



UNIVERSITY OF MOUNT UNION
HUSTON-BRUMBAUGH
NATURE CENTER

Discover the Wonder of Nature's Ever-Changing Story



SUMMER
2025

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John T. Huston – Dr. John D. Brumbaugh Nature Center

Mission Statement

The John T. Huston - Dr. John D. Brumbaugh Nature Center provides and supports opportunities for enjoying and learning about our natural and cultural heritage.

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Horticulture and Facility Coordinator

Michael Greiner

Site Manager

Jason Smith

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Bonnie Twaddle

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From the Director

Jason A. Smith, Ph.D.

What a glorious thing! – the sights and sounds of Nature's beauty erupting with renewed life. After last summer's drought and an "old fashioned real winter", somehow this spring feels more like spring. It's been a good time to plan, plant and be excited about NEW things. Indeed, here at the Nature Center, there has been a flurry of new activity this spring as we rush to plan for a busy summer and fall and an anticipated robust new crop of Raiders coming to campus. These plans include new programs focused on horticulture and native plants, a greenhouse for propagation, and a display garden and signage to educate the public about the importance of native plants in landscapes for wildlife and pollinators.



Other exciting happenings coming this summer and fall include the finalization of installation and public opening of our new wetland habitat - a wonderful new resource for environmental learning and exploration. These activities are all part of a new strategic plan, long in the making, which is soon to be fully released to the public. This plan provides a blueprint for a vibrant, inclusive and collaborative future for the HBNC and the University of Mount Union to enhance opportunities for students and improve the quality of life for all living in the greater Alliance community.

Lastly, I must recognize that we will see some changes that must be considered "challenges" (ah, such is the reality of life). One such "challenge" is the retirement of an absolutely STELLAR and foundational staff member Bonnie Twaddle. Bonnie has served at the Nature Center since beginning as a part-time staff member in 1998 and in her capacity as Community Outreach Coordinator has truly gone "above and beyond" becoming a face of the Nature Center. Her presence will be missed by so many, but I am pleased to say, the very thing that brought her to us – her love for volunteerism – will actually keep her around (so be sure to be extra nice to her!).

Investigating BLD at HBNC

Beech Leaf Disease (BLD) is an emerging disease that effects the American beech tree (*Fagus grandifolia*). BLD is caused by a parasitic nematode, *Litylenchus crenatae mccannii* (LCM), native to Japan. The nematode causes deformation of the buds in the winter as well as dark and thickened bands on the leaves in the spring and into the fall. BLD was first found in Lake County, OH and spread quickly toward the east coast of the U.S. While transmission of BLD is poorly understood, Hannah Mitchell and Dr. Jason A. Smith are researching the possibility of airborne transmission.

At the Nature Center, they have deployed spore traps at three sampling locations. The traps spin using a small motor, and a sticky membrane catches nematodes from the air, which are then tested in a lab at the University of Mount Union. This project started July 2024, and the traps were set out from mid-August to December 2024. They also exposed disease-free beech tree saplings at two of the air sampling sites. These trees, along with the membranes, were switched out on weekly intervals to see if nematodes were present at different periods during the fall.

In spring 2025, spore traps were set out on April 1 in the same three locations. The saplings from last fall are being monitored for the presence of BLD symptoms. Some of the spore traps from last fall are being looked at under a microscope, and the rest are having the DNA extracted off the membranes to detect the presence of the LCM nematode. This would allow them to conclude the LCM nematode is present in the air, but they won't know if the nematodes are moving on their own or if they are being transported by a vector. This research is ongoing, and the spore traps will continue to be set out through the summer and into the fall this year.

New Retiree, Bonnie Twaddle



The Nature Center’s Community Outreach Coordinator, Bonnie Twaddle, is set to retire after 2-plus decades of service to the Nature Center and University of Mount Union. Bonnie started at the Nature Center as a dedicated and exemplary volunteer. Her volunteerism transitioned into part-time employment as Weekend Ranger and eventually turned into full-time employment as Volunteer Coordinator and Outreach Specialist. Bonnie’s friendly demeanor, raucous laugh, and enthusiasm about the outdoors have been hallmarks of her tenure.

Bonnie’s contributions are innumerable. Some of her most impactful contributions might include growing the Nature Center’s volunteer program, helping to develop the Children’s Hands-on Gardening program with Alliance City Schools, organizing the annual Relax and De-stress Event, planning and facilitating the annual Founder’s Day Volunteer Luncheon, and leading workshops focused on developing backyard habitats to support pollinator populations. Beyond the Nature Center, she has been an active member of Mount Union’s campus community by participating in committees, supporting student activities, and spreading word about opportunities for students and faculty at the Nature Center.

When asked about her plans in retirement, Bonnie says she will continue her lawn conversion from grass to habitat to support pollinators and other wildlife, pursue travel opportunities, and resume her original role as a volunteer at the Nature Center. When asked about fond memories from the past 20+ years, she mentioned the support she’s received from other Nature Center staff and the many interactions she’s had with visitors in the lobby, at events, and during her programs. Bonnie said “The Nature Center is in good hands and I’m comfortable retiring knowing that things will continue to be well cared for.” She hopes that Nature Center visitors will continue to “enjoy, respect, and take care of the Nature Center, too.” And we should all enjoy it with the same enthusiasm and wonder that Bonnie has had for so many years.

Volunteer Recognition

We extend a sincere thank you to our December, January, February, and March Volunteers! Our outstanding Volunteer staff assists us in maintaining high-quality programming and beautiful facilities. Thank you for ALL that you do!

Joseph Balogh G.M.	Fred Cockrill	Sarah Heffernan	Tyler Kohlmann	Grace Seefeldt
Connie Boller	Joel Collins	Ann Hendel	Lukea Pitinii	Geri Senczyszak
Nate Border	Shirley DeMaiolo	Blake Howard	Grayson Sanwald	Kelly Slutz
Ruthie Border	Claire Fried	Michael Kanagy	Kennedy Schlessman	Kenzie Stafford
Eleanore Busch	Sandy Gahan	Kevin Kern	Hannah Scott	Keith Swartz
Kerry Cochran	Jane Heater	Morgan Klein	Adam Seefeldt	

Special Thanks

We are so thankful to Janet Fox and Jim Miller for their willingness to continue coordinating Acoustic Music Jam sessions on the first Sunday of every month from 2-4pm! Ann Hendel was instrumental in helping to organize this event 18 years ago! Ann received the “From the Heart” Award at the Nature Center’s annual Founders Day/Volunteer Luncheon from the staff on October 19th, 2008, for sharing her music talents to initiate this monthly program. As an artist and teacher in many arenas, Ann provided several clay pottery workshops for the public, and she’s been seen multiple times sitting outside on the Nature Center property with easels and paints with a few friends and/or students. Ann’s love and excitement of the out-of-doors brought her to the Nature Center to walk the trails, usually with a friend or two. On November 10, 2024, Ann once again received the “From the Heart” Award at the annual Founders Day/Volunteer Appreciation Luncheon from the Nature Center staff for her assistance with making sure there was music for the luncheon entertainment after an unexpected cancellation from the scheduled entertainment 2 days before the event! She was able to round up 3 musician/friends from the local band, Rock Salt Nails, who provided song and music for one hour to our attendees! Ann embodied the quote, “The show must go on!”

Thanks again to Janet and Jim who will make sure “the show must go on” for Acoustic Music Jam and their audiences. May their music be lifted up to celebrate Ann Hendel’s life!

Huston-Brumbaugh Nature Center's Schedule of Events

General Information

Events marked with an asterisk (*) require registration. All other events are informal, open to adults and families, and are available without registration. All events begin at the Visitors Center and are held rain or shine unless otherwise indicated.

To register or inquire about events, call (330) 823-7487 or email naturecenter@mountunion.edu.

Acoustic Music Jam

Sunday, June 1 | 2-4:00 p.m.

Join us at the Nature Center for a music jam. Bring an instrument or just come to listen. Beginners are welcome. Make new friends, have fun, and learn a new tune or two! No registration required.

*Wildlife Wednesday: Bees

Wednesday, June 4 | 9-10:30 a.m.

There are over 500 bee species in Ohio, how many can we find? Join us on this introductory exploration using hands-on collecting and observation skills to discover native bees as we hike around the Nature Center. As we collect and observe bees, we will discuss basic bee identification characteristics specific to each major family of bee we find. Open to all ages. ***Registration is required.**

*Wildlife Wednesday: Birds

Wednesday, June 11 | 9-10:30 a.m.

Over the last 10 years, 81 species of birds have been recorded at the Nature Center during the breeding season. Join us for a leisurely walk around the Nature Center to see how many of these we can see/hear or add new species to the list. Bring binoculars.

***Registration is required.**

*Enhance Your Homegrown Habitat

Sunday, June 15 | 2-4:00 p.m.

Help us jump-start National Pollinator Week by attending this pollinator-supporting program! Discover what you currently provide for wildlife and pollinators (without even realizing it!), and simple steps you can take to make your outdoor space more wildlife- and pollinator-friendly. FREE seeds, plants, pollinator homes and safe water dishes will be available. ***Registration is required. Attendance is limited to 20 adults only.**

*Wildlife Wednesday: Butterflies

Wednesday, June 18 | 9-10:30 a.m.

An exploration in search of butterflies and day-flying moths of the Nature Center. Binoculars and cameras are encouraged to view and document all the species we see. ***Registration is required.**

*Solstice Sunset

Friday, June 20 | 8:30-9:30 p.m.

Bring a chair and enjoy sunset on the longest day of the year. We're certain to be entertained by the sights and sounds of resident wildlife as we enjoy dusk at the North Woods. Light refreshments will be provided, and guests are welcome to bring their own snacks and non-alcoholic beverages. ***Registration is required.**

*Bees In Your Backyard Lecture

Monday, June 23 | 6-9:00 p.m.

Dr. Olivia Carril, researcher, educator, and co-author of "The Bees in Your Backyard" and "Common Bees of Eastern North America" will present a lecture about native bees followed by a meet & greet, book signing, and open Q&A. Books and posters will be available to purchase. ***Free but registration is required. Open to 60 registrants of all ages. Snacks and campfire provided.**

*Wildlife Wednesday: Dragonflies

Wednesday, June 25 | 9-10:30 a.m.

An exploration in search of dragonflies and damselflies at the Nature Center. Binoculars and cameras are encouraged to view and document all the species we see. Nets will be provided to catch and ID specimens by hand as well. ***Registration is required.**

*Wildlife Wednesday: Bees

Wednesday, July 2 | 9-10:30 a.m.

On this exploration, we will discuss specialist vs. generalist bees and see how many specialized bees we can collect and identify using hands-on collection and observation skills. Open to all ages. ***Registration is required.**

Acoustic Music Jam

Sunday, July 6 | 2-4:00 p.m.

Join us at the Nature Center for a music jam. Bring an instrument or just come to listen. Beginners are welcome. Make new friends, have fun, and learn a new tune or two! No registration required.

*Wildlife Wednesday: Birds

Wednesday, July 9 | 9-10:30 a.m.

This month we'll be birding by ear. The forest is full of dense leaf cover making observation by binocular difficult. We'll carry our binoculars but focus primarily on recognizing resident bird species by their vocalizations as we walk the trails. ***Registration is required.**

*Full Moon & Firefly Hike

Thursday, July 10 | 9-10:00 p.m.

Join us for a hike in search of the full moon and fireflies! Moonrise is 9:23pm. We're likely to see a few different species of firefly, each with their unique flash patterns and color. This is a moderately difficult hike due to distance and changes in elevation across the trail system. ***Registration is required and limited.**

***Wildlife Wednesday: Butterflies**

Wednesday, July 16 | 9-10:30 a.m.

An exploration in search of butterflies and day-flying moths of the Nature Center. Binoculars and cameras are encouraged to view and document all the species we see. ***Registration is required.**

Bat & Moth Night

Friday, July 18 | 8:30-10:30 p.m.

We will begin with a bat count at the Huston Barn before sunset (bring a lawn chair). After the count, we will walk back to the Visitors Center to explore light traps which lure a variety of moths and other insects for close observation. Bring a flashlight and your phone to upload images of insects using the iNaturalist app. Canceled for rain or wind.

***Wildlife Wednesday: Dragonflies**

Wednesday, July 23 | 9-10:30 a.m.

An exploration in search of dragonflies and damselflies at the Nature Center. Binoculars and cameras are encouraged to view and document all the species we see. Nets will be provided to catch and ID specimens by hand as well. ***Registration is required.**

Tuning In with Nature

Sunday, August 3 | 1:30-5:00 p.m.

Join us for an afternoon of live music and the sounds of nature in the shade of the forest and Visitors Center pavilion. Our monthly Acoustic Music Jam will be playing folk tunes from 1:30 to 3:30pm followed by an ensemble from the Alliance Symphony Orchestra from 4:00 to 5:00pm. Bring a chair (or borrow one of ours), snacks, and non-alcoholic beverages and enjoy an afternoon of music. No registration required. May be cancelled for inclement weather.

***Wildlife Wednesday: Bees**

Wednesday, August 6 | 9-10:30 a.m.

On this exploration, we will conduct our own native bee survey at the Nature Center using methods that many citizen science projects use like net collection, setting pan traps, and observing specific flowers. Open to all ages. ***Registration is required.**

***Wildlife Wednesday: Birds**

Wednesday, August 13 | 9-10:30 a.m.

This month we will walk in search of bird species in juvenile and adult plumages. Young birds of some species look just like an adult bird while others have identifiable juvenile feathers that can make identification confusing. We will sort through the adults and young of the year to learn some identifiable characteristics. Bring binoculars. ***Registration is required.**

***Wildlife Wednesday: Butterflies**

Wednesday, August 20 | 9-10:30 a.m.

An exploration in search of butterflies and day-flying moths of the Nature Center. Binoculars and cameras are encouraged to view and

document all the species we see. ***Registration is required.**

***Wildlife Wednesday: Dragonflies**

Wednesday, August 27 | 9-10:30 a.m.

An exploration in search of dragonflies and damselflies at the Nature Center. Binoculars and cameras are encouraged to view and document all the species we see. Nets will be provided to catch and ID specimens by hand as well. ***Registration is required.**

***Tick Talk: What's Trending?**

Sunday, August 31 | 2-4:00 p.m.

"Don't be suspicious" of this Tick Talk! Come and learn about the different species of ticks found in Ohio as we talk about their biology, lifecycle, disease transmission, and tick bite prevention methods. Discover which ticks are "giving main character energy", which ticks have the "most followers", and which ticks to "bombastic side-eye". The more you know, the less you'll go "Ew, brother, ew! What's that brother?!" ***Registration is required.**

Acoustic Music Jam

Sunday, September 7 | 2-4:00 p.m.

Join us at the Nature Center for a music jam. Bring an instrument or just come to listen. Beginners are welcome. Make new friends, have fun, and learn a new tune or two! No registration required.

3rd Annual Stark County Bird Quest

September 12 & 13

This family-friendly 24-hour challenge has two goals: get people into the outdoors using birds as a catalyst and to accumulate data about bird populations in Stark County. This event is free including resources, guided walks, and the celebration at the event's conclusion on Saturday, September 13. For more information and registration, go to cantonaudubon.org/stark-county-bird-quest.

Summer Research Showcase

Sunday, September 14 | 1-2:30 p.m.

See the work of outstanding University of Mount Union students in this showcase event. The 2025 cohort of summer researchers undertook a variety of projects with University mentors. Each student will make a presentation about their research. Your attendance is appreciated in support of the students, their mentors, and their academic research!

Acoustic Music Jam

Sunday, October 5 | 2-4:00 p.m.

Join us at the Nature Center for a music jam. Bring an instrument or just come to listen. Beginners are welcome. Make new friends, have fun, and learn a new tune or two! No registration required.

Facility Improvement Projects

It will be yet another busy summer around the Nature Center. We have many projects planned that will support our Mount Union students and enhance the visitor experience.

Though the North Woods wetland isn't open to visitors yet, it continues to take shape with the introduction of more plants along with the hundreds of plants installed last spring. To improve student and visitor access, we are constructing two observation platforms that will allow everyone to better observe the wildlife associated with the wetland habitat.

The historic Huston barn will be getting a facelift this year. Repairs are being made to the vents, new siding is being installed on the south side of the barn, and all of the barnyard structures will receive a fresh coat of paint once these repairs are made.

A new greenhouse will be installed to help facilitate tree disease research and tree seedling propagation. This may be the first of several greenhouses to come with the expansion of faculty and student research and development of a native plant nursery.

To highlight the importance of native plants and their specific relationships with pollinators, we will be developing new flower beds in the North Woods area and renovating some of our existing flower bed spaces around the Visitors Center. We will use Planting by Number guides developed by The Ohio State University Extension and Bee Lab with the intent of providing homeowners with a guide to installing a well-balanced native plant garden with specific themes that will support native pollinators, beneficial insects, and birds. These garden designs are free and available to the public at <https://u.osu.edu/plantbynumbers/>.

After 20 years, the Children's Hands-on Gardening program has run its course. The site will be overhauled in the coming months to accommodate plant propagation for restoration purposes. A portion of the area will still be used for vegetable gardening education and programming. We will be installing underground drip irrigation lines and making the layout mower-friendly. The lower half of the garden area will house more native plants as we move toward increasing our native plant productivity and education. The dahlias that have been a wonderful addition to the site will remain where they are along the fence for all to enjoy!

Summer Research

Summer is always a busy season for research at the Nature Center, and 2025 will be no different. This summer the Brumbaugh endowment is funding three students and their mentors for Brumbaugh Scholars research. The projects were selected from a diverse range of proposals, and we are thrilled to assist three students with funding and support for their scholarly research this summer.

Eleanor Pace (Biology major) is working with Dr. Michael Zimmermann to explore the effects of eutrophication on the diversity of freshwater parasites in the Nature Center's ponds. They intend to do water sampling as well as surveys of macroinvertebrates, snails, and fish as part of their investigation.

Emily Krizner (Biology and Spanish major) is working with Dr. Heather Milliken-Mercer to investigate biodiversity and Lyme disease risk at the Nature Center. They will evaluate the relationship between old growth and second growth forest stands and the presence of Lyme-infected Black-legged ticks. Ticks will be identified and analyzed for the presence of Lyme disease bacterium *Borrelia burgdorferi*.

Ahmed Alzoubi (Computer engineering) is working with Dr. Thuan Do to develop an interactive, digital tour of the Nature Center for education and engagement. Ahmed believes that a virtual tour will make the Nature Center accessible to a wider audience and aligns with modern trends in digital conservation education, and this project is reflective of his interest in using technology for social and environmental impact.

We are looking forward to seeing their ideas come to life this summer. Everyone is invited to learn about their projects and results in September at the Summer Scholars Research Showcase on Sunday, September 14.



A Room with a View

By Al Eibel, Nature Center volunteer

This past February, my wife Lucy was outside after dark throwing out some compost. When she returned to the house, she told me she thought she heard an owl near our garage. She wanted me to listen, so I stepped out, and, sure enough, I heard an owl. At first, I thought the tremolo/trill call belonged to a Northern Saw-whet Owl, but I checked and discovered the call belonged to an Eastern Screech Owl. It's not unusual to hear the easily identifiable "whinny" call in our woods, but I could not remember hearing the trill. The unique, descending "whinny" call sounds like a horse, and the trill call can be easily mimicked by a kid doing ghost sounds. Several times during February the tremolo call woke me early, early in the morning – 2:00am. I honestly smiled whenever the owl woke me.

Several years ago, I had attached a kestrel box – clearly visible from our son's former bedroom – to a large Silver Maple hoping to attract owls, but Fox Squirrels appropriated the box in both 2022 and 2023 and successfully raised young. I often sat in the backyard late on summer evenings and watched the squirrels return to lounge on the roof – legs dangling over the edge. Eventually they would go inside for the night. In 2023, I watched in disbelief as six squirrels packed into the box. In 2024, the old kestrel box had rotted and even the squirrels eschewed the condemned box, so I removed it and attached a new owl box to the maple. Lucy and I were thrilled to hear owls so close to the house, and I hoped against hope that maybe an owl might find the new box attractive enough to nest in.



I've seen several species of owl on our property: Great Horned Owls, Barred Owls, and even a Northern Saw-whet Owl. I've even seen Great Gray Owls in Yellowstone National Park. However, I had never seen an Eastern Screech Owl in the wild, but I had banded several rehab birds at Stark Parks Wildlife Conservation Center. That all changed early this past March when I was working in the yard and glanced at the box. I was delighted to see a rufous-colored screech owl sitting in the entrance. Screech Owls have two color phases: rufous or red and gray. Gray screech owls make up about 81% of Eastern populations and the rufous phase the remainder. We continued to see the rufous owl for several weeks, then in late March, a gray phase screech owl appeared at the entrance to the box. The appearance of the new owl created mixed feelings. Was there a pair nesting? Was there some territorial conflict, and the gray owl took up residence? Who knows? I do know that the gray owl has remained throughout April and sits in the entrance hole hours upon hours. Even though we can see the owl through the bedroom window with the naked eye, we sometimes use binoculars to get an even closer look, and I get an eerie feeling when the owl is unmistakably looking back at me.

Eastern Screech Owls are secondary cavity nesters and use abandoned woodpecker cavities and broken-off tree trunks, and they readily accept nest boxes. They do not "build" nests, but simply lay 2 – 6 eggs in whatever material covers the floor of the cavity. The eggs are incubated for approximately a month, then the nestlings remain in the cavity for another month before fledging. Screech owls eat just about any type of animal including insects, reptiles, small mammals, birds, and even fish.

Even as I type this article, the owl sits in its box and makes me feel good because we are privileged to see an owl up close and personal. Maybe this May, Lucy and I will be rewarded with owlets.

Ohio Certified Volunteer Naturalist Program

If you have a strong interest in nature and enjoy helping others, you are invited to apply to become an Ohio Certified Volunteer Naturalist (OCVN). The Ohio State University Extension – Stark County, in coordination with Stark Parks, The Wilderness Center, Huston-Brumbaugh Nature Center, and Beech Creek Botanical Garden and Nature Preserve, is facilitating an OCVN training this fall from September 3 through November 12, 2025. Meeting once a week, OCVN participants will learn how to contribute to community science efforts, restore and protect critical habitats, and communicate effectively about Ohio's environment while exploring parks and natural areas in your community.

Spaces in the course will be available on a first come, first-served basis. Course size is limited to 15 participants. You must be at least 18 years old to apply. The course fee for 2025 is \$225.00. All fees are due two weeks before the start of the first session. The price includes a binder manual, additional handouts, state fees, and related costs for conducting the program. Application period opens June 1. To learn more, contact OSU Extension Stark County at 234-348-6145 or visit go.osu.edu/OCVNStark.



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Discover the Wonder of Nature's Ever-Changing Story

Visitors Center and Bird Observatory Hours

April through October
Tuesday through Friday, 9 a.m. to 4 p.m.
Saturday and Sunday, 1-5 p.m.
Closed Mondays

November through March
Tuesday through Friday, 9 a.m. to 4 p.m.
Sunday 1-5 p.m.
Closed Mondays and Saturdays

Our trails are open from dawn to dusk every day.

**The Nature Center is located six miles south of
the University of Mount Union on Daniel Street, just off Route 183**



Contact us at:

Phone: (330) 823-7487

Email: naturecenter@mountunion.edu
mountunion.edu/nature-center