



A PARTNERSHIP OF PUBLIC AND PRIVATE ORGANIZATIONS, LANDOWNERS, AND INDIVIDUALS  
WORKING TOGETHER TO PRESERVE, ENHANCE, AND RESTORE CRITICAL NATURAL AREAS IN  
THE OAK OPENINGS REGION OF NORTHWEST OHIO AND SOUTHEAST MICHIGAN

## Oak Openings Green Ribbon Initiative 2022 Science Summit

Ward Pavilion at Wildwood Preserve Metropark  
November 10, 2022

### GREEN RIBBON INITIATIVE SCIENCE & RESEARCH IN THE OAK OPENINGS

2:15 – 2:30 p.m.	<b>Check-in</b> <i>Brittani Furlong, Green Ribbon Partnership Specialist, The Nature Conservancy in Ohio</i>
2:30 – 2:35 p.m.	<b>Welcome and Introduction</b> <i>Erika Buri, Director of The Olander Park System, GRI Steering Committee Chair</i>
2:35 – 3:05 p.m.	<b>Oak Wilt: Challenges and Opportunities</b> <i>Jay Wright, Director of Conservation Science at Metroparks Toledo</i> Oak wilt is a fungal disease that can kill mature trees within a year following infection. Although the disease has been present in the Oak Openings region for over 20 years, it has spread rapidly in recent years, creating new challenges for land managers trying to conserve the diverse native communities dependent on oaks. In addition to the many management challenges of oak wilt, it also has presented several potential research opportunities. In particular, the creation of different-sized forest canopy gaps by the removal of dead oak wilt trees could lead to the enhancement of oak sapling recruitment, the lack of which is another persistent threat to oak-dominated ecosystems. These questions, and the future of oak wilt management at Metroparks Toledo, will be discussed.
3:05 – 3:35 p.m.	<b>Early Detection Rapid Response of Invasive Plants in the Oak Openings Region</b> <i>Peter Blank, Northwest Ohio Restoration Manager at The Nature Conservancy in Ohio</i> The Oak Openings Region contains a unique combination of geology and hydrology that have created globally rare natural communities. Non-native invasive plants threaten these rare ecosystems and the native species they support. In 2021, The Nature Conservancy, in partnership with Metroparks Toledo, received a U.S. Forest Service grant to monitor and control 15 priority invasive species using an Early Detection Rapid Response approach. To date, monitoring has been conducted on 639 acres and data collected are being used to develop predictive models of invasive plant species throughout the Oak Openings Region. In addition, invasive plant control treatments have been applied to 48 acres of high-quality habitat. This presentation will summarize these monitoring and control efforts and present preliminary models of the occurrence of priority invasive plants in the region.
3:35 – 4:05 p.m.	<b>Connecting Students to Our Waterways – With Science!</b> <i>Sara Guiher, Water Quality Planner at Toledo Metropolitan Area Council of Governments</i> Since 1989, TMACOG’s Student Watershed Watch (SWW) has provided water quality testing supplies so that classes in grades 5-12 can learn more about Oak Openings waterways through parameters such as pH, phosphate, nitrate, and aquatic macroinvertebrate communities. Many students also attend the SWW Summit to present data to their peers, and some build upon sampling with further research. TMACOG staff have recently joined with other volunteer monitoring programs throughout the Lake Erie basin in the US and Canada to increase the quality of volunteer-collected data. This long-standing environmental science program has an accomplished history and exciting future.
4:05 – 4:35 p.m.	<b>Using Amphibians to Inform Wetland Conservation Under Anthropogenic Development Conditions in Northwest Ohio</b> <i>Brian Kron, Root Lab Biological Sciences PhD Student at Bowling Green State University</i> As loss of habitat and global climate change have led to decline in biodiversity, amphibians have been called the most threatened vertebrate taxa on the planet today. By studying the relationship between amphibians and habitat, we can



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	collect valuable data on increasing biodiversity and habitat restoration. We have used Anuran calling surveys and spatial/temporal habitat variables to identify trends in amphibian presence in the Northwest Ohio area, finding a decline in diversity and ecosystem functionality in areas associated with urbanization.
4:35 – 5:05 p.m.	<b>Status and Assessment Updates for Threatened Turtles in Northwest Ohio</b> <i>Matt Cross, Conservation Biologist, at The Toledo Zoo &amp; Aquarium</i> The Toledo Zoo has been surveying local turtles in Northwest Ohio since 2005, with a focus on Species of Greatest Conservation need, like Blanding’s, Spotted, and Box Turtles. Our long-term, multi-technique approach to turtle conservation has produced the largest turtle dataset in the state of Ohio. Here we summarize results from some of our local turtle conservation initiatives and discuss the next steps.
5:05 – 5:15 p.m.	<b>Q&amp;A for all Speakers &amp; Transition to Poster &amp; Networking Session</b> <i>Karen Menard, Research and Monitoring Supervisor at Metroparks Toledo, GRI Science Sub-committee Chair</i>

**POSTER & NETWORKING SESSION**

*A casual BYOB happy hour to network with regional partners and to view scientific posters describing research, conservation, and stewardship in the Oak Openings Region. Hors d'oeuvres provided by the Green Ribbon Initiative.  
Note: Alcohol may only be consumed INSIDE of the Ward Pavilion.*

5:15 – 5:55 p.m.	<p><b>Poster Session</b></p> <p>Effects of Variable Canopy Cover on Floral Visitation in the Oak Openings of Northwest Ohio <i>Toby Shaya, M.S. Student, Bowling Green State University</i></p> <p>The Lowest Terraces of The Maumee River: Perspectives from Side Cut Metropark <i>Thomas J. Zych, M.S., R.P.A., Associate Lecturer in Anthropology, Archaeologist, University of Toledo</i> <i>Timothy G. Fisher Ph.D., Professor of Geology, University of Toledo</i></p> <p>Metroparks Toledo Rare Plant Monitoring <i>Karen Menard and Josh Brenwell, Metroparks Toledo</i></p> <p>Improving Water Quality in the Oak Openings by re-investing in City of Toledo Green Infrastructure <i>Alexa Vogel, Environmental Specialist, City of Toledo</i></p> <p><b>Partner Tables</b></p> <ul style="list-style-type: none"> <li>• Green Ribbon Initiative</li> <li>• The Nature Conservancy</li> <li>• Metroparks Toledo</li> <li>• Oak Openings Region Conservancy</li> <li>• University of Toledo: Department of Environmental Sciences &amp; Students for Environmental Advocacy</li> <li>• Ohio Department of Natural Resources – Division of Natural Areas and Preserves</li> <li>• Wild Ones Oak Openings</li> <li>• Lucas Soil and Water Conservation District</li> <li>• Lake Erie Advocates</li> </ul>
5:55 – 6:00 p.m.	<b>Conclusion of Science Summit – Thank you!</b> <i>Brittani Furlong, Green Ribbon Partnership Specialist, Green Ribbon Initiative – The Nature Conservancy in Ohio</i>