



In the Glen

Winter 2022/2023 | News and Activities of the Glen Helen Association

A Watershed Moment

Also in this issue:

Exciting Changes at the Raptor Center
Glen Helen as an Outdoor Classroom
Grinnell Mill is Now Part of Glen Helen

In the Glen

In the Glen is published for Glen Helen Association members and friends.

Contributors

Editor: Laurie Freeman; Contributors: Nick Boutis, Susie Butler, Christine Avery, Sarah Cline, Laurie Freeman, Rebecca Jaramillo, Kelsey Mazur, Susan Smith; Design: Bob Bingenheimer

Glen Helen Nature Preserve

Trails are open daily, sunrise to sunset. All wildlife, vegetation, and natural features are protected. For general information: 937-769-1902

Administrative Offices

405 Corry Street, Yellow Springs
937-769-1902

Nature Shop

Located in the Vernet Ecological Center
405 Corry Street, Yellow Springs
December hours: Thu-Sun, 10am-4pm
January, February hours: Fri-Sun, 10am-4pm

Trailside Museum

505 Corry Street, Yellow Springs
Visit www.glenhelen.org for the opening date and hours.

Outdoor Education Center

Residential environmental education center for school groups and summer Ecocamps.
1075 State Route 343, Yellow Springs,
937-767-7648

Raptor Center

Raptor education and rehabilitation
Visitors are welcome to visit the center and see the resident birds.

Winter hours: 9am-5pm
1075 State Route 343, Yellow Springs
937-767-6656

Mission

The mission of the Glen Helen Association is to steward and strengthen Glen Helen nature preserve for present and future generations, safeguard the ecological, historical, and geological resources within its bounds, and utilize the preserve to offer life-shaping environmental learning to our students and visitors.

Glen Helen Association Board of Trustees

Art Boulet, Bruce Bradtmiller, Ph.D., Ken Dahms, Ph.D., Margaret Dunn, M.D., Scott Geisel (President), Mitch George, Jon Horvath, Jeremy Main (Treasurer), Betty Ross (Vice President), Dan Rudolf, Paul Sampson, Yasmeen Soin, Kat Walter (Secretary), Nick Boutis (Ex-officio)

Glen Helen Association Staff

Administration

Executive Director: Nick Boutis
Manager: Scott Cline

Land Management

Ranger: Susan Smith

Outdoor Education Center

Director: Sarah Cline
Assistant Director: Kelsey Mazur
Business Manager: Shannon Schenck

Raptor Center

Director: Rebecca Jaramillo
Assistant Director: Christine Avery

Outreach

Manager: Laurie Freeman

Facility Rentals/Booking

Coordinator: Ashley Mason

Maintenance

Supervisor: Shahkar Strolger
Assistant: Sam Crawford

On the Cover:

Photo by Wayne Heinfeld

From the Director

As I write this, a demolition crew is in the midst of what I believe is the largest restoration project Glen Helen has ever undertaken. We are dismantling the former Antioch College power plant, a first step in restoring the site back to nature.

You might be inclined to ask: "Why was a power plant built in the Glen?" That would be a reasonable question to ask.

In 1929, the Antioch College trustees agreed to accept the gift of Glen Helen on the precondition that the College could build its power plant in the preserve. Conversely, when the Glen Helen Association acquired the preserve in 2020, the power plant had to be included as a result of its geographic location within the preserve.



The Antioch power plant is currently being demolished. Restoration will follow.

The College saw the plant as an efficient way to power the growing campus, particularly the planned science building. It was built to last, but it was built in a simply terrible location. Not only was it within the nature preserve, it was situated at the edge of a spring-fed quarry. The plant was initially coal-fired, and later converted to natural gas. In the days when it burned coal to produce power, trains would dump coal right from their cars into storage bins on the cliff wall. Asbestos was used throughout, and needed to be professionally removed before the



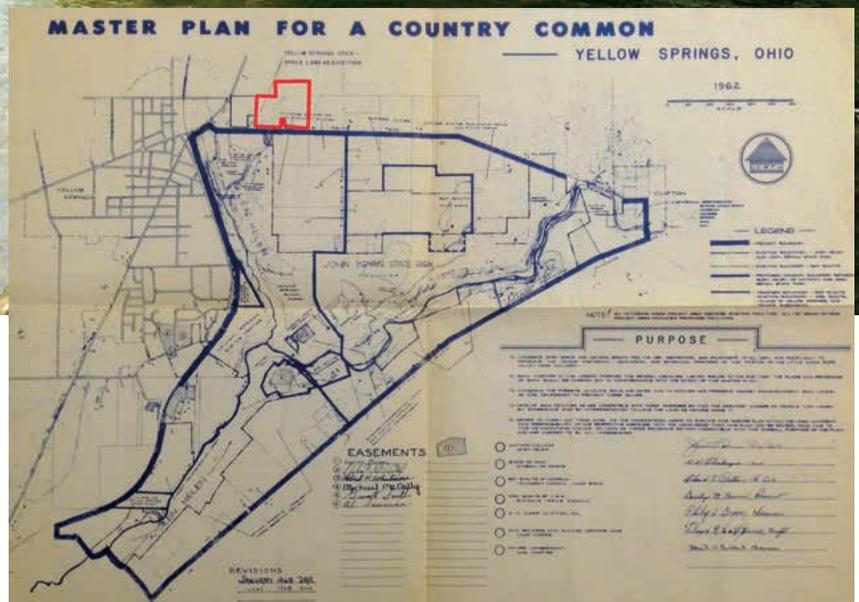
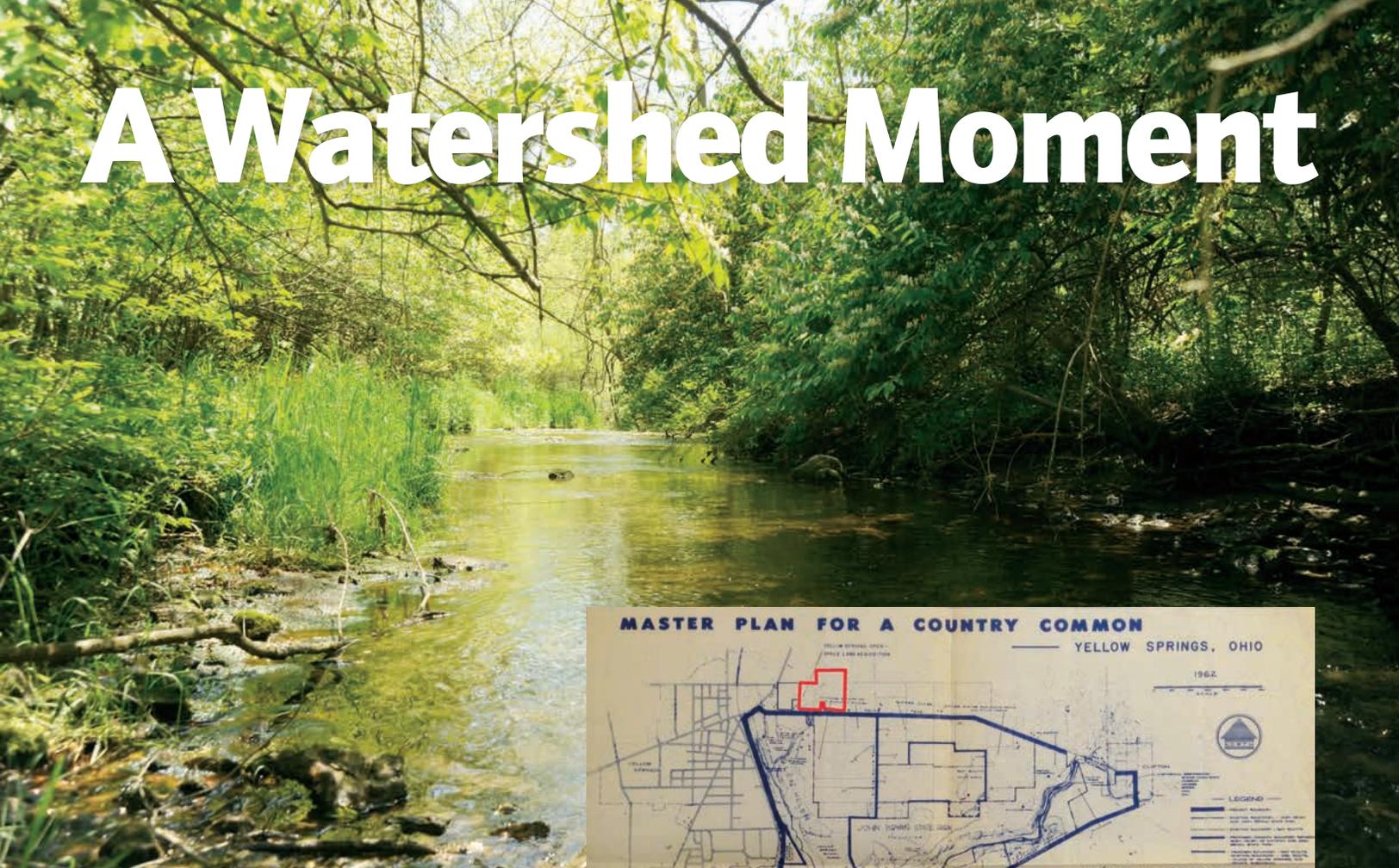
rest of the demolition could proceed. The plant has not been in operation for over a dozen years, and during that time, it became a public nuisance and safety hazard.

Ironically, although Glen Helen is impacted by the power plant, the preserve never benefitted from it. The heat and the electricity it generated never fed any of the buildings in the Glen. While we didn't create this hazard, and never benefitted from it, we are working to do the right thing for the environment, for the ecology of the preserve, and for public safety.

Demolition should conclude this fall, after which we'll begin the long, slow process of restoring the site to natural habitat. The demolition and site restoration is a component of our \$4.25 million Campaign to Secure the Future of Glen Helen. The project was supported by Clean Ohio Conservation Fund, the Village of Yellow Springs, and donors like you.

– Nick Boutis, Director, Glen Helen Association

A Watershed Moment



Conservationists sometimes frame wildlife management in terms of “Keystone Species” and “Umbrella Species.” The idea is straightforward enough: a keystone is found at the top of a stone arch. Without it, the arch will not stand. Similarly, a keystone species is one that is essential to the continued function of its ecosystem. Likewise, an umbrella protects all that is below it. Ergo, when you protect an umbrella species you protect the entire ecosystem.

All that said, my goal here is not to talk about wildlife. Instead, I’d like to share the observation that the water resources for an ecosystem can be thought of as both the keystone and the umbrella. Consider: if you lose the water resources, you lose the entire ecosystem that depends on it. So, water is a keystone. But also, if you protect the water resources, you protect the entire ecosystem. So, water is also an umbrella.

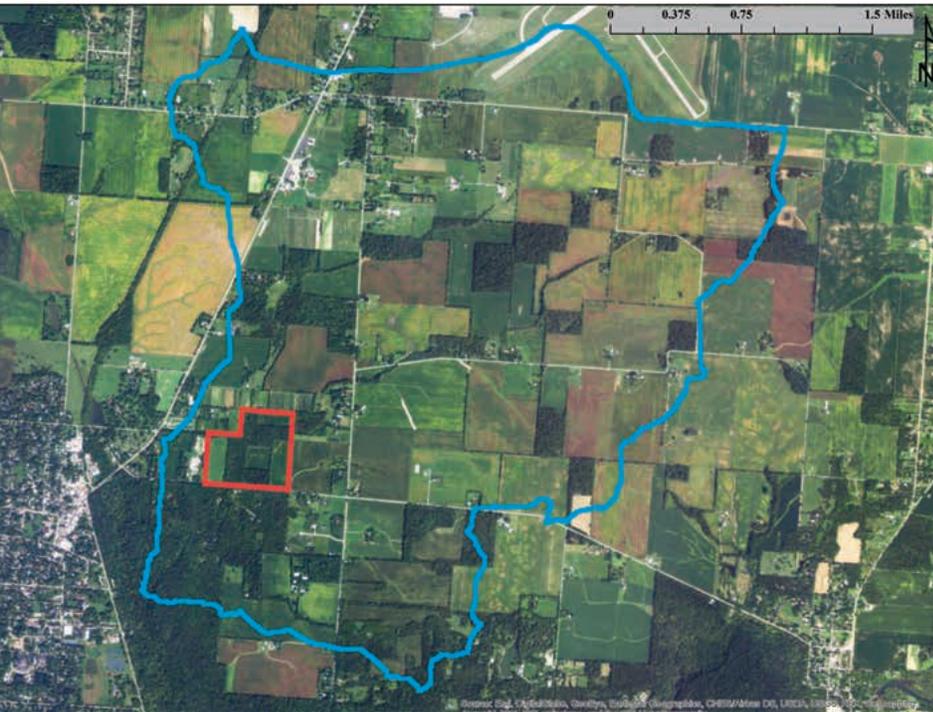
And yet, water is often peripheral to our thinking about protecting habitats. When you think about our country’s parks and preserves, rarely (dare I say never?) is the preserve boundary designed to encompass an entire watershed. Lots of parks protect mountains or

Above: Birch Creek as it flows through the Sutton Farm.

Inset: The Country Commons mapped out by Ken Hunt and others. The red outline shows the Sutton Farm.

caves or deserts or maybe, as is the case with Glen Helen, a thin stretch of a river a half mile wide, by four miles long. Preserve boundaries tend to be political, or visual, or geographic. I cannot think of a single example where a park boundary is defined by its watershed. Ultimately, what this means is that water flows into protected lands upstream from who-knows-where, and exits protected lands downstream to who-knows-where.

In the early 1960s, my predecessor Ken Hunt had a vision for better protecting the land around Glen Helen and its neighbors, John Bryan State Park and Clifton Gorge State Nature Preserve. Ken and his co-conspirators imagined a triangle bordered by State Route 343, Clifton Road, and what is now the Little Miami Bike Trail. They named this triangle the “Country Commons.” The idea was that, if all of



Sutton Farm in red, and Birch Creek watershed in blue.

the property owners within this triangle would be willing to accept a conservation easement on their property, it would create a protected polygon that would safeguard Glen Helen and the state lands from encroachment and “conserve open space and natural beauty for the use, inspiration, and enjoyment of all men.”

For sixty years, we more or less pursued this vision. When the Glen Helen Association acquired Camp Greene from the Girl Scouts of Western Ohio, it was with the idea that not only was the former camp adjacent to Glen Helen on the Little Miami River, but it was a core (and vulnerable) parcel within the Country Commons. A couple years later, we were able to work with the children of Barbara and David Case to acquire their wonderful 46 acre homestead off State Route 343. It was a hugely important parcel for us because of its proximity to the Outdoor Education Center; it was also within the Country Commons.

But then, we turned our attention to the Sutton Farm. The farm was just north of the Glen, across the road from the Outdoor Education Center along State Route 343. Owned by the Village of Yellow Springs, much of the land was leased to an area farmer

who annually planted a soybean crop using conventional growing techniques. We liked the idea of instead managing that land as forest contiguous to the Glen, but what really interested us in the property was that Birch Creek flowed through the Sutton Farm before crossing under the road and into the Glen. If we could better protect a longer stretch of Birch Creek, then we could ensure cleaner water and healthier habitats along the creek. Now, instead of thinking about a protected area bordered by roads, we for the first time gave consideration to what the Glen’s watershed looked like.

We honestly were not prepared for what we learned. Check out the map to the left. It shows the Sutton Farm in red, and the Birch Creek watershed in blue. At the lower left of the map, you see the town of Yellow Springs, Ohio, with the forests of Glen Helen immediately to the right. Analyzing the map, we realized that only about 8% of the Birch Creek watershed is in Glen Helen. Put another way, 92% of the water that flows over the Cascades is coming from neighboring farmland, or homesteads, or Young’s Jersey Dairy, or the Springfield Air National Guard base. We could follow every best practice for stewarding the water resources within the Glen, but the water quality in the preserve would still be largely determined by the choices made by our upstream neighbors. The same is true for the other watersheds that the Glen is part of, principally the Yellow Springs Creek and the Little Miami River.

So, now we came to realize that we had a management dilemma that we hadn’t previously given much thought to: how do we protect Glen Helen if we don’t control the water, and, how do we influence the quality of the water if we don’t own the land? Here is where I would love to say that there was a simple solution, a problem solved, and a happy ending. Alas, environmental challenges rarely work out that tidily.

Still, we know what the basic parameters of a solution are: there may be some lands in our watershed that it makes sense for us to try to acquire, if the location is right, the landowner

How do we protect Glen Helen if we don't control the water, and, how do we influence the quality of the water if we don't own the land?



is interested, and the funding can be secured. We've added 150 acres to the Glen over the past 10 years, and can imagine that, in time, we'll have the opportunity to add more. Of course, this gets expensive, both because of the purchase price, and because it takes time and effort (in other words: money) to manage land. But land acquisition has a big advantage as well: we can be sure that any land that we own will be managed with a priority placed on ecological stewardship rather than some other competing interest.

It's also possible that we would be able to work with our neighbors, and our friends at the Tecumseh Land Trust, to see that lands upstream are protected by conservation easement, allowing agriculture to continue, but

Many Ecocamp and Outdoor Education Center activities are based around the water, and the quality of that water is of great importance to us.

ensuring that these lands are not subdivided and developed. Indeed, many of the parcels near and adjacent to Glen Helen are already in the land trust. We can't expect that these neighbors will manage their lands as a natural area, but we can count on them maintaining the conservation values of the land as articulated in their conservation easements.

Really though, for most of the property owners who live upstream of us, we will ultimately rely on education to make people aware that they are part of the Glen Helen watershed. Moreover, that the decisions that they make on their property will impact the health of the preserve and everything else that is downstream of them. Moreover still, that there are actions that they can take or not take that will help ensure that the water coming into the Glen is as high quality as possible.

A parting example: one of the noxious species in the Glen is Lesser Celandine. It has round succulent leaves, and produces yellow flowers early in the spring. Highly, highly invasive, it spreads downstream along creeks. When we identified this plant along the Yellow Springs Creek, we went looking upstream, and found infestations of it in neighborhoods in the town. In backyards in Yellow Springs, tubers from the plant were breaking off, floating downstream, and gaining a foothold in the Glen. We started connecting with homeowners in town, to make them aware of what Lesser Celandine looks like, and working with them to eliminate it on their property, both to protect their own land, and to protect the Glen. Along the way, our neighbors gain a better understanding that they are part of the Glen Helen watershed, and that the way they manage their yard will impact the health of the preserve. Runoff is still carrying Lesser Celandine into the preserve, but awareness among our upstream neighbors is growing, and each year, more property owners redouble their efforts to tackle what's in their own backyard. 🌱

- Nick Boutis, Executive Director (nboutis@glenhelen.org)

Exciting Changes at the Raptor Center

The heart of the Glen Helen Raptor Center is rehabilitating wild birds of prey and educating the public about them, but it's the Raptor Center classroom that is getting a helping hand this month!

The summer has seen wonderful growth at the Raptor Center. We introduced a new weekend education program and have been busy training docents to engage visitors of all ages.

One of our many goals has been to increase the number of meaningful interactions with visitors by creating a program that invites people to see our birds out of their enclosures, and connect with them in a more personal way. Seeing a child's eyes light up when one of the austere hawks fluffs up his feathers and shivers in an undignified rouse is pure joy for our education team, a team that is largely volunteer-based. We are so grateful for all our volunteers who have diligently applied themselves to learn the skills to safely handle our birds and teach the public about them in the past few months. Together we are creating a new culture of public interaction at the Raptor Center, one that we hope will grow and leave



The Raptor Center classroom (above) invites visitors Saturday and Sunday, 11am-2pm. Educational docent Cassie Crawford (right) shares bird facts with weekend visitors at the Raptor Center.



an imprint on the hearts and minds of our visitors.*

So what does this new culture look like? Fun! Each Saturday and Sunday, between the hours of 11am and 2pm, educational docents are available to talk about our birds with anyone who visits the Raptor Center. Unless there is a reason we cannot, we also will have a bird out on a glove or a perch so visitors can meet them up close, take pictures and ask questions. Our "Raptor Chats" are accompanied by correlating art projects, interactive activities, and coloring pages for children that reinforce the information our docents are sharing. The combination creates an open and inviting learning experience that the whole family can

take away with them to remember and enjoy.

Until now, our new programs have been hosted entirely outdoors. The summer and early autumn weather has been beautifully cooperative for our programs and it has allowed us to host any size group, but with the cold weather fast approaching, we have set our sights on a new goal: to create a functional learning environment indoors.

Until recently, our classroom has not been open to the public except for pre-arranged group programming, or for use by the Outdoor Education Center. In part, this has been because the Raptor Center has never had the staff to safely monitor the space and be available to

the public. For the same reason, the space itself has not been updated in many years. However, with the new addition of a permanent Assistant Director and a second full-time intern, we can now offer what we never could before: an open door!

So this season we have been busy redesigning the classroom space. We are updating the education materials available inside and modernizing the look of the room. Our classroom is small and can only accommodate small groups, but we are thrilled to be able to share it with the public and to continue offering engaging education opportunities for families throughout the cold winter months. So please, come visit us for a weekend program in any weather Ohio can throw at us. We're thrilled to be able to say we'll have our door open for you! 🌿

— Christine Avery, Assistant Director of the Raptor Center (cavery@glenhelenassociation.org)

**If you are interested in becoming an educational docent volunteer at the Raptor Center, please visit our website, www.glenhelen.org, and click the "Get Involved" tab, or contact our Glen Helen Outreach Manager, Laurie Freeman, for more information. You can reach her by e-mail at lfreeman@glenhelenassociation.org, or by phone at 937-769-1905.*

Rent the Glen

Venue Spotlight: Camp Greene

Camp Greene is a former Girl Scout camp near John Bryan State Park and is the perfect place for weddings, family reunions, business retreats, and celebrations of life.

The lodge at Camp Greene is 3,200 square feet of blank canvas for you to decorate and make your own. The hardwood floors, high ceilings, and two stone fireplaces give it a rustic, homey feel. Two lofts and a screened-in porch complete the space. Built in the 1920s, the 200-person capacity lodge has many recent upgrades including heating and air conditioning and a premier restroom trailer.

With over 30 acres, Camp Greene is the ideal private retreat for anyone wanting to be surrounded by nature. The grounds feature open green areas surrounded by forest, an open-air platform with a magnificent vista overlooking the Little Miami River, two covered pavilions with picnic tables and fireplaces, and a bunk house that can be used as a staging area or breakout space.



Camp Greene is available for rental from April 1–November 14. Book your Camp Greene event by January 31, 2023 and get 10% off the base booking rate! Use promo code **Greene23**.



The Vernet Ecological Center is perfect for celebrations of life, business meetings, and small weddings for up to 140 people seated theater style or 80 seated at tables.



Birch Manor is a 1930s mansion and outdoor space used for weddings, receptions, and business retreats for up to 150 people outdoors or 110 indoors.



The Outdoor Education Center Lodge and dorms provide warm and friendly, large spaces for a variety of gatherings, just steps from the Cascades waterfall.

Visit glenhelen.org/rentals for photos and information. For rates, questions, or to schedule a tour of any of our facilities, contact rentals@glenhelenassociation.org or call 937-769-1902 ext 1101.

Pull out
this section
for your
program
calendar.

Glen Helen Program Calendar

December 2022–February 2023



Group sizes are limited. Register early to ensure your participation at glenhelen.org. Many programs are free or discounted for Glen Helen members. Contact lfreeman@glenhelenassociation.org for member code. Visit glenhelen.org to learn more.

December



Photo | Luciana Lief

Saturday, Dec. 3, School Forest Festival, 9am-3pm | Visit Ohio's oldest educational forest to take part in a longstanding Yellow Springs tradition! Cut your own Christmas trees, grown by the School Forest Club of Yellow Springs High School. Funds raised support the club's efforts at Glen Helen. Hayrides, a bonfire, hot cocoa, and homemade treats are available. School Forest, 3777 Bryan Park Rd.

Saturday, Dec. 3 and 10, Honeysuckle Daze, 11 am-2pm | Join Land Stewardship staff and volunteers in managing invasive bush honeysuckle (*Lonicera spp*). Please bring your own loppers if possible. Limited hand tools will be available. [RSVP ssmith@glenhelen.org](mailto:RSSmith@glenhelen.org). Meet in parking lot, 405 Corry Street. Canceled in case of inclement weather.

Wednesday, Dec. 7, Full Cold Moon Hike, 7-8:30pm | Join naturalist Paul Sampson for a full moon hike on the Inman Trail and work off some of those holiday calories on a moderate 1-mile hike. \$5, members free. All participants must register. Contact lfreeman@glenhelenassociation.org for member code. Trailside Museum parking lot. 505 Corry St.

Friday, Dec. 9, Winter Solstice Poetry Reading, 7-9pm | Tecumseh Land Trust and Glen Helen are sponsoring the 11th annual Solstice Poetry Reading. Celebrate the solstice and our wonderful natural places with a night of nature-inspired poetry. Wine, cheese and light refreshments. Suggested donation \$10. Vernet Ecological Center, 405 Corry St.

Saturday, Dec. 17, Glen Helen Rim 2 Rim Hike, 2-3pm | Join Paul Sampson and hear about his recently completed 25-mile Grand Canyon Rim 2 Rim hike. Get Rim 2 Rim hiking tips for your next

adventure followed by a moderate 1-mile hike. \$5, members free. All participants must register. Contact lfreeman@glenhelenassociation.org for member code. Trailside Museum parking lot.

Saturday, Dec. 17, Christmas Bird Count, 8am-2pm | One of the world's longest-running citizen science efforts. In addition to Glen Helen, our 15-mile count circle includes John Bryan State Park, Clifton Gorge State Nature Preserve, and many Greene County parks. Each year observers spot over 2,500 individual birds! [RSVP to nboutis@glenhelen.org](mailto:RSVPtoNBoutis@glenhelen.org).

Sunday, Dec. 18, Cocoa and Cookies Raptor Reading Program, 2-4pm | Drop in at the Outdoor Education Center Lodge for some hot cocoa and cookies and enjoy raptor related stories by the fire. Visit with live birds from the Raptor Center while you watch the birdfeeders outside the windows. \$5 per ticket, members free. All participants must register. Contact lfreeman@glenhelenassociation.org for member code. Glen Helen Outdoor Education Center, 1075 State Route 343.

January



Photo | Cassandra Crawford

Friday, Jan. 6, Full Wolf Moon Hike, 7-8:30pm | Take a winter hike on the Inman Trail and listen for Barred Owl calls

on a moderate 1-mile hike. \$5, members free. All participants must register. Contact lfreeman@glenhelenassociation.org for member code. Trailside Museum parking lot, 505 Corry St.

Saturday, Jan. 14, Camp Greene Open House, 1-4pm | Camp Greene is a scenic, rustic, and secluded space for special events such as weddings, family reunions, and business retreats. Features include a 200-person capacity lodge, open green space surrounded by forest, two covered pavilions, an open air overlook of the Little Miami River, and a bunkhouse. If you are interested in renting Camp Greene for your event, please join us for our open house. 3452 Grinnell Rd. No RSVP required.

Sunday, Jan. 22, Backyard Nest Box Build, 2-4pm | Learn how to get your backyard bird-ready and build a nest box sized for many native songbirds. All materials to build the nest box will be provided for you, as well as information on other simple ways you can boost your backyard habitat. At the end of the program, you will take a completed nest box home, ready to invite a few feathered tenants. Skill level for this project is beginner friendly, though parents may need to help younger participants with some of the steps. \$25 per nest box build (\$20 for members). All participants must register. Contact lfreeman@glenhelenassociation.org for member code. Glen Helen Raptor Center: 1075 SR 343.

Saturday, Jan. 28, Winter Birds, 9-11 am | We'll search the area around Grinnell Mill for hardy birds of winter. \$5, members free. All participants

must register. Contact lfreeman@glenhelenassociation.org for member code. Grinnell Mill, 3536 Bryan Park Road.

February



Photo | Kelsey Mazur

Saturday, Feb. 4, Pine Forest and Full Snow Moon Hike, 7-8:30pm | Join Tom Sabin and naturalist Paul Sampson for a full moon hike to the Pine Forest and nearby School Forest on a moderately strenuous 3-mile hike. \$5, members free. All participants must register. Contact lfreeman@glenhelenassociation.org for member code. Trailside Museum parking lot, 505 Corry St.

Saturday, Feb. 11, Winter Birds, 9-11 am | We'll search the north Glen for elusive winter finches. \$5, members free. All participants must register. Contact lfreeman@glenhelenassociation.org for member code. Trailside Museum, 505 Corry St.

Saturday, Feb. 11, Raptor Valentines, 11 am-2pm | Come to the Raptor Center to celebrate your love of all things feathered! Make a valentine for your favorite birdy bachelor and have a chance to see some of our ambassadors up close. Learn how birds welcome spring and get ready for nesting season. Want to bring a gift for your avian amoré? Check out our wish list before you come! Free, drop-in event. Glen Helen Raptor Center: 1075 State Route 343.

Saturday, Feb 18 and 25, Honeysuckle Daze, 11 am-2pm | Join Land Stewardship staff and volunteers in managing invasive bush honeysuckle (*Lonicera spp*). Please bring your own loppers if possible. Limited hand tools will be available. [RSVP ssmith@glenhelen.org](mailto:RSSmith@glenhelen.org). Meet in parking lot, 405 Corry Street. Canceled in case of inclement weather.

Saturday, Feb. 18, The Great Glen Scavenger Hunt, 12-3pm | Enhance your afternoon hike with a scavenger hunt around the Glen! Stop by the Trailside Museum between

12 and 3 pm to pick up your scavenger hunt list, and come back with a completed list for your prize and a high five. No registration required, just show up and enjoy! Trailside Museum, 505 Corry St.

Making Ice Ornaments



Even with our chilly weather, there is still plenty to do and see outdoors! Embrace the chill and make some ice ornaments to decorate your outdoor space! Here's all you'll need:

- » A shallow dish
- » Water
- » String
- » Your favorite nature things
- » And your imagination!

First, gather your favorite nature things, like leaves, cool sticks, some neat moss or lichen – whatever you like! I enjoy using things that I find already on the ground and wouldn't recommend picking wild growing things.

Second, pour some water into your shallow dish. Then, arrange your favorite nature things in the water.

Next, add a string or a loop at the top of your ornament.

Finally, leave your dish outside to freeze. Once it is frozen, you'll have a beautiful ornament full of your favorite things! Remember to hang it outside where it can stay frozen!



Announcements

For all Your Holiday and Winter Needs!

Have you stopped by the Nature Shop recently? New merchandise is arriving regularly. Looking for a holiday gift? Hundreds of nature related items are available for friends and family including Charley Harper items, hiking supplies, new T-shirt designs, fun mugs, children's books and nature toys, and field guides. The shop even features beaver items paying homage to our beaver dam. Can't decide? Gift cards are also available.

Members receive a 10% discount on items. The shop will be open Thursdays through Sundays from 10am to 4pm, at 405 Corry St.; January and February open Friday-Sunday, 10am-4pm.

Thank You for Making the Glen Your Amazon Smile Partner!

So far \$5,450.91 has been donated by Amazon to the Glen! Participating is very simple. All you have to do is go to "smile.amazon.com" any time you'd like to make an Amazon.com purchase. When you are prompted to select your charity, select "Glen Helen Association." Everything else about your Amazon shopping experience stays the same - the shopping cart, wish lists, shipping options and prices. You shop. Amazon donates 0.5% of your purchase price to us.

Order a Glen Helen License Plate Today!



The Glen Helen license plate is a way to show the world that you love the Glen. Plus, as a bonus, you get to drive with a beautiful Charley Harper sapsucker affixed to your bumper.

Any Ohio car owner can acquire the tag, either from your local Bureau of Motor Vehicles office, or by visiting oplates.com. No need to wait until your regular renewal date on your birthday - you can order your plates at any time. For each driver who purchases these specialty plates, the Glen Helen Association receives \$15.

Get Your 2023 Glen Helen Calendar

The beautiful 2023 calendar featuring twelve months of breathtaking photos of Glen Helen is now available. Calendars may be purchased in person at the Nature Shop open Thu-Sun, 10am to 4pm.



Calendars may also be purchased online at glenhelen.org. At just \$12, it's a great gift for the holidays!

GHA Bird Seed Sale and Local Delivery

The Annual Glen Helen Bird Seed Sale comes right in time for winter and food scarcity for our feathered friends.

We stock locally-grown high quality black oil sunflower seed, plus hot pepper suet and other suet cakes.

» Yellow Springs residents (45387) may order seed or suet and have it delivered for just \$3!

» Hot Pepper Suet-\$3, Regular Suet Cake-\$2.50, Black Oil Sunflower Seed (25 lbs.)-\$20 🌿



GHA members a receive 25% discount. Products are only available for delivery to persons within the 45387 zip code. GHA volunteers will deliver within 48-72 hours. Order online at glenhelen.org/birdseedsale, or purchase at the Nature Shop, Thursday through Sunday from 10am to 4pm.



Follow us on Facebook: www.facebook.com/glenhelen

Glen Helen as an Outdoor Classroom

Environmental Education at the Outdoor Education Center



Photos: Kelsey Mazur

The Glen Helen Outdoor Education Center has offered residential environmental science learning for children since 1956 – but why? There must be a reason we play outside, routinely get covered in mud, pick up millipedes, do science experiments, and hang out with kids all day!

Education in and about nature is not a new idea. Outdoor education emerged in the early 1940s as people began using the natural spaces to meet students' learning objectives through direct experiences in the outdoors. Environmental education is even older; as early as the 18th century, philosophers encouraged students to “study nature, not books.” Now, research into environmental education finds real health and wellness benefits in a nature connection and that learning about scientific phenomena in a hands-on, personal way allows for science

After learning how to respectfully and carefully collect frogs, a group of young Ecocampers observe and learn.

to be accessible to all kinds of learners. The connection between environmental education and wellness was particularly well-documented by Richard Louv in his 2005 book *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*. Further research from the BEETLES Project and Lawrence Hall of Science finds that inquiry-based as well as student- and nature-centered learning allows for students to take ownership over their education and lets their environmental education experience be even more impactful.

With pedagogy informed by scientific research, it is the Outdoor Education Center's mission to offer transformative learning experiences that engage learners in the practices of sciences; promote self-discovery and growth; cultivate community; and create a connection to our natural world.

The Outdoor Education Center has three main programs built around these goals:

Outdoor School, our Naturalist Teacher Internship, and Ecocamp. Outdoor School is offered during the school year and takes fourth through seventh grade students out of the classroom and into nature for a residential science learning experience. Our curriculum complements classroom learning; we offer a variety of lessons on scientific topics, such as geology and ecology, which are all aligned to the Ohio content standards. Our Naturalist Teacher Internship trains young professionals in the environmental education field as naturalists and educators. Naturalist Teacher Interns deliver Outdoor School programming and create an amazing community during their year at the Center. Finally, Ecocamp is our summer camp with both day and overnight options, focusing on nature immersion, fun, and exploration, and following a variety of themes. While Ecocamp is not designed around academic content standards, we do follow inquiry and experiential learning tenets.

By teaching science in the outdoors, we are able to make science accessible to multiple learning styles and different ways of learning. Teachers state that “students have a science background from the classroom, and they can see it in action” while at Outdoor School. In 2018 research by Marie Kuo et al. also finds that learning in nature can go beyond classroom curriculum and rejuvenate students’ “capacity for learning” and that after learning outdoors, students are better prepared once back at school. Further research by Kuo in 2019 documented that learning in nature not only improved student health and wellbeing, but decreased stress; restored attention and concentration; helped students develop self-resilience, creativity, and social connections; and increased engagement both inside and outside of the classroom.

An additional benefit of Outdoor School is the residential piece – it takes students out of the classroom and places them in a new environment. We are able to set aside challenging circumstances that could exist at home, such as food insecurity, and give students a new, safe, and engaging learning environment to create new patterns of engagement, as argued for in Nicole Ardoin and Phillip Kilbridge’s 2022 article “Is This the Only Bipartisan Solution to the Youth



Top: Ecocampers connected with one another and nature by creating their own slug habitat.

Above: While learning about stream ecology and health, a student at Outdoor School embraces a hands-on learning experience.

Mental Health Crisis?” When we talk with teachers about what Outdoor School means to them and their students, they echo this research: “Students bond, engage, and grow at Glen Helen in a way that no other school experience can replicate. They become closer to each other, understand each other better by sharing their days and nights, and are willing to try new experiences in the Glen’s natural settings that they never would during a typical school day.” While science and standards are a definite focus of Outdoor School, we are also seeing a need for and benefit of social emotional learning for our students.

Social emotional learning is defined as “finding constructive ways to deal with emotions and interact with one another in respectful ways.” Core competencies of social emotional learning are self-awareness, self-management, social awareness, relationship skills, and responsible decision making. To support this type of learning, students at Outdoor School are split into small “trail groups” of 13-15 students with a dedicated Naturalist Teacher. They eat, live, and learn together, giving students the opportunity to practice and perfect these competencies.

Teachers have mentioned that they like that our programs get students outside and learning science in a hands-on way, but the most important part is the “community aspects” or the social emotional learning:

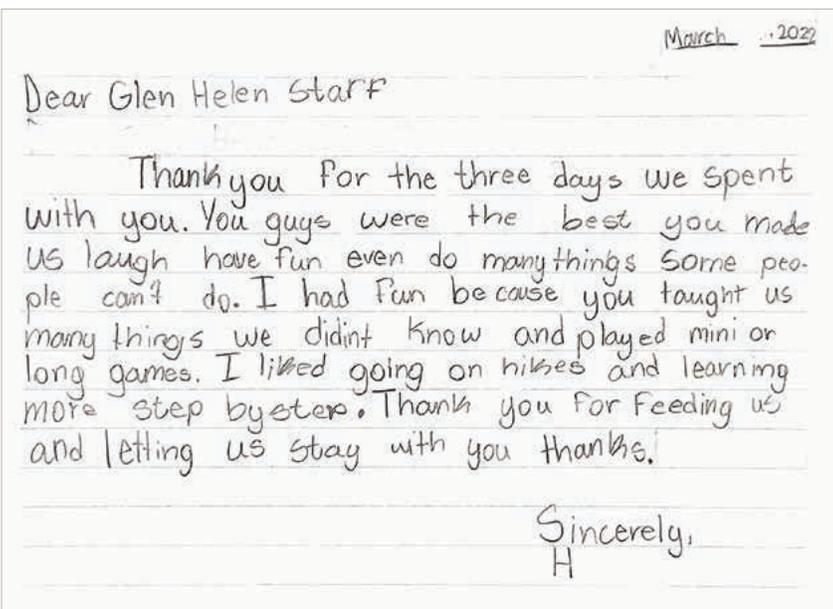


Top: An Outdoor School Trail Group gets silly and grows as a team.

Above: A Naturalist Teacher Intern and her student share a hug at the end of a transformative and impactful week at Outdoor School.

“students learn how to act, treat each other, [and] be mindful. They gain independence and get to help others.” This is also reflected in Cincera et al.’s 2021 study: “the most significant outcome [of residential programming] was the improvement in the students’ interpersonal competence and in the relationship between the teachers and their students.” Further, additional studies from Dongying Li, Sara Warber, and others, suggest a “beneficial role of early nature exposure in later-life mental health,” and that a “connection to nature appears to be associated with reduced stress and greater holistic health and wellbeing.”

The pandemic exacerbated an already tense situation in regards to student mental health. By removing students from the classroom during the height of the pandemic,



the community aspect and associated growth was difficult, or impossible, to achieve. Now, back in the classroom, “educators across the U.S. overwhelmingly believe their students have experienced ‘significant’ learning loss. Many teachers share that their students are two years behind, particularly in their ability to be emotionally resilient and connect with other kids,” as seen in Ardoin and Kilbridge’s research. They argue that environmental education is the answer to this problem; seeing the benefits first hand, perhaps they are right.

As one teacher who brought students to Outdoor School reflected, “the learning [at Glen Helen Outdoor Education Center] moves beyond standards.” The Outdoor Education Center is supporting student growth in the social emotional realm as well as increasing science learning, understanding, and literacy, and helping to create a more environmentally conscious community. By seeing conservation in action – our wasted food goal in the dining hall, our mindfulness on trails, and even raptor rehabilitation – students are able to make connections to their own lives and experiences.

This safe, supportive learning environment is beneficial to children, teachers, and even our staff and interns. An Ecocamp Naturalist reflected on their experience teaching children in the woods as “I think I became more confident and comfortable taking charge and asserting myself. I also learned so much and feel a lot more connected with nature.”

We even hear the same thing from students as you can read in the note at left.

The environmental education offered at Glen Helen Outdoor Education Center, and similar centers across the world, is hard work – and is extremely necessary and valuable work; as a 2017–2018 Naturalist shared, “the value of time spent at Glen Helen is that it teaches staff, naturalists, and kiddos how to be good humans, both to the world around them and to each other.” The resiliency, confidence, and ‘good human-ness’ we teach is just as important as the science – and the impacts of our work will extend far into the future with every child we work with. 🌱

– Kelsey Mazur, Outdoor Education Center Assistant Director

A list of sources cited is available upon request – please reach out! kmazur@glenhelenassociation.org

Grinnell Mill Is Now Part of Glen Helen



Grinnell Mill, a historic grist mill on the Little Miami River, has been located in Glen Helen since 1821, but has not been managed by the Glen Helen Association until now.

As what is likely the oldest human-made structure in the preserve, it has had a long and fascinating history. The mill came desperately close to being demolished in the early 2000s. But miraculously, local businessman and craftsman Jim Hammond came forward with an interest to see the structure restored. He partnered with Miami Township, who leased the property from then-owner Antioch University, and set about a multi-year effort to bring the structure back to glory as a museum of milling. We look forward to telling the full story of the mill's history in a future issue of *In the Glen*.

To provide funds for its ongoing maintenance, part of the mill operates as a bed and breakfast. Susie Butler, our Innkeeper, has lovingly cared for the property for over a decade. She shares her story at right, along with information on bed and breakfast.

Grinnell Mill Bed & Breakfast offers beautiful accommodations in an expertly restored grist mill. On the second floor, two charming rooms are available, each with a queen bed and a private bathroom with walk-in shower. On the first floor, we offer a lovely suite with two queen beds and a private full bathroom. This room also has its own private entrance from the deck. There is a ramp leading onto the deck providing full access to the first floor, the handicapped-accessible restroom and the first floor suite.

A freshly prepared continental style breakfast and Wi-Fi access are included during your stay.

Grinnell Mill is filled with antiques from the original operations as well as exquisite woodwork and comfortable period furniture. In addition to the restored mill wheel, the back deck has two tables and a grill for dining in a delightful outdoor setting. The mill is also available to rent for private events such as retreats, meetings, conferences, parties, etc. 🍁

For more information go to www.grinnellmillbandb.com.

What the Grinnell Mill Means to Me



Susie Butler, Innkeeper

Many years ago I moved to Yellow Springs after marrying a hometown boy. We hiked the Pine Forest and Glen Helen every week, always driving by the Grinnell Mill and dreaming about making it our home someday. It was so damaged and of course never for sale.

Years later a friend of ours decided to rehab the Mill and turn it into a B&B.

I was very excited to watch the transformation over the next four years never dreaming I could be a part of its history.

I have been the Innkeeper and caretaker of this amazing beauty for the last 10 years.

So very thankful for the relationships I have created with our many guests over the years.

Jim Hammond helped in making a dream come true by making the Grinnell Mill part of my life (not by making it our home, but by letting me share it with guests over the years). It is my happy place.

– Susie Butler, Innkeeper

Welcome New Staff



Photo: Cassandre Crawford

Glen Helen recently welcomed our new Assistant Director of the Raptor Center, Christine Avery. Here's an opportunity to learn a bit about her.

When did you begin at Glen Helen and what was your prior experience here?

I started with Glen Helen in early October of 2016, six years ago now. I had never heard of Glen Helen before that morning, but from the first moment on the property I was hooked.

I was grieving the death of my mother at the time and at a crossroads in my life. On my way home from a dog show that morning I had decided to stop at Peifer Orchard from some fresh apples and cider, but it was still early and the store wasn't open yet. I decided to wander around, looking for a place to take some pictures of my little pup and his fancy blue ribbon to pass some time. I turned down the driveway and stumbled across the Raptor Center. I left my dog in the car for a short bit and wandered around the place looking for someone to talk to and I found a woman in one of the owl enclosures. I told her I had a lifetime of experience working outdoors with animals and I was looking for somewhere to give my time. I asked her if she knew if the place took volunteers. She was a little skeptical and told me that the Raptor Center didn't typically

take volunteers, but if I was really interested to show up that coming Friday and she would show me around.

When I got back to the car, I looked at the card. It read "Rebecca Jaramillo, Director, Glen Helen Raptor Center." I still have it. I committed my heart to the Glen and to the birds that day and I never looked back.

What is your favorite place in the Glen?

The Raptor Center of course! I love everything about the RC from the bird poop and feather dust to the wide-eyed children who get to hear an owl call for the first time.

What animal, insect, bird, amphibian, etc. do you identify with or absolutely love?

When I was a teenager and learning to drive, nothing risked an auto accident more than a red-tailed hawk soaring over my car. I have always had a deep love of the predators of the sky, though I never guessed then that I would be working as closely with them as I am now. In the summer of 2016, before stumbling across the Raptor Center, I had taken a falconry course. I knew from the first moment that a bird of prey alighted to my glove that somehow I would have hawks in my world for the rest of my life. It may have been by chance that I stumbled across the Raptor Center, but I don't believe it was by accident. I had set my heart on hawks months before.

Do you have a favorite vacation or adventure?

I have lived in three countries and visited several more. I've had more adventures than I can recount, but of all the places I've been, nothing compares to the home I found on the North Island of New Zealand. I lived in a town called Cambridge, just down the Waikato River from the small city of Hamilton. All of my favorite adventures began there, from

getting lost in the Waitomo caves and finding my way by the light of the glow worms, riding horseback across the fields, camping on the beaches of the Coromandel Peninsula and being swept out to sea by riptides during my first surfing lesson, to hiking the Tongariro peaks.

What is the best part of your job?

I'm not sure there's a fair way to answer this. My job involves so many wonderful things that I'm not sure how to compare. I love the rehabilitation part of my job. I love helping people that are also wanting to help the wild winged hunters of our skies. Helping the birds recover, releasing them back to the wild, I could easily say is the best part of my job if it weren't for the fact that I also get to delight children, teach them to love and appreciate things that they may have never seen before and learn that they have a place in the ecosystem of the wild.

I love teaching. I love watching a child's eyes light up with the new connections as they learn new things. I love teaching the birds and watching them settle into their new experiences with confidence instead of concern or skepticism. I love so many parts of my job that there isn't any way to say one thing is better than the rest. I can tell you what I don't love: I don't love trying to convince people that their wandering housecats are more a threat to our hawks and owls than the hawks and owls are to them!

What do you think is the tastiest meal or treat?

My favorite treat is Pavlova! I have many food allergies and dietary limitations, but in New Zealand I was introduced to a dessert that I was able to enjoy without reserve. Pavlova is a confection that is mostly whipped egg white and dissolved sugar, slathered in whipped cream and fresh fruit. 🍓

From the Archives



Grinnell Mill has been in the Glen since the 1920s, but only this year became one of the properties under management by the Glen Helen Association. Located in the floodplain of the Little Miami River, the mill has seen its share of floods. It can withstand these floods, but the rising river fills the basement

with muddy water.

This picture, which we believe is from the early 1970s, shows the structure on one such don't-go-into-the-basement day. Nowadays, when a flood comes, we simply wait for the water to drain out, then power wash the basement. 🍁