantine Regulations and Their Implication for Tribal Lands (Part 2)  
JoAnn Cruse, Plant Protection and Quarantine  
Patrick Pelky, Environmental, Health and Safety Division of the Oneida Nation
5. Implementation of Invasive Species Management Based on Large-scale Inventory and Prioritization  
Paul Quinlan, Cardno

### **Workshop: Identification of Native and Exotic Aquatic Plants of the Upper Midwest**

Paul Skawinski, *Coordinator – Wisconsin Citizen Lake Monitoring Network*

UW-Extension Lakes Program

The Upper Midwest region is blessed with an amazing diversity of aquatic plants – over 150 species. Knowing what to look for is the key to distinguishing between the members of this important group of plants. Participants will learn through a combination of classroom and hands-on instruction. Many non-native species will also be discussed, including how to distinguish them from similar native species.

### **MONDAY AFTERNOON II: 3:00 – 4:40 PM**

#### **Dreissenid (Zebra and Quagga Mussel) Research and Control -2**

Moderator: James Luoma, USGS Environmental Science Center

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1. Ecology and Genetics of Zebra Mussel Spread in Minnesota: Results and Plans  
Michael McCartney, Minnesota Aquatic Invasive Species Research Center at the University of Minnesota
2. The Potential of eDNA to Guide Site Selection for Zebra Mussel Control  
Christopher Merkes, U.S. Geological Survey
3. A Rapid Response Zebra Mussel (*Dreissena polymorpha*) Control Project, Ruth Lake, Minnesota  
Richard Rezanka, Minnesota Department of Natural Resources Invasive Species Unit
4. Evaluation of Carbon Dioxide as a Dreissenid Mussel control tool  
Diane Waller, U.S. Geological Survey
5. Control of Dreissenid Mussels with a More Rational Use of Copper  
David Hammond, Earth Science Labs

### **Locally Led Efforts\***

(10 min. presentations followed by 30 min. discussion)

Moderator: Tina Wolbers, Minnesota Department of Natural Resources

1. Michigan's Invasive Species Program  
Christina Baugher, Michigan Department of Natural Resources
2. WePIC  
Jennifer Ricker, Iron Baraga Conservation District
3. An RC&D-led Regional AIS Program Providing Services in 8 Counties  
Amy Thorstenson, Golden Sands RC&D and Portage, Marathon, Waupaca, Waushera, and Wood Counties
4. Living the Dream as a 'Top Ten' County: Cass County MN  
Rima Smith-Keprios, Cass County, Minnesota
5. Hubbard County - Local Partnerships With Resorts and Townships  
Kenneth Grob, Chairman of the Hubbard County AIS Task Force and AIS Coordinator for Hubbard County
6. Locally Led AIS efforts  
Tera Guetter, Pelican River Watershed District
7. Discussion (30 minutes)

### **How to Recruit and Manage Volunteers**

Moderator: Andrea Lorek Strauss, University of Minnesota Extension

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1. Tips for Recruiting and Managing volunteers to Help with Invasive Species Management  
Andrea Lorek Strauss, University of Minnesota Extension
2. Mobilizing Citizens: Increasing Volunteer Involvement and Early Detection on Wisconsin's Rivers  
Amanda Perdzock, River Alliance of Wisconsin
3. Development and Enhancement of the Michigan Invasive Aquatic Plant Citizen Monitoring Program  
Angela De Palma-Dow, MiCorps Cooperative Lakes Monitoring Program through Michigan State University
4. AIS Detectors and Trackers: WANTED  
Eleanor Burkett, Aquatic Invasive Species (AIS) Detector Program
5. Invasive Blitz: Expanded Roles for Volunteers  
Andrea Lorek Strauss, University of Minnesota Extension

### **Invasive Species Management on Tribal Lands – 2**

Moderators: Tyler Kaspar, 1854 Treaty Authority & Susan Burks, Minnesota DNR

1. The Vanishing Goblin Fern: Negative Effects of Non-Native Earthworms  
Bobby Henderson, Leech Lake Band of Ojibwe, Division of Resource Management
2. Adapting to Emerald Ash Borer: Planting Replacement Species in the Understory  
Shannon Kesner, Fond du Lac Band of Ojibwe
3. Is Phragmites Being Spread by Waste Water Treatment Facilities?  
Todd Norwood, Red Cliff Band of Lake Superior Chippewa Treaty Natural Resources Division
4. Using Drones to Monitor Invasive Species and Wetland Restorations  
Michael Arce, Oneida Environmental Health and Safety Division
5. Panel Discussion: Enhancing Cooperative Invasive Species Management Across Tribal Borders

### **Workshop: Identification of Grasses, Sedges, and Rushes**

Presenter: Steve Eggers, U.S. Army Corps of Engineers

This workshop will introduce participants to the basics of identification of grasses, sedges, and rushes; three graminoid families with species commonly found growing in wetlands and adjacent uplands. Taxonomy, plant structure and use of appropriate plant keys for identification will be discussed with species samples available for close observation. Several grass species that are invasive in the Midwest will be covered.

## Tuesday, October 18, 2016

### **TUESDAY MORNING I: 8:00 – 9:40 AM**

#### **Minnesota Invasive Terrestrial Plants and Pests Center: Research Updates and Management**

Moderator: Rob Venette, Minnesota DNR

1. The Minnesota Invasive Terrestrial Plants and Pests Center: Research for Results  
Robert Venette, The Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC)
2. Aptamer Development for Early Detection of the Invasive Fungus *Ceratocystis fagacearum*  
Renu Singh, University of Minnesota Twin Cities
3. The Invasive Continues: Getting a Leg up on a Growing Six-Legged Problem  
Bill Hutchison, Department of Entomology at the University of Minnesota
4. Cover it Up! Using Plants to Control Buckthorn  
Peter Wragg, The Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC)
5. Love it or List it: Agency Perspectives on the MITPPC – MN: Agency Panel and Discussion  
Laura Van Riper, DNR  
Mark Abrahamson MDA  
Dan Shaw, BWSR  
Ken Graeve, MN-DOT

#### **Emerald Ash Borer Control and Management**

Moderator: Mark Abrahamson, Minnesota Department of Agriculture

1. Minnesota Wasp Watchers: An Update on Emerald Ash Borer Biosurveillance  
Jennifer Schultz, University of Minnesota Extension
2. When Do You Pull the Trigger? Using Monitoring Data to Optimize EAB Management  
Mark Abrahamson, Minnesota Department of Agriculture
3. An Update on Wisconsin's Forest Management Guidelines for Emerald Ash Borer  
Greg Edge, Wisconsin Department of Natural Resources Division of Forestry
4. Discussion

#### **Ecology and Biology of Invasives -1**

Moderator: Laura Van Riper, Ecological and Water Resources Division of the Minnesota Department of Natural Resources

1. Using Habitat Suitability Models in Wisconsin: An Engaged, Iterative, and Collaborative Approach  
Niels Jorgensen, University of Wisconsin-Madison Nelson Institute for Environmental Studies

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2. Facilitating Natural Succession in Heavily Invaded Ecosystems  
Amber Miller-Adamany, University of Wisconsin-La Crosse
3. Invasive Species or Invasible Landscapes: An Alternative Perspective on Invasion  
Steve Thomforde, Great River Greening
4. Climate Change and Terrestrial Invasive Species  
Laura Van Riper, Ecological and Water Resources Division of the Minnesota Department of Natural Resources
5. How the Phenology of Curly-Leaf Pondweed (*Potamogeton crispus* L.) Affects Biomass Estimation, Dissolved Oxygen, and Nutrient Cycling in the Upper Mississippi  
Deanne Drake, Wisconsin Department of Natural Resources

### **Biology and Impacts of Starry Stonewort\***

(Six, 10 minute presentations followed by a 30 minute discussion)

Moderator: Paul Skawinski, UW-Extension-Lakes

1. Starry Stonewort: Addressing Identification Challenges Faced by Monitoring Volunteers and Professionals  
Angela De Palma-Dow, MiCorps Cooperative Lakes Monitoring Program through Michigan State University
2. Starry Stonewort (*Nitellopsis obtusa*): Research Efforts Towards an Integrated Management Plan  
Anna Monfils, CMU Herbarium at Central Michigan University
3. Identification and Biology of Starry Stonewort (*Nitellopsis obtusa*)  
Paul Skawinski, Citizen Lake Monitoring Network, University of Wisconsin Extension Lakes Program
4. Tracing the Movement of the Invasive Alga *Nitellopsis obtusa* Using Genetic Analyses  
Robin Sleith, New York Botanical Garden
5. Response to Starry Stonewort (*Nitellopsis obtusa*) in Silver Lake, Washington County, Wisconsin  
Bradley Steckart, Washington and Waukesha Counties
6. Starry Stonewort: A New Species of Concern in Minnesota  
Chip Welling, Minnesota Department of Natural Resources
7. Discussion Session (30 minutes)

### **Prioritizing and Controlling New Terrestrial Invasive Plants**

Moderator: Emilie Justen, Minnesota Department of Agriculture

1. Early Detection, Delayed Reaction Repercussions of Amur Cork Tree and Wild Chervil  
Christopher Gaetzke, Dunn County Land and Water Conservation Division

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2. Successful Japanese Hops (*Humulus japonicus*) Early Detection and Management in Southeastern Minnesota  
Emilie Justen, Minnesota Department of Agriculture
3. Lesser Celandine (*Ficaria verna* or *Ranunculus ficaria*) in Wisconsin: An Account of its Recent History and Control Efforts  
Michael Putnam, Wisconsin Department of Natural Resources Division of Forestry
4. Callery Pear: An Emerging Invasive Threat  
Jason Belcher, Bayer CropScience
5. Grecian Foxglove (*Digitalis lanata*) Management Success: A Collaborative Effort  
Emilie Justen and Lynette Anderson, Belwin Conservancy

### **Responsive Management of Fish**

Moderator: Brooke Vetter, University of Minnesota - Duluth

1. The Potential Use of Chemical and Auditory Stimuli with Other Control Strategies to Develop an Integrated Pest Management Tool for the Control of Asian Carps  
Robin Calfee, U.S. Geological Survey
2. Predation of Juvenile Asian Carp by Native Species in Experimental Ponds  
Cari-Ann Hayer, U.S. Geological Survey
3. The Effects of Anthropogenic Sound on Native and Invasive Fish Behavior in the Upper Mississippi River  
Kelsie Murchy, University of Minnesota Duluth
4. Bigheaded Carp Movements Past Navigation Dams on the Upper Mississippi River  
Jon Vallazza, U.S. Geological Survey
5. Bigheaded Carp Behavior and Bioacoustics  
Brooke Vetter, University of Minnesota-Duluth

### **TUESDAY MORNING II: 10:00 – 11:40 AM**

#### **Locally Led Efforts and Organisms in Trade**

Moderator: Tim Campbell, University of Wisconsin Extension Environmental Resources Center, University of Wisconsin Sea Grant, and the Wisconsin Department of Natural Resources

1. A Review of One Aquatic Invasive Species Coordinator Model in Wisconsin  
Diane Schauer, Calumet County, WI
2. Managing Aquatic Invasive Species While Improving Water Quality: Riley Creek Watershed  
Claire Bleser, Riley-Purgatory-Bluff Creek Watershed District

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3. Michigan Department of Natural Resource's Organisms in Trade Inspection Initiative  
Steven Huff, Michigan Department of Natural Resources
4. Illinois Needs Heroes: Preventing the Introduction of Aquatic Invasive Species in Trade into Natural Areas  
Greg Hitzroth, Illinois-Indiana Sea Grant and Illinois Natural History Survey
5. Watercraft Inspection Data Collection in Wisconsin Using a Custom Mobile Application  
Tim Campbell, University of Wisconsin Extension Environmental Resources Center, University of Wisconsin Sea Grant, and the Wisconsin Department of Natural Resources

### **Industry Solutions for Better Aquatic Invasive Species Management**

Moderator: Steve McComas, Blue Water Science

1. A New Biochemical Dreissenid Control Technology  
Bridget Gruber, ZM Controllers, LLC
2. Early-Season Whole Lake Herbicide Strategies for Control of Hybrid Eurasian Water Milfoil  
Eddie Heath, Onterra, LLC
3. Case Studies of AIS Detection and Response: What Have We Learned?  
Steve McComas, Blue Water Science
4. Behavioral Response of Sea Lamprey (*Petromyzon marinus*) to Electric Fields  
Alecia Stewart-Malone, Smith-Root
5. Utilization of Set Line Gear for the Control of Aquatic Nuisance Species and the Protection of At-Risk Freshwater Inland Fisheries  
Jackson Gross, Smith-Root

### **Ecology and Biology of Invasives – 2**

Moderator: Jake Walsh, Center for Limnology at the University of Wisconsin-Madison

1. Evaluating the Risk of Non-Native Aquatic Species Establishment in a Changing Climate  
Sara Stahlman, Pennsylvania Sea Grant
2. Massive Ecosystem Services Impact by Invasive Spiny Water Flea in Lake Mendota, WI  
Jake Walsh, Center for Limnology at the University of Wisconsin-Madison
3. Measuring Invasive Species Impact Using Comparative Analyses  
Jake Vander Zanden, Center for Limnology at the University of Wisconsin-Madison
4. Interaction of Zebra Mussels and Water Quality in Lake Minnetonka, Minnesota  
Eric Fieldseth, Minnehaha Creek Watershed District



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5. Illinois' Exotic Freshwater Mollusks' Distributions and Implications  
Jeremy Tiemann, Illinois Natural History Survey

6.

### **"New" Invasive Plants Threatening Our Forests**

Moderator: Susan Burks, Minnesota DNR

**(Four, 10-minute presentations followed by an hour of open discussion)**

1. "Introduction to Goals, Biology, and Identification, Susan Burks, MNDNR Forestry
2. Angela Isackson, Three Rivers Park District
3. Jeffrey Flory, 1854 Treaty Authority
4. Val Green, MNDNR Forestry
5. General Discussion

### **Cooperative Weed Management Areas: Updates and Future Direction**

Moderator: Kari Hagenow, Door County Invasive Species Team, The Nature Conservancy

1. Cooperative Management in Northwest Lower Michigan  
Katie Grzesiak, Northwest Michigan Invasive Species Network
2. Keeping Momentum a Decade Later - The Door County Invasive Species Team  
Kari Hagenow, Door County Invasive Species Team
3. Slowing the Spread and Educating Citizens in West Central Wisconsin  
Christopher Gaetzke, Dunn County Land and Water Conservation Division
4. Cooperative Weed Management Area Program Utilizing Cost-Share for Landowners  
Jennifer Wahls, Wabasha County
5. Greater Blue Earth Cooperative Weed Management Area (CWMA)  
Rich Perrine, Martin Soil and Water Conservation District

### **Phragmites (Common Reed) Research, Prevention and Control – 1**

Moderators: Kurt Kowalski, USGS - Great Lakes Science Center

1. Great Lakes Phragmites Collaborative: A Collective Impact Approach to Non-Native Phragmites  
Heather Braun, Great Lakes Commission
2. Developing the Phragmites Adaptive Management Framework (PAMF)  
Abram DaSilva, U.S. Geological Survey

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3. Non-native Phragmites in the Midwest: Status of its Invasion and Control Projects in Wisconsin, Illinois, Minnesota, and Iowa  
Brock Woods, University of Wisconsin and Department of Natural Resources
4. Phragmites Prevention and Control Coalition of Michigan's Upper Peninsula (U.P.)  
Darcy Rutkowski, Upper Peninsula (UP) RC&D Council and UP Phragmites Coalition Project
5. Developing a Private Landowner Cost-Share Program for Invasive Species Removal  
Jennifer Muladore, Huron Pines

### **TUESDAY AFTERNOON I: 1:30 – 3:10 PM**

#### **Minnesota Counties' Prevention Aid Outcomes and Impacts\***

(Seven, 10 minute presentations followed by a 30 minute discussion)

Moderator: Tina Wolbers, Minnesota DNR

1. Minnesota's Aquatic Invasive Species Prevention Aid Outcomes and Impacts  
Tina Wolbers, Minnesota Department of Natural Resources
2. Beltrami County MN AIS Prevention  
Bruce Anspach, Beltrami County
3. Successes and Challenges of AIS Prevention Aid in Cook County, Minnesota  
Amanda Weberg, Cook County, MN
4. Chisago County AIS Prevention Program  
Jerry Spetzman, Chisago County and Chisago Lakes Lake Improvement District
5. Making a Difference at the Local Level - AIS Prevention Aid Implementation in Washington County, Minnesota  
Colin Kelly, Washington County Office of Administration
6. Winona County, MN AIS Aid in Trout Streams  
Amanda Gentry, Winona County SWCD
7. 4-H Youth/Adult Partnerships and Aquatic Invasive Species Education  
Suzanne Souza, Big Stone County
8. Discussion Session (30 minutes)

#### **Forest ecosystem connections and invasive plant species**

Moderator: Ryan McEwan, University of Dayton

1. Garlic Mustard: Regional Decline of a Major Forest Invader  
Bernd Blossey, Ecology and Management of Invasive Species Program in the Department of Natural

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### Resources

2. Do Extreme Stochastic Climate Events Affect the Density of the Invasive Garlic Mustard (*Alliaria petiolata*) and Disrupt the Years of Alternating Abundance of First and Second Year Plants?  
Roger Anderson, Illinois State University
3. Perspectives on Garlic Mustard Biocontrol in the Midwest  
Laura Van Riper, Ecological and Water Resources Division of the Minnesota Department of Natural Resources
4. Effects of the Invasion, and Removal, of the Terrestrial Shrub *Lonicera maackii* on the Biology of Headwater Streams  
Ryan McEwan, University of Dayton
5. Advances in Control of Invasive Plants by Conservation Goat Grazing  
Jacob Langeslag, Goat Dispatch

### **Policy, Law, and Legislation**

Moderator: Ryan Wheeler, Michigan Department of Natural Resources, Forest and Wildlife Divisions

1. Implementation of a Multi-agency Invasive Species Decontamination Policy in Michigan  
Ryan Wheeler, Michigan Department of Natural Resources, Forest and Wildlife Divisions
2. Prospects for Asian Carp Harvest from the Illinois River  
Alison Coulter, Southern Illinois University – Carbondale
3. Using Risk Analysis to Inform Asian Carp Management in Minnesota  
Adam Kokotovich, Minnesota Aquatic Invasive Species Research Center at the University of Minnesota
4. Enforcing AIS Laws and Educating Boaters Through the Wisconsin DNR Water Guard Program  
Samantha Olsen, Wisconsin Department of Natural Resources
5. Wisconsin Ballast Water Program Update  
Susan Eichelkraut, Department of Natural Resources  
Mike Goettel, Department of Natural Resources

### **Phragmites (Common Reed) Research, Prevention and Control -2**

Moderators: Brock Woods, UW Extension

1. Lower Grand River Phragmites Control--A Public/Private Partnership Success Story  
Melanie Manion, Ottawa County Parks  
Brian Majka, GEI Consultants
2. Can't See the Wetland for the Reeds: Phragmites Control in Coastal Wetlands  
Christopher May, The Nature Conservancy

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3. Bridging the Gap Between Innovation/Technology and Restoration in the Fight Against Invasive Phragmites  
Jason Carlson, AES
4. A Science Agenda for Managing Non-native Phragmites australis Through Microbial Intervention  
Kurt Kowalski, U.S. Geological Survey Great Lakes Science Center
5. Root Fungi Associated with Native and Non-Native Phragmites in the Great Lakes  
Wesley Bickford, U.S. Geological Survey Great Lakes Science Center

### **Tools for Invasive Plant Removal**

Moderator: Steven Manning, Invasive Plant Control, Inc.

1. Invasive Plant Management with Herbicides  
Jamie Baumgardner, Dow AgroSciences
2. Using Adjuvants to Increase Coverage and Reduce Off-Target Movement with Aerial Applications  
Ryan Edwards, Winfield US
3. New Ultra-Low Pressure Herbicide Dispenser Reduces Drift and Increases Target Adhesion  
John Lampe, Green Shoots, LLC
4. Equipment for Invasive Plant Management; The Good, The Bad and the Ugly (Part 1)  
Steven Manning, Invasive Plant Control, Inc.
5. Equipment for Invasive Plant Management; The Good, The Bad and the Ugly (Part 2)  
Steven Manning, Invasive Plant Control, Inc.

### **TUESDAY AFTERNOON II: 3:30 – 5:00 PM**

#### **Emerging Threats, Assessment and Management of Aquatic Invasive Species**

Moderator: Angelique Dahlberg, St. Croix River Association

1. New and Emerging Aquatic Invasive Species in Michigan: Invertebrates  
William Keiper, Michigan Department of Environmental Quality
2. Do Silver Carp and Shad Species Share Resources in a Mesotrophic Reservoir?  
Dalton Lebeda, Murray State University
3. Evaluation of Aquatic Plant Communities Following a Whole Lake Fluridone Treatment to Control for Myriophyllum spicatum (Eurasian watermilfoil) - Michigan Case Studies  
Barb Gajewski, Many Waters, LLC
4. Early Detection and Rapid Response at a Watershed Scale: A Role for Local Government  
Eric Fieldseth, Minnehaha Creek Watershed District

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5. Population Demographics of Silver Carp in a Large Mesotrophic Reservoir  
Allison DeRose, Murray State University

### **Wood Utilization: Impacts of Invasives on Timber and Value**

Moderator: Mark Abrahamson, Minnesota Department of Agriculture

1. Wood Utilization Options for Urban Trees Infested by Invasive Species  
Brian Brashaw, USDA Forest Products Laboratory
2. Urban Wood Utilization in Michigan, Minnesota, Virginia and North Carolina  
Stephen Bratkovich, Dovetail Partners
3. Managing EAB's Silver Lining—Dead Trees Become Local Wood  
Twink Jan-McMahon – Wisconsin Urban Wood
4. A Burning Topic: Firewood and What Minnesota is Doing to Minimize the Spread  
Katy Longen, Minnesota Department of Agriculture

### **Responsive Management of Aquatic Plants – 1**

Moderator: Scott Provost, Wisconsin Department of Natural Resources

1. Linking the Efficacy and Side Effects of Long-Term Best Management Practices for Eurasian Watermilfoil Control in Wisconsin Lakes  
Ellen Kujawa, Wisconsin Department of Natural Resources
2. Incorporating Holistic Management into Successful Integrated Pest Management Implementation  
Scott Provost, Wisconsin Department of Natural Resources
3. The Cost of the Cure *and* the Disease: Understanding the Ecological Effects of an Invader Relative to Large-Scale Herbicide Treatments Used in its Control  
Alison Mikulyuk, Wisconsin Department of Natural Resources
4. Rapid Response Management of Eurasian Watermilfoil (*Myriophyllum spicatum*) in Staring Lake  
Joshua Maxwell, Riley-Purgatory-Bluff Creek Watershed District
5. Reed Canarygrass Risk Assessment by the Minnesota Noxious Weed Advisory Committee  
Michael Merriman, Minnesota Department of Agriculture

### **Threats on the Horizon**

Moderator: Angie Ambourn, Minnesota Department of Agriculture

1. Minnesota's Most Wanted: Invasive Insect Species on the Horizon  
Angie Ambourn, Minnesota Department of Agriculture's Plant Protection Division

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2. Addressing the Current and Potential Impact of the Invasive Jumping Worm (*Amyntas* sp.) in Wisconsin  
Brad Herrick, UW-Madison Arboretum
3. Potential Effects of the Invasive *Amyntas* Earthworm on Vegetation in Hardwood Forests  
Katie Laushman, University of Wisconsin-Madison Nelson Institute for Environmental Studies
4. Feral Swine in the Upper Mid-West  
John McComas, USDA APHIS Wildlife Services
5. Identification, Biology and Management of Burning Bush (*Euonymus alatus*) in Forest Ecosystems  
Anthony Summers, University of Wisconsin

### **Organisms in Trade**

Moderator: Stephanie Otts, National Sea Grant Law Center and the Mississippi-Alabama Sea Grant Legal Program at the University of Mississippi School of Law

1. Organisms in Trade Invasion Pathways: Lessons from the GL BIOTIC Symposium  
Tim Campbell, University of Wisconsin Extension
2. Harmonizing Great Lakes Regulated Species Lists: Progress Towards Reconciling a Regional Patchwork  
Lindsay Chadderton, The Nature Conservancy
3. Fish and Wildlife Service's Lacey Act Authorities and Cooperative Risk Management Activities  
Michael Hoff, Fish and Wildlife Service's Aquatic Invasive Species Program
4. GLDIATR: Protecting the Great Lakes from the Internet Trade of AIS  
Erika Jensen, Great Lakes Commission
5. Multi-State Efforts to Address the Threat of Invasive Species  
Stephanie Otts, University of Mississippi School of Law

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## **Wednesday, October 19, 2016**

### **WEDNESDAY MORNING I: 8:00 – 9:40 AM**

#### **Practical Approaches to Education and Outreach**

Moderator: Pat Conzemius, Wildlife Forever

1. Clean Drain Dry: Prevention Outreach Begins with Action!  
Pat Conzemius, Wildlife Forever

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2. Digging Deeper Into What Works in AIS Outreach  
Douglas Jensen, Great Lakes Sea Grant Network
3. Social Marketing and PlayCleanGo: Stop Invasive Species In Your Tracks  
Susan Burks, Minnesota Department of Natural Resources
4. Collaboration Among Partners: Aitkin County Buckthorn Control  
Brian Leitinger, Minnesota Department of Natural Resources
5. Documenting the Occurrence through Space and Time of Aquatic Non-Indigenous Fish, Mollusks, Algae, and Plants Threatening North America's Great Lakes  
Andrea Miller, The Morton Arboretum

### **New Developments in Biocontrol -1**

Moderator: Monika Chandler, Minnesota Department of Agriculture

1. USDA, APHIS, PPQ, Biological Control - Progress, Processes, Projects  
Ronald Weeks, USDA Animal Plant Health Service, Plant Protection and Quarantine
2. Marram Grass Neighbors Increase Susceptibility of Pitcher's Thistle to an Invasive Weevil  
Alyssa Hakes, Lawrence University
3. Testing the Effectiveness of a Native Fungus to Control Ailanthus in Ohio Forests  
Joanne Rebbbeck, U.S. Forest Service
4. Factors Impacting Biocontrol Agent Choice in Use of Invasive Host Plants  
Gina Quiram, University of Minnesota
5. Cold Tolerance of Biological Control Agents of the Brown Marmorated Stink Bug  
Erica Nystrom, University of Minnesota

### **Invasive Species Observations and Assessment**

Moderator: Maureen Ferry, Department of Natural Resources

1. Displaying Invasives with Interactive Maps  
Karl Hillstrom, Minnesota Department of Agriculture  
Monika Chandler, Minnesota Department of Agriculture
2. 5 Years of Science to Assess Prevention Efforts and Improve Aquatic Invasive Species Monitoring in Wisconsin  
Maureen Ferry, Department of Natural Resources
3. The Great Lakes Invasives Thematic Collections Network: >500,000 Museum Specimens and Growing  
Ken Cameron, University of Wisconsin-Madison, Wisconsin State Herbarium, and UW-Madison Natural History Museums Council

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4. EDDMapS, ISMTrack and Smartphone Apps for Invasive Species Management  
Chuck Barger, Center for Invasive Species and Ecosystem Health
5. Data Archive, Retrieval, and Use: Building the Rainbow Bridge  
Jason Granberg, Wisconsin Department of Natural Resources

### **Advances in Aquatic Plant Control**

Moderator: Michelle Nault, Wisconsin Department of Natural Resources

1. Carolina Fanwort (*Cabomba caroliniana*): Research Efforts Towards an Integrated Management Plan  
Blake Cahill, Institute of Great Lakes Research at Central Michigan University
2. Invasive Watermilfoil Response to Control Efforts in a Lake Superior Coastal Waterway  
Kevyn Juneau, University of Wisconsin-River Falls
3. Evaluation of Herbicide Treatments for Eurasian Watermilfoil Control Across Wisconsin Lakes  
Michelle Nault, Wisconsin Department of Natural Resources
4. Efficacy and Selectivity Studies for a New Aquatic Herbicide - PROCELLACOR™  
Michael Netherland, U.S. Army Engineer Research and Development Center
5. Going to the Mat: Biodegradable Benthic Mats for Invasive Aquatic Plant Control  
Andrew Tucker, The Nature Conservancy and the University of Notre Dame

### **Early Detection of New Invasive Fish and Invertebrates**

Moderator: Kylie Cattoor, Minnesota Department of Natural Resources

1. Sampling Design for Aquatic Invasive Species Early Detection in Great Lakes Ports  
Joel Hoffman, U.S. Environmental Protection Agency
2. Development of an AIS Monitoring Program on Lake Superior: Using Chequamegon Bay as a Case Study for Improving Detection Probabilities  
Jared Myers, USFWS Ashland Fish and Wildlife Conservation Office
3. The Art and Science of Finding Zebra Mussels (*Dreissena polymorpha*): A Discussion of In-Lake Early Detection Search Methods in Minnesota  
Kylie Cattoor, Minnesota Department of Natural Resources
4. Identification of Bighead Carp and Silver Carp Natal Environments and Detection of Lock and Dam 19 Passage in the Upper Mississippi River: Insights from Otolith Chemistry  
Brent Knights, USGS Upper Midwest Environmental Sciences Center
5. Documentation of Asian Carp Reproduction in the Upper Mississippi River  
James Larson, U.S. Geological Survey



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### **Emerging Forest Insect Pests**

Moderator: Brian Aukema, University of Minnesota

1. Are Minnesota's Pines Too Good for Mountain Pine Beetles?  
Brian Aukema, University of Minnesota
2. Barriers the Mountain Pine Beetle Must Overcome to Spread to the Midwest  
Kevin Chase, University of Minnesota
3. The Role of Climate Change in the Synchrony of Larch Casebearer and Eastern Larch  
Samuel Fahrner, University of Minnesota Twin Cities
4. Etiology of Thousand Cankers Disease in the Eastern USA  
Melanie Moore, USDA Forest Service
5. Using a Pest Risk Analysis Approach to Prepare for Mountain Pine Beetle  
David Nisbet, Invasive Species Centre

### **WEDNESDAY MORNING II: 10:00 – 11:40 AM**

#### **New Developments in Biocontrol -2**

Moderator: Monika Chandler, Minnesota Department of Agriculture

1. Biological Control of Invasive *Phragmites australis*: Right Around the Corner?  
Bernd Blossey, Department of Natural Resources
2. New Bio Control Agent Development in North America, a Wyoming Perspective  
Aaron Foster, Fremont County WY and North American Invasive Species Management Association
3. Taming a "Beautiful Killer": Wisconsin's Continuing Purple Loosestrife Biocontrol Program  
Brock Woods, University of Wisconsin and Department of Natural Resources
4. Potential Biological Control for Invasive Knotweeds in North America  
Jennifer Andreas, Washington State University Extension
5. Getting Release Permits for Weed Biocontrol Organisms: The TAG Process Revisited  
Bernd Blossey, Department of Natural Resources

#### **Environmental DNA as a Tool for Early Detection**

Moderator: Christy Meredith, Utah State University

1. Integrating DNA-Based Data into Bioassessments Improves Our Understanding of Species Distributions  
Christy Meredith, Utah State University

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2. Challenges and Progress in Making DNA-based AIS Early Detection Monitoring Operational  
Anett Trebitz, U.S. Environmental Protection Agency
3. Expanding Larval Fish DNA Metabarcoding to All the Great Lakes  
Erik Pilgrim, U.S. Environmental Protection Agency
4. A Comparison of Molecular Detection Methods for Bigheaded Carp DNA Copy Number Estimation In the Mississippi River  
Craig Jackson, UMESC
5. Correlating Sea Lamprey Densities with eDNA Copy Numbers  
Nicholas Schloesser, Great Lakes Fisheries Commission

### **Using Novel Technology to Manage Invasives**

Moderator: Chris May, The Nature Conservancy

1. Minnesota's Investment in Innovative Strategies for Preventing the Spread of AIS  
Don Hickman, Initiative Foundation
2. Drones for Land Managers  
Ben Yahr, Marek Landscaping LLC
3. The Clean Drain Dry App: A New Reality for Outreach  
Pat Conzemius, Wildlife Forever
4. Extension Using Mobile Technology, 3D printing & UAVs to Battle Invasive Species  
Angela Gupta, University of Minnesota
5. Using Mobile GIS to Make Invasive Species Detection and Treatment More Efficient  
Ryan Wnuk, Cardno; Lance Nelson, Cardno; Jameson Loesch, Cardno

### **Early Detection, Prioritization, and Response**

Moderator: Kathryn Kromroy, Minnesota Department of Agriculture

1. Pathways Survey for New and Emerging Invasive Insects and Diseases in Minnesota  
Kathryn Kromroy, Minnesota Department of Agriculture
2. Priority Areas for Invasive Species Management: A Geospatial Model for Wisconsin  
Jason Granberg, Wisconsin Department of Natural Resources
3. Rapid Response to AIS - From 1 to 100  
Bob Wakeman, Wisconsin Department of Natural Resources
4. Development of Electrical Control Methods For Zebra and Quagga Mussels  
Ashley Harmon, US Army Corps of Engineers

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5. European Marsh Thistle: An Aggressive Wetland Invader  
Emily Anderson, Wild Rivers Invasive Species Coalition and the Dickinson Conservation District

### **Minnesota Aquatic Invasive Species Research Center: Priorities and Future Direction**

Moderator: Becca Nash, Associate Director, Minnesota Aquatic Invasive Species Research Center

1. MAISRC's Research Approach: Emerging Issues and Critical Gaps  
Susan Galatowitsch, Minnesota Aquatic Invasive Species Research Center and the University of Minnesota
2. Control of Aquatic Invasive Animals in Minnesota  
Przemek Bajer, University of Minnesota
3. Research on Control of Aquatic Invasive Plants in Minnesota  
Daniel Larkin, Assistant Professor and Extension Specialist with the Minnesota Aquatic Invasive Species Research Center and the University of Minnesota
4. Understanding Pathways of AIS Spread for Prevention and Early Detection  
Nick Phelps, University of Minnesota College of Veterinary Medicine and the Minnesota Aquatic Invasive Species Research Center
5. Soliciting Public Feedback for an AIS Grants Program Using a Novel Survey Approach  
Shelly Thomsen, Wisconsin Department of Natural Resources

### **Oak Wilt, Deer, and Gypsy Moths**

Moderator: Matthew Russell, University of Minnesota, Department of Forest Resources

1. Engaging Multiple Stakeholders to Revise the WI DNR Oak Wilt Guidelines  
Linda Williams, Wisconsin Department of Natural Resources
2. Evaluating Girdle Herbicide Method to Control Below-Ground Spread of Oak Wilt  
Jed Meunier, Wisconsin Department of Natural Resources
3. White-tailed Deer in the Upper Midwest: Interactions Between Deer Density, Invasive Plants, and Lyme Disease  
Matthew Russell, University of Minnesota, Department of Forest Resources
4. White-tailed Deer: Indirect Effects on the Environment May Facilitate Forest Understory Invasion  
Autumn Sabo, University of Wisconsin-Madison
5. MDA Gypsy Moth (*Lymantria dispar*) Program Updates - Surveys & Treatments  
Natasha Northrop, Minnesota Department of Agriculture

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### **WEDNESDAY AFTERNOON: 1:00 – 2:40 PM**

#### **Fire As a Tool for Invasive Plant Management**

Moderator: Craig Maier, Tallgrass Prairie and Oak Savanna Fire Science Consortium

1. Prescribed Fire: Improving Our Understanding and Use of an Important, Imperfect Tool  
Craig Maier, Tallgrass Prairie and Oak Savanna Fire Science Consortium  
Jack McGowan-Stinski, Coordinator, Lake States Fire Science Consortium
2. Fort McCoy - 20 Years of Prescribed Fire and Its Effects on Invasive Species Management  
Dave Texley, Center for Environmental Management of Military Lands  
Nathan Tucker, Center for Environmental Management of Military Lands
3. Lessons Learned Controlling Woody Species in Prairies and Savannas in Southern WI State Natural Areas  
Nate Fayram, Wisconsin DNR  
Matt Zine, Wisconsin DNR
4. Frequent Fire Prevents Extinctions of Native Species, but Doesn't Exclude Invasive Species in Wisconsin Prairie Remnants  
Amy Alstad, University of Wisconsin-Madison
5. Panel Discussion  
Craig Maier, Tallgrass Prairie and Oak Savanna Fire Science Consortium

#### **Responsive Management of Aquatic Plants - 2**

Moderator: Marte Kitson, Minnesota Sea Grant, University of Minnesota – Duluth

1. Early Detection and Response to Prevent New Aquatic Invasive Plants from Establishing in Michigan  
Kile Kucher, Michigan Department of Natural Resources
2. The Great Winneconne Water Hyacinth Expedition  
Valerie Stabenow, Citizen Lake Monitoring Network
3. Potential Spread of *Hydrilla* (*Hydrilla verticillata*) to the Great Lakes Basin  
Kristen Hebebrand, University of Toledo
4. Occurrence and Distribution of Eurasian, Northern and Hybrid Watermilfoil in Lake Minnetonka and Christmas Lake: Genetic Analysis  
Eric Fieldseth, Minnehaha Creek Watershed District
5. *Glyceria maxima* in Wisconsin: Status and Control Strategy  
Brock Woods, University of Wisconsin and Department of Natural Resources

#### **Rapid Response and Eradication: Case Studies from Around the Great Lakes**

Moderator: Erika Jensen, Great Lakes Commission

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1. Attempted Eradication of Ambitious Architects: *Procambarus clarkii*, The Red Swamp Crayfish in three SE Wisconsin Ponds – Successes and Failures  
Heidi Bunk, WI Department of Natural Resources  
Scott Van Egeren, WI Department of Natural Resources
  
2. *Nymphoides peltata* Management in Six Wisconsin Ponds  
Heidi Bunk, WI Department of Natural Resources  
Audrey Greene, Walworth County (retired)  
Susan Graham, Brenda Nordin, and Michelle Nault, WI Department of Natural Resources
  
3. Demonstration Project to Eradicate *Hydrilla* in Tonawanda Creek section of the Erie Canal, NY  
Michael Greer\* and Richard Ruby, U.S. Army Corps of Engineers  
Michael Netherland, U.S. Army, Engineer Research and Development Center
  
4. Michigan European Frog-Bit Response  
Sue Tangora, Michigan Department of Natural Resources
  
5. Invasive aquatic plant control: IDNR's *Hydrilla* Eradication & Starry Stonewort battle  
Eric Fischer, Indiana Department of Natural Resources