

STUDENT RESEARCH SYMPOSIUM

November 14, 2026 | 8am - 4pm

~ Keynote Address: ~

Real World Science: What the Forest Teaches us About Research

Michael Tiller, Ph.D.

University of Wisconsin-Stevens Point



Michael Tiller is a professor of forest ecology at the University of Wisconsin–Stevens Point, where he teaches and conducts research in forest and fire ecology, fire effects, and forest management. Before entering academia, Michael spent 15 years with the California Department of Forestry and Fire Protection and two years with the Texas A&M Forest Service, experiences that continue to shape his applied approach to teaching and research.

Michael's research focuses on how forests respond to management, disturbance, and fire, including long-term studies in pine and oak ecosystems, prescribed fire, understory plant communities, and fire behavior. Michael also serves as faculty advisor to the UWSP Fire Crew and is increasingly integrating LiDAR, drones, and other emerging technologies into his research.

Feedback for Presenters

Please share your feedback and encouragement for each presenter by scanning this QR code!
Your input is valuable and appreciated.

Symposium Event Survey

Thank you so much for coming to Riveredge! Please take our general event survey to share your feedback, ideas, and favorite moments with our staff.

Welcome to Riveredge!

Schedule

8:00 am – 8:30 am	Registration & Breakfast (Visitor Center)
8:30 am – 9:40 am	Morning Poster Session (Visitor Center)
9:45 am – 10:30 am	Oral Presentations – Session 1 (Barn)
10:35 am – 11:20 am	Oral Presentations – Session 2 (Barn)
11:25 am – 12:10 pm	Oral Presentations – Session 3 (Barn)
12:10 pm – 12:40 pm	Lunch (Barn)
12:40 pm – 1:05 pm	Afternoon Poster Session (Visitor Center)
1:10 pm – 2:10 pm	Oral Presentations – Session 4 (Barn)
2:15 pm – 3:00 pm	Oral Presentations – Session 5 (Barn)
3:00 pm – 3:45 pm	Keynote Presentation & Q&A (Barn)
3:45 pm – 4:00 pm	Awards & Closing (Barn)

Please leave feedback throughout the day by scanning the QR codes on the front of this program! Your feedback helps support student presenters and sustains the continual improvement of this event.



UNIVERSITY OF WISCONSIN MILWAUKEE | School of Freshwater Sciences

Dennis Miller

GEI Consultants

Great Waters Group of the Sierra Club

Southeastern Wisconsin Trout Unlimited

Oral Presentation Times and Topics

Session I: 9:45 am – 10:30 am
Wildlife Ecology, Conservation, and Management

Integrating Museum Collections and Historical Genomics to Investigate the Extinct Merriam's Elk (*Cervus canadensis merriami*)
McKenzie Henkelman, UW-Milwaukee (graduate)

Using Acoustic Telemetry and Stable Isotopes to Understand Juvenile Lake Sturgeon Behavior and Ecology in the Milwaukee River Estuary
Emma Millsap and Katie Lowenstein, UW-Milwaukee (graduates)

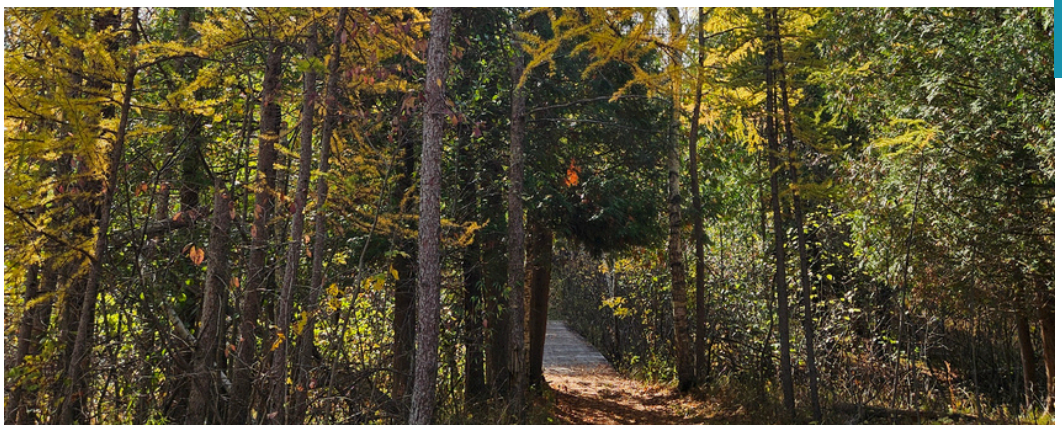
Effects of Replacing Corn Oil with Black Soldier Fly Oil on Growth, Nutritional Composition, and Temperature Stress Tolerance of Juvenile Walleye (*Sander vitreus*)
Alexander Gregory, UW-Milwaukee (graduate)

Session II: 10:35 am – 11:20 am
Animal Behavior, Communication, and Adaptation

Camouflage and Aposematism Do Not Simultaneously Lower Predation Risk in Eastern Gray Treefrogs
Angela Marie Edwards Mish, UW-Milwaukee (graduate)

Calling in the Anthropocene: Anuran Signal Transmission in Urban Environments
Isabella Wyatt, UW-Milwaukee (graduate)

Development of Prey-Capture Behaviors in a Web-Building Spider
Madison Rittinger, UW-Milwaukee (graduate)



Session III: 11:25 am – 12:10 pm
Behavioral Ecology, Human Geography, and Environmental Interactions

Male Genitalic Copulatory Courtship and Cryptic Female Choice in Yellow Dung Flies (*Scathophaga stercoraria*) (*Diptera: Scathophagidae*)
Hossein Asgari, UW-Milwaukee (graduate)

A Mixed-Methods Analysis of Gray Wolf (*Canis lupus*)–Livestock Conflict in Wisconsin
Natalie Hannemann (graduate) & Alisun Thomas (undergraduate), UW-Stevens Point

Incorporating Temporal and Spatial Information into the Measurement of Neighborhood Structural Vulnerability to Explain Obesity Prevalence in Three Rust Belt Metropolitan Areas
Shamsun Nahar, UW-Milwaukee (graduate)

Session IV: 1:10 pm – 2:10 pm
Environmental Science, Pollution, and Ecosystem Health

Soil Health Differences (Colorimetric Enzyme Activity Assay) in Fields Amended with Biosolids in Southeastern Wisconsin
Landon Pahmeier, Wisconsin Lutheran College (undergraduate)

Detection of Neonicotinoid Pesticides in Environmental Water Matrices Using Machine Learning-Assisted Surface-Enhanced Raman Spectroscopy
Alex Taylor, UW-Madison (undergraduate)

Influence of Light Availability on CO_2 Uptake and Productivity of Lake Michigan Diatoms
Eliza Volz, UW-Milwaukee (undergraduate)

Methodology to Predict Respiratory Emergency Department Visits Due to Wildfire-Induced Smoke at Froedtert Medical Center in Milwaukee, Wisconsin
Cameron Lee & Kali Quade, Medical College of Wisconsin (undergraduate)

Session V: 2:15 pm – 3:00 pm
Behavioral Ecology, Human Geography, and Environmental Interactions

Habitat Hunters: Using Suitability Models to Locate Pristine *Pristimantis euphronides* Habitat
Kaitlyn Lund, UW-Milwaukee (undergraduate)

Step Off: Territorial Calling Behavior in the Tropical Grenada Frog *(Pristimantis euphronides)*
Leila Goodrum, UW-Milwaukee (undergraduate)

Do White-Tailed Deer (*Odocoileus virginianus*) Maintain the Same Temporal Activity Patterns Throughout the Year?
Jonah David Linse, Concordia University of Wisconsin (undergraduate)

Poster Sessions (all posters on display in Visitor Center)
8:30 am – 9:40 am, 12:40 pm – 1:05 pm

Investigating the Role of hgcAB and S-adenosylmethionine in *Pseudodesulfovibrio mercurii* ND132 Mercury Tolerance
Sarkis Buchaklian, University of Wisconsin–Milwaukee (undergraduate)

Land Use and River Residence Time Alter Microbial Community Abundances in the Milwaukee River Estuary
Isaiah J. Chang, University of Wisconsin–Milwaukee (undergraduate)

Improving Early Feeding Success in Lake Sturgeon (*Acipenser fulvescens*)
Elyse Olysav, University of Wisconsin–Milwaukee (undergraduate)

Smallmouth Bass Diet Analysis in a Warmwater Central Wisconsin Stream
Colin Staley, University of Wisconsin - Stevens Point (undergraduate)

Behaviors in Captive and Group-housed Penguins at the Milwaukee County Zoo
Brianna Nicole Blehovde, Carroll University (undergraduate)

Who Runs the World? Evaluating Social Dynamics of Captive (*Giraffa camelopardalis)* at the Milwaukee County Zoo
Anna Gregory, Bailey Harlan, & Madi Dunski, Carroll University (undergraduates)

Do Preferences of Female Gray Treefrogs Vary Across the Breeding Season?
Chris Graham, University of Wisconsin–Milwaukee (undergraduate)

Do Eastern Gray Treefrogs (*Hyla versicolor*) Possess Individually Distinct Advertisement Calls?
Eli Moe, University of Wisconsin–Milwaukee (undergraduate)

Are Early Frogs Different? Survey of Gray Treefrog Call Variation Across the Breeding Season
Eduardo Ortiz-Lopez, University of Wisconsin–Milwaukee (undergraduate)

Female Choosiness Maintains Call Variation in Male Eastern Gray Treefrogs (*Hyla versicolor*)
Violet Diderrich, University of Wisconsin–Milwaukee (undergraduate)

What's the Drill?: an Analysis on the Post-breeding Season Activity of Red-Headed Woodpeckers
Evan Doucette, University of Wisconsin–Milwaukee (undergraduate)

Was the Yellowstone Wolf Reintroduction Successful in the Eyes of Researchers and Local Outfitters?
Selah McAlpine, University of Wisconsin–Whitewater (undergraduate)

Effects of Pasture Slope and Llama Latrine Behavior on Soil Nutrient Distribution and Soil Health in Northeast Wisconsin
Micah Garland, Wisconsin Lutheran College (undergraduate)

Use of Leaf and Phloem Tissue Spectral Reflectance to Estimate *Fraxinus spp.* Health Conditions
Deagan Wiebel & Lydia Kunkel, University of Wisconsin - Stevens Point (undergraduates)

Quantifying Physiological Stress Indicators in Red Mangroves (*Rhizophora mangle*) Across Different Anthropogenically Polluted Coastal Areas in Grenada
Haylee Jones, University of Wisconsin–Milwaukee (undergraduate)

Transcriptomic Response of Bull Kelp Gametophytes from the Salish Sea in Response to a Simulated Heatwave
Jackson Powell, University of Wisconsin–Milwaukee (undergraduate)

Who's That Organism? a Comparison Between iNaturalist User and Species Diversity in Urbanized Versus Natural Areas
Kaitlyn Lund, University of Wisconsin–Milwaukee (undergraduate)

Attitudes Towards Electric Bicycles on the Green Circle Trail in Stevens Point, WI
Levi Lohnes, University of Wisconsin - Stevens Point (undergraduate)

'Measure Twice, Cut Once' Not 'Move Fast and Break Things': Contested Meanings of 'Rural Character' in Data Center Disputes
Sydney Peterson, University of Wisconsin–Milwaukee (undergraduate)

Detection of Neonicotinoid Pesticides in Environmental Water Matrices Using Machine Learning-Assisted Surface-enhanced Raman Spectroscopy
Alex Taylor, University of Wisconsin–Madison (undergraduate)

Analysis of 6PPD and 6PPDQ UV Degradation Through Optical Techniques
Miles S. Carlson, University of Wisconsin–Milwaukee (graduate)

Utilizing Acoustic Telemetry to Identify Juvenile Lake Sturgeon Movement Patterns and Habitat Hot Spots
Emma Millsap, University of Wisconsin–Milwaukee (graduate)

Unforeseen Consequences: the Link Between Invasive Quagga Mussels and Methylmercury in the Water of Lake Michigan
Emily Anne Richter, University of Wisconsin–Milwaukee (graduate)

Using Stable Isotopes to Characterize Food Web Structure in Milwaukee River Estuary with Emphasis on Juvenile Lake Sturgeon
Katie Lowenstein, University of Wisconsin–Milwaukee (graduate)

Isolation of Cell Lines from Lake Sturgeon for Conservation Genetics and Biobanking
Ari Maurer, University of Wisconsin–Madison (graduate)

Mussels & Mercury: Exploring the Impact of Lake Michigan's Invasive Species on Mercury Bioaccumulation
Nicole Price, University of Wisconsin–Milwaukee (graduate)

AI at Cooperative Extension: How a Public Organization Focused on Resource Sustainability and Dissemination of Reliable Information Is Adapting in the AI Era
Maggie Afshar, University of Wisconsin–Madison (graduate)

Assessing Education Professionals' Perceptions and Implementation of Recreation-Related Outdoor Ethics in Wisconsin School Forest Education
Rachel Marten, University of Wisconsin - Stevens Point (graduate)

Opportunities at Riveredge



Habitat Healers conservation volunteer team (year-round)

Meeting weekly throughout the year, this is a committed and crucial support team for the ecosystems at Riveredge. From invasive species removal to native seed collecting, the Healers create a continual positive impact on the woodlands, wetlands, and prairies of Riveredge. Apply online at riveredgenaturecenter.org/volunteer



Bird Banding volunteer team (April through October)

After completing training, work under the direction of master banders to help researchers band birds and record data that contributes to regional and national avian research findings. Contact Jana Gedymin to inquire: jgedymin@riveredge.us



Community Conservation Days, River Clean-Ups, Water Action Volunteer Trainings, and Garlic Mustard Pull-a-Thons

Watch the Riveredge event calendar for opportunities to participate in one-day conservation events! For more information, email Abby Kroll at akroll@riveredge.us

Internships and Field Study

Watch our website for summer internship opportunities with our Return the Sturgeon Project, Ornithology, and Environmental Education. Find internship details as they are updated at riveredgenaturecenter.org/internships

We are also happy to accomodate individual field study projects on-site at Riveredge depending on capacity. Please contact Jana Gedymin to pitch your idea at jgedymin@riveredge.us





Very Special Thanks to Our Symposium Judges

Dennis Miller
Ascension, Aurora

Kim Pemble
Focus Outcomes Consulting, LLC

Medhavi Ambardar
Lake Michigan Bird Observatory

Norman Lasca
University of Wisconsin-Milwaukee, Geosciences

Stephanie Beilke
Great Lakes Audubon

Jon Gedymin
Wisconsin Mediation, Toastmasters

David Anderson
Heyday Harvest

Lora Loke
Hawthorne Glen

Ellie Blank
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Wren Woodburn
Milwaukee County Zoo

Toby Seegert
Zoological Society of Milwaukee

Mark Repenshek
Ascension

Suzanne Kaehler
Cedar Grove Ornithological Research Station

Aaron Thiel
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