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# ANNUAL REPORT 2020

## Green Ribbon Initiative

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# OUR MISSION

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To preserve, enhance, and restore critical natural areas of the globally unique Oak Openings Region and to inform residents about ways this region is important

## **Organizational Structure**

Green Ribbon Initiative (GRI) is voluntary partnership of governmental agencies, non-governmental organizations, businesses, and individuals that accept the initiative's mission and agree to help achieve partnership goals. Four subcommittees (Science, Stewardship, Protection, and Education) and various working groups collaborate to achieve the goals and objectives of GRI as stated in the Oak Openings Conservation Plan.

## Message from the GRI Chair

In this field, we expect the unexpected, and generally we try to prepare the best we can for them, but this past year came straight out of left field. It left all of us scrambling and adapting to a constantly changing crisis. Again, as practitioners, we regularly practice flexibility and have pride in our ability to make it up as we (or Mother Nature) go along. We were not ready for this. No one was ready for this.

But you know what? We pulled it off.

Despite restrictions on our ability to reach our community, and do our work, the following annual report is a testament to how much we did accomplish. To how hard we worked to make sure we fulfilled our missions as individual organizations and in the Oak Opening Region as a whole. It's a testament to our dedication to this work and to all the communities we serve. If this year proved anything, it showed that we are a group of people who will do our best to get it done no matter the challenges.

Thank you to all of you. This work is so important to our region. Your passion and energy and integrity and grit made it happen despite the obstacles we faced. Congratulations! We made it through, from here on out, it's gravy.

In gratitude and admiration,

**Erika K Buri**

Executive Director, The Olander Park System

## GRI PARTNER ORGANIZATIONS

### Committee and/or Grant Participation

Bedford Township Parks  
Bowling Green State University  
Bowling Green Parks  
Huron Clinton Metroparks  
Lucas County Soil and Water  
Oak Openings Region Conservancy  
Ohio Department of Natural Resources  
Metroparks Toledo  
Michigan Department of Natural  
Resources  
Southeast Michigan Land Conservancy  
The Nature Conservancy  
The Olander Park System  
The Toledo Zoo  
University of Toledo  
Wayne County Parks  
WildOnes Oak Openings Chapter  
Wood County Parks

### Participating Community Groups

Arkona Township  
City of Sylvania  
General Motors  
Monroe County Conservation District  
The Village of Ottawa Hills  
Toledo Memorial Park  
Tomahawk Archers Club  
TMACOG  
Partners for Clean Streams  
Private Landowners  
River Raisin Institute  
Village of Ottawa Hills  
Area Educators





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Protecting and preserving the unique natural communities of the Oak Openings is a monumental task. Partners of the Green Ribbon Initiative recognize that the most powerful tool we have to make this dream reality is a willingness to collaborate. **In 2020 new, diverse partnerships were forged that will help to achieve our lofty goals.** Being a partner of the Green Ribbon Initiative means having a shared interest in protecting and/or restoring the biodiversity of the plants, animals, and natural communities of the Oak Openings Region. We work together and share resources where possible.



## New Partnership



### City of Sylvania

City of Sylvania has partnered with GRI through a contract with the Oak Openings Interagency Restoration Team (IRT) to restore Harroun park into a healthy floodplain forest. The work that the IRT will do removing invasive species will not only benefit wildlife, but will change for the better the experience of Sylvania citizens that use the park. Restoring the ecological integrity of the city park is not the only update in 2020 for the City of Sylvania. The city has adopted a newly designed logo that features an oak leaf. The City Council wanted a logo that represent the Oak Openings Region. Dani Fuller of Fuller Art House crafted the new logo based off of a bur oak leaf, commemorating the 370-year-old Bur oak that stands outside of the municipal building.

### Toledo Memorial Park

In their effort to beautify the 380-acre cemetery and park, Toledo Memorial Park (TMP) enthusiastically joined GRI this past fall and is converting mowed lawn into beneficial habitat for wildlife. TMP applied for and received 1.7 acres of native Oak Openings ecotype seeds through GRI's Native Plant Materials Exchange Program.







## Michigan United Conservation Clubs (MUCC)

MUCC On-the-Ground is partnering with GRI in southeast Michigan to connect volunteers with meaningful opportunities. MUCC strives to unite citizens to protect and enhance Michigan's natural resources and outdoor heritage. Their membership consists largely of hunters, anglers, and trappers. This past summer, volunteers planted hundreds of wetland plants as part of a larger effort funded by The U.S. Fish and Wildlife Service under the Great Lakes Fish and Wildlife Restoration Act to restore habitat for the Blazing Star Borer Moth.

## Monroe Conservation District

The statewide Michigan Agriculture Environmental Assurance Program (MAEAP) "Forest, Wetland, Habitat (FWH)" program helps Michigan landowners better understand, manage, protect, and use their natural lands. MAEAP technicians are working with GRI to assist landowners in southeast Michigan sustainably manage their property. Registry members Tomahawk Archers Club, Bedford Township's Ansted Park, and other private landowners are MEAP-certified for management practices they implement. Many of our Michigan registry members qualify for this program. To learn more contact [ashlee.decker@tnc.org](mailto:ashlee.decker@tnc.org).





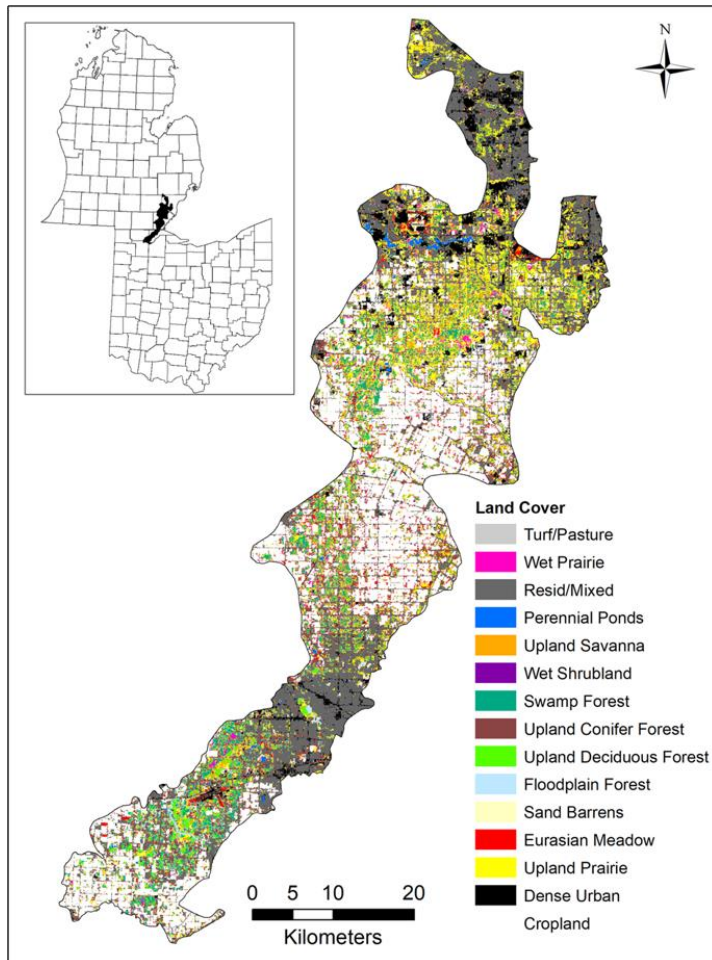


Permanently protecting important land in the Oak Openings Region is one of the most powerful actions we can take to ensure that we preserve what's left of our natural heritage. The partnership is a platform for the coordinated identification, prioritization, and implementation of land protection in the Oak Openings Region and has a 100-year goal to protect 8.3% of the landscape. **This year partners collectively acquired 526 acres of land and Bowling Green State University released a report assessing the long-term effects of our conservation efforts.**



## A Decade of Change

Published in the June 2020 edition of Environmental Management, "Examining Land Use Changes to Evaluate the Effects of Land Management in a Complex, Dynamic Landscape",



by Amanda Martin and Dr. Karen Root from Bowling Green State University, assesses the long-term effects of conservation action in the Oak Openings. The researchers used satellite imagery to examine vegetation patterns for forest cover, grasslands, and other land-uses and created an up-to-date landcover map (pictured on left). Currently, natural land covers 33% of the landscape, with 10% permanently protected. Martin and Root then compared these results to a 2006 landcover map to assess the effects of decades of making strategic acquisitions and managing the landscape in the Oak Openings. Although human-modified lands in Ohio increased from 73.3% to 76.6%, early successional habitats (wet prairie and upland prairie) have also increased from 3%

to 7%. This indicates successful results of the GRI efforts to promote ecological conservation through restoration and enhancement of critical natural areas. This new map highlights critical features such as connectivity and habitat patches and can be used by GRI partners to identify priorities for future acquisition and targets for management activities.

## 2020 Oak Openings Acquisitions

- Ohio Department of Natural Resources- Forestry purchased a **31-acre** tract with H2Ohio funding
- The Nature Conservancy added **11.4 acres** to the Kitty Todd Preserve in Swanton, Ohio.
- Metroparks Toledo acquired a total of **354 acres** in the Oak Openings Region
- City of Bowling Green and Black Swamp Conservancy partnered to secure a Clean Ohio Greenspace grant to add **20.4 acre** to Wintergarden/St. John's Nature Preserve.
- Black Swamp Conservancy partnered with Henry-Wood Sportsmans Alliance to purchase **99 acres** of land in Henry County along the Maumee River. They plan to restore prairie in 2021. BSC also purchased **21 acres** of prairie at their headquarters in Pemberville. Both BSC acquisitions were with Clean Ohio Funds.





# STEWARDSHIP

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The Green Ribbon Initiative Stewardship Subcommittee allows land managers to collaborate on restoring natural habitats through the removal of invasive species, application of prescribed fire, and restoration of hydrology. By adopting shared goals and developing best management practices, managers put their efforts into broader context and create strategic, efficient management across the region. **This year stewardship teams accomplished impressive on-the-ground numbers with the help of thousands of volunteer hours.**

*Subcommittee Chair: LaRae Sprow, Metroparks Toledo*

*Native Plant Working Group Chair: Jenella Hodel, Metroparks Toledo*

*Cooperative Weed Management Area Working Group: Brian Yahn, The Nature Conservancy*



## On-the-Ground Stewardship

- 226 acres fire
- 791 acres mowed
- 2,434 acres of invasive species treatment
- 140 acres planted with native vegetation
- 125 acres of canopy removal to restore savanna
- 2000 acres of habitat monitoring
- 5028+ Volunteer Hours



## Helping Hands

Partners of the Green Ribbon Initiative want to express their sincerest gratitude for the many volunteers that take pride in the Oak Openings and contribute to improving our beloved landscape. Volunteers contribute to stewardship, monitoring, and outreach with many of our partner organizations. Two volunteer opportunities unique to GRI include:

**Adopt A Natural Area (AANA)-** The AANA program provides opportunities for individuals, community groups, schools, or corporations to take an active part in the stewardship of local natural areas. Enrolled volunteers are provided with training by GRI and return to 'their' site several times a year, forming a relationship with their adopted tract of land. There are currently a total of 10 adopted sites covering 102 acres of critical natural areas in the Oak Openings Region. This year, volunteers committed 150 hours to restoring these important places.

**Internship program-** Each year Green Ribbon Initiative offers internships to students from local universities. This year four interns spent 400 hours traversing hundreds of acres of the Oak Openings to monitor habitat quality.



## Oak Openings Cooperative Weed Management Area

Oak Openings CWMA is a coordinated effort to control priority invasive species in the Oak Openings Region. With funding from the USFS GLRI, the CWMA coordinator led efforts to:

- Survey and map priority invasive species on **2,000 acres** of conservation lands in the region using the Oak Openings Rapid Assessment Method (OORAM)
- Trained volunteers and landowners to identify and record invasive species
- Assess and create Best Management Practices (BMPs) for 10 priority invasive species.

Results of this year's work have provided land managers with maps of priority invasive species as well as 10 new quick reference BMPs for select invasive species ultimately, resulting in the enhanced ability to conduct rapid responses and subsequently improve habitat quality.

### What is OORAM?



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The Oak Openings Rapid Assessment Method (OORAM, protocol attached) was developed by the GRI Science Subcommittee to provide consistent means of assessing changes in habitat quality out the landscape scale and across ownerships and of measuring site-level changes resulting from restoration activities. Evaluation of the size and extent of invasive species populations are a significant component of this method.

## Native Plant Working



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### Species of Greatest Conservation Concern Research Summary

- Verified populations of *Filipendula rubra* and attempted to propagate
- Tested propagation methods and documented known locations of *Lithospermum carolinense*
- Collected seed and researching DNA extraction of *Coreopsis lanceolata*

### Highlights

- The Blue Week plant sale was modified to online sale with drive-through pickup
  - o 987 plants were sold
- Tomahawk Archers Club received seed from the GRI Native Plant Materials Exchange Program to re-seed a disturbed area





# EDUCATION AND OUTREACH

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The goal of the Education and Outreach subcommittee is to promote regional identity through programming, place-making efforts, story-telling, media and marketing to advance GRI initiatives in the Oak Openings Region. **Although 2020 was a difficult year for programming because of statewide gathering restrictions, GRI partners saw the challenge as an opportunity to innovate the ways we reach people.**

*Subcommittee Chair: Ashlee Decker, The Nature Conservancy*

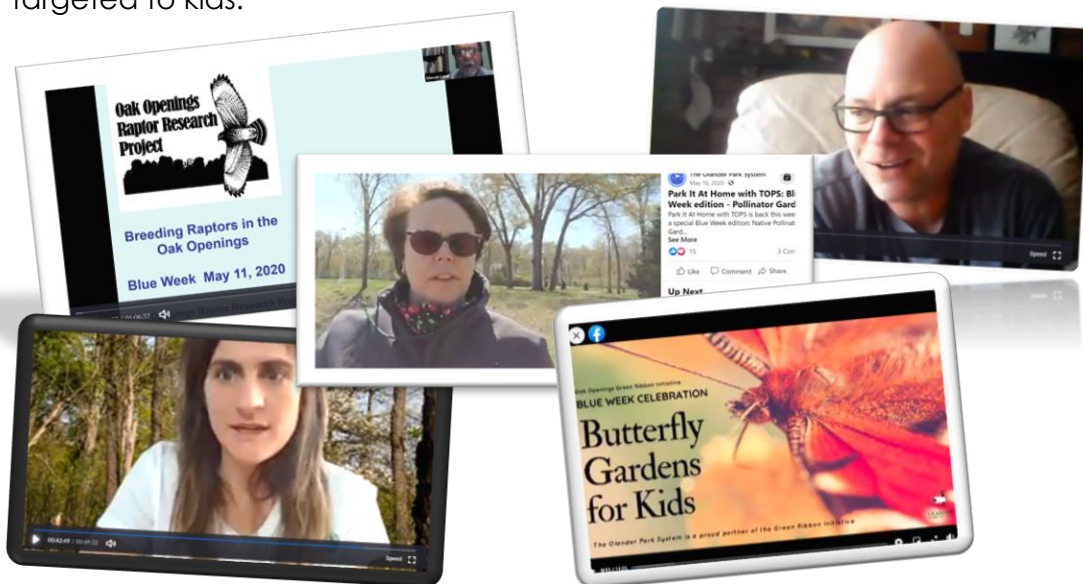


## Innovative Programming

Much of the planned programming this year came to a halt when COVID-19 hit. Yet, partners were still able to provide programs that let people escape for a short time into the wonders of nature from the safety of their homes. Toledo Metroparks guided us through scavenger hunts, creating backyard birdfeeders, and tree identification videos. Wood County Parks gave us Nature Bingo, Backyard Naturalist videos, and virtual tours through the woods. The Olander Park System provided fun activities for kids like a virtual egg hunt. Huron Clinton Metroparks offered live virtual programming and pre-recorded programs for classrooms, and a hands-on travelling truck of materials to enhance curriculum.

## Oak Openings Region Blue Week

Each May, partners that sit on the GRI Education and Outreach subcommittee assemble a week of programs to showcase the natural wonders of the Oak Openings. This event is named for the variety of blue plants and animals that reveal themselves each spring. Blue Week 2020 saw some last-minute changes, but all in all, it was still a success. Each evening during the week featured a virtual presentation to accommodate working schedules of the adults in the house. Since kids were attending school from home during this time, each morning featured a virtual event targeted to kids.



## Blue Week 2020 Highlights

22 events We experimented with live video, pre-recorded video, and Power Point photo presentations.

Virtual programming allowed for a 12% Increase in participation from outside of the Oak Openings

First on-line plant sale

11 GRI partners participated in hosting events including: The Nature Conservancy, Metroparks Toledo, WildOnes, Bowling Green State University, Olander Park, Wood County Parks, Toledo Naturalist Association, Oak Openings Region Conservancy, Black Swamp Conservancy, Nature's Nursery, and Bedford Highschool.



## Awards



### Conservation Partner

Patrick Hogan, Tomahawk Archers Club

Patrick started his journey with the Green Ribbon Initiative as a landowner, but today we proudly consider him a conservation partner because of the work he does in the region and collaborative nature. Patrick educates and encourages the membership of Tomahawk Archers club to participate in restoration and works community wide to share the same message. He has been instrumental in connecting the conservation community with the recreational sporting community.

He serves on the Board of Directors for Michigan United Conservation Club and helps organize volunteer days with GRI.

### Landowner of the Year

Andrew and Rebecca Britton

Andrew and Rebecca Britton transformed 73-acres of former farmland into a beautiful nature preserve setting. Over the past two decades, they planted over 30,000 native trees and a variety native grasses, shrubs, and wildflowers. The wildlife is returning, and they use this property to teach their grandchildren about the environment



### Outstanding Volunteers

Randy and Chris Haar

Randy and Chris Haar volunteer hundreds of hours a year with many regional conservation groups including Metroparks Toledo, Ohio Natural Areas and Preserve Association (ONAPA), Ohio Conservation Volunteer Network (OCVN), and Wood Country Park Services. Randy and Chris participate in the Green Ribbon Initiative's Adopt-A-Natural-Area (AANA) program. Since their involvement new populations of two state-listed plant species have been found at their site.





A photograph showing two individuals in a large, open field of tall green grass. One person, wearing an orange jumpsuit and a face mask, is operating a yellow and black SmartCart. The other person, wearing a plaid shirt and a cap, is standing next to the cart. The background features a line of trees under a clear blue sky.

# SCIENCE

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Land Managers, local researchers, and private industry members sit on the Science subcommittee and work to share new information and insights about species and systems in the Oak Openings so that land managers may use resources most efficiently. **In 2020, the Science Subcommittee updated Priority Conservation Areas (PCA), determined Key Ecological Attributes to measure the health of our natural communities, and hosted the third annual Oak Openings Science Summit.**

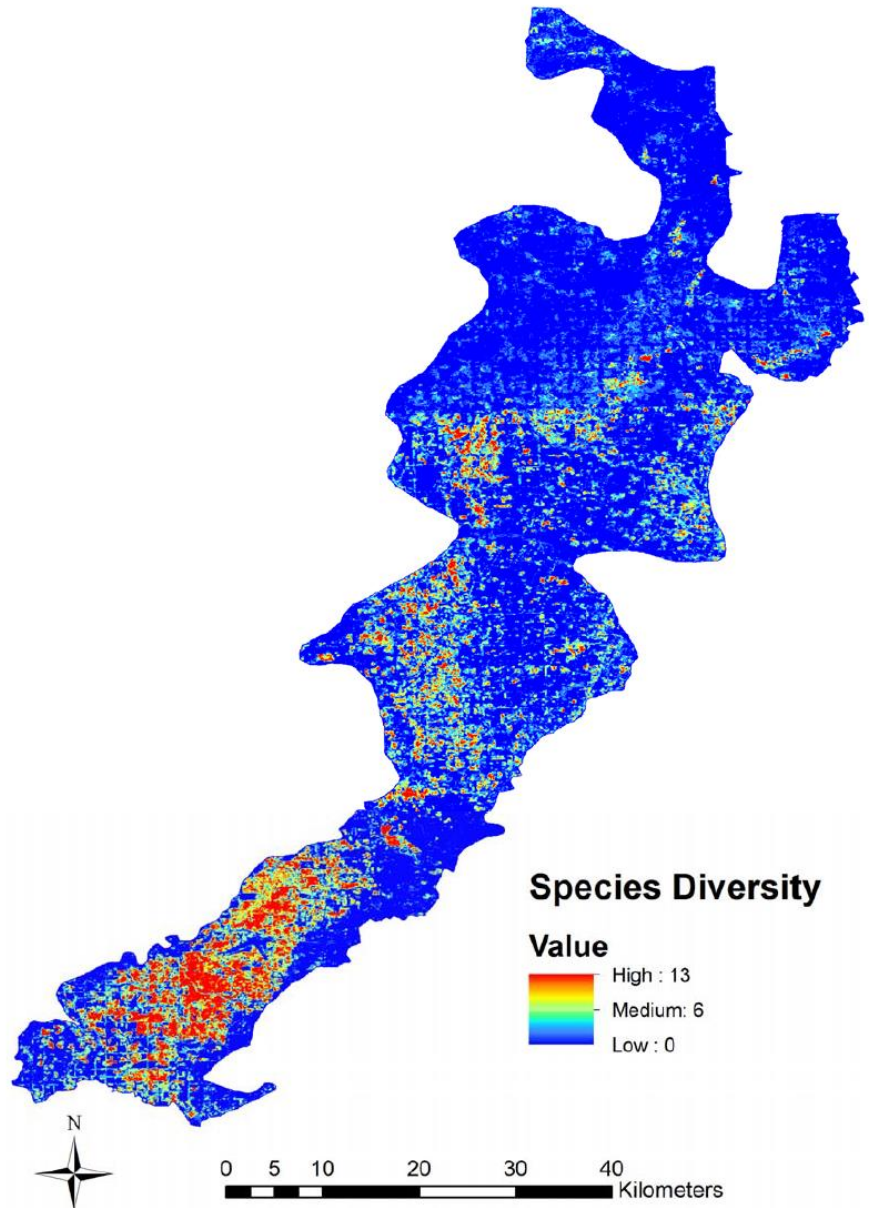
*Subcommittee Chair: Dr. Rachel Kapplar, Bowling Green State University*



## CONSERVATION PLANNING

The Science subcommittee used a new habitat suitability model by BGSU researchers Dr. Karen Root and Amanda Martin to update the Priority Conservation Areas (PCA). PCAs are areas where our efforts will benefit the greatest number of species. The committee also determined how to best measure the health of our priority habitats and will begin to measure attributes like total number of acres, fire frequency, and OORAM scores.

The habitat models created by BGSU researchers, like the example to the right, map ecologically functional habitat. Models were created for 15 species that serve as indicator species or that are primarily associated with five specific ecosystems within the Oak Openings Region. Occurrence data for multiple focal species (3 per ecosystem) was used to help identify a variety of habitats and critical characteristics required by most other species. Each color shows the number of species that overlap, red indicating higher diversity, blue indicating low.





## 2020 Science Summit Presentations

### ***Patterns in Oak Savanna Nectar Landscapes***

Dr. Helen Michaels, Bowling Green State University.

### ***Parasitic Wasp Release as BioControl for Emerald Ash Borer Beetle***

Dr. Rachel Kapplar, Biology Department, Bowling Green State University

### ***20 Years of Vegetation Monitoring at Oak Openings Preserve***

Dr. Tim Schetter, Director of Natural Resources, Metroparks Toledo

### ***Evaluating the Effects of Anthropogenic Land Use and Habitat Fragmentation on Bat Diversity and Activity in the Oak Openings Region***

Kelly Mei-Feung Russo Petrick, Bowling Green State University

### ***Breeding Birds in the Oak Openings***

Kathryn Ware, M.S. Candidate in Biological Sciences, Bowling Green State University

### ***Raptor Monitoring in the Oak Openings***

Karen Menard, Research and Monitoring Supervisor, Metroparks Toledo

### ***Restoring Open Canopy Habitats from the Ground Up; What Does Soil Have to Do With It?***

Dr. Jessica Miesel, Assistant Professor, Fire and Ecosystem Ecology, Department of Plant, Soil and Microbial Sciences, Michigan State University

### ***Landscape Use and Nesting Ecology of Female Eastern Box and Spotted Turtles***

Sara Carter, Graduate Assistant, Department of Environmental Sciences, University of Toledo

### ***Restoration Insights: Stories from Sandhill Crane Wetlands***

Alexis Sakas, Conservation Project Manager, The Nature Conservancy; Dr. Enrique Gomezdelcampo, Associate Professor, Bowling Green State University

### ***Efficient Approach to Locating Drainage Tile Network and Variations in Soil Properties within the Oak Openings Region***

Dr. Kennedy Doro, Assistant Professor, Department of Environmental Sciences, The University of Toledo

## VOLUNTEER MONITORING HIGHLIGHTS

- 1,112 butterflies counted at the Kitty Todd Preserve, reflecting a general decline over the past 10 years of monitoring.
- 76 raptor nests located in the Oak Openings Region
- 168 Ohio Endangered and Threatened plant populations were monitored in Oak Openings Preserve Metropark
- Dragonfly monitoring at Wiregrass Lake: 1,458 individuals; 37 species counted
- Bat monitoring led by BGSU at Wildwood, Secor, and Oak Openings Preserve



### **2020 Steering Committee Members**

Kent Becker, Toledo Zoo

Jon Bossenbock, University of Toledo

Rick Bryan, Oak Openings Region Conservancy

Erika Buri, The Olander Park System

Melanie Coulter, Black Swamp Conservancy

Ashlee Decker, The Nature Conservancy

Katharine Mason-Wolf, WildOnes, Oak Openings Region Chapter

Karen Root, Bowling Green State University

Ryan Schroeder, Ohio Department of Natural Resources

LaRae Sprow, Metroparks Toledo