

NATURAL AREA PRESERVATION

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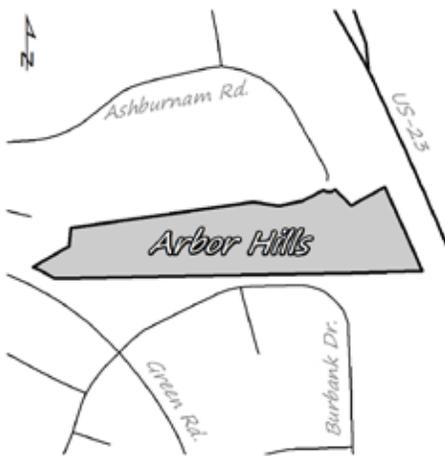
Park Focus: Arbor Hills Nature Area

George Hammond, Outreach and Inventory Assistant

Arbor Hills Nature Area is a wedge of woods and wetlands in the northeast corner of the city, between Green Road and US-23. It's one of our smaller natural areas, just under 6 acres, but it has some special features that are rare in our parks. At the west end, the park includes a portion of a small buttonbush swamp, in the middle, the woods are at least 70 years old, and at the east end there is a vernal pool.



At the west end, the park includes a portion of a small buttonbush swamp.



Arbor Hills Nature Area is a wedge of woods and wetlands in the northeast corner of the city, between Green Road and US-23.

The wetlands here are part of a complex of seasonal pools and permanent ponds in the area. These are old habitats: a map of the landscape circa 1800 (created from early surveyor notes) shows wooded wetlands here. It was these wetlands that first brought me to Arbor Hills Nature Area a few years ago. I was a volunteer with NAP's Frog & Toad Survey, and frogs breed in the wetlands here. For the frog survey, volunteers each choose a route with stops at several different parks in a section of the city. During the spring and early summer, we follow the route after dark, listening at each stop and recording the frogs that we hear. Each of the 10 or so frog and toad species in the city has its own distinct call, and they are pretty easy to tell apart. Arbor Hills Nature Area has 6 of them: chorus

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A unit of the City of Ann Arbor
Community Services Area,
Parks and Recreation Services.

*The mission of Natural Area
Preservation is to protect and
restore Ann Arbor's natural
areas and to foster
an environmental ethic
among its citizens.*

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*Natural Area Preservation is
funded by the voter-approved
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COORDINATOR'S CORNER

Help Nature Take Its Course

David Borneman, Deputy Manager for Volunteerism and NAP

My contributions to this newsletter routinely draw from events in my own life, or from the larger community. No issue has demanded more of my time these past few months than the implementation of Ann Arbor's first deer cull, which took place in designated park natural areas between January 2 and March 1. The decision to do a cull in designated city parks in wards 1 and 2 was a policy decision made by City Council after a two-year public process. It's important to note that policy is set by City Council. Staff's role is to implement policy.

I want to focus my comments here on the broader issue of natural area management, or stewardship, in general. Of all the complaints I heard about the cull, the hardest for me to understand was the "let Nature take its course" argument, which suggests that we shouldn't be "playing God" with Nature.

**NATURE NOW NEEDS OUR HELP
TO "TAKE ITS COURSE."**

This perspective, to continue the biblical theme, looks at Nature as a "Garden of Eden" with us as humans simply looking on from the side, or maybe being lucky enough to walk through it and admire it, the way one might walk through and appreciate an art gallery, never interacting with the art itself, simply observing it. From that world view, there is absolutely no reason for humans to be culling deer, or controlling invasive species, or reintroducing fire into a natural community, or doing any other type of ecological management, or stewardship.

In my role as NAP Manager, that's not my perspective. Sure, it might be easier to look at a remote wilderness and say that we humans should stay away and "let Nature take its course" there (although, of course, we now understand that this planet is not as large as we once thought, and human impacts are, literally, everywhere on Earth). But here in Ann Arbor, in our city parks, among this fragmented landscape, we are centuries past the point of being able to "let Nature take its course." Our natural areas may be fragments of a former wilderness, but they are missing many key components of that wilderness, and are instead burdened with many other stresses and challenges that are the result of centuries of accumulated human impacts. Nature now needs our help to "take its course."

So the discussion, in my opinion, is not about *if* we should step in and manage natural areas, but *how* we should take action. If we see that our past human actions have allowed one species to thrive, its population exploding at the expense of other native species, disrupting the ecological balance within our natural areas, *how* should we as responsible stewards address the situation? That's the challenge we have with garlic mustard, buckthorn, purple loosestrife, and many other invasive species, and some aggressive native ones. So we take direct action with prescribed fire, or hand-pulling, or mowing, or introducing a bio-control, or even with the targeted application of herbicide. But what do we do when none of those techniques is effective? And what price are we as a community willing to pay to address these threats? These are decisions that we, as one community living together, need to make collectively. I hope we can do it in a cooperative, respectful and collaborative manner. And I hope you will be an active part of that discussion about *how* we *help* Nature take its course. ■

Pictured right: the life cycle of a Pipevine Swallowtail



Discovering The Pipevine Swallowtail

Becky Gajewski, Stewardship Specialist

Cutting away at a big thicket of invasive shrubs can sometimes be a meditative exercise. You focus in on your work, tune out everything else around you, and let your mind go blank. But if you stop every once in a while and look around, you may find something extraordinary hiding in an unexpected place.

Two members of our conservation crew made a discovery like this last summer while cutting honeysuckle during a workday at Cedar Bend Nature Area. They noticed an interesting-looking black caterpillar with lines of bright orange “spikes” along both sides of its body sitting on the end of a honeysuckle twig. Neither crew member had seen a caterpillar like this before, so they moved the twig with the caterpillar on it safely out of the workday area and snapped a picture to bring back to the office for identification. Since it was such a distinctive looking caterpillar, it didn’t take long to figure out that what they had found was the larva of a pipevine swallowtail butterfly (*Battus philenor*), a species of special concern in Michigan!

Pipevine swallowtails are normally found in open areas near deciduous forests. They lay their eggs on pipevines, which are plant species in the genus *Aristolochia*. The hatchling caterpillars use the pipevines as host plants, which provides them with both a home and a food source. There’s no telling why this particular caterpillar chose to rest on a honeysuckle instead, but the caterpillars do move through the forest in search of new host plants. When they have grown big enough, the caterpillars stop feeding, leave their host plants, and transform into a chrysalis that can survive the winter. The adult butterfly emerges in the spring (as early as late April) sporting iridescent dark blue wings marked with rows of orange and white spots. They then search for nectar from plants such as thistle, wild bergamot, phlox, and common milkweed.

These beautiful butterflies feed solely on pipevine plants

Pipevine swallowtails are listed as a special concern species in Michigan.



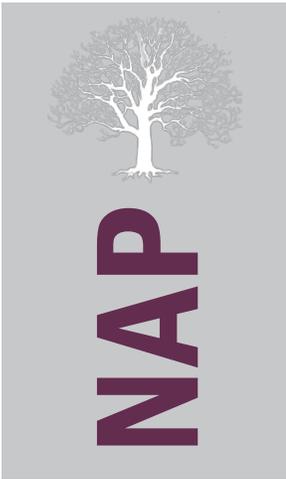
while they are larvae because pipevines are toxic to other animals. The pipevine swallowtail, however, is not harmed by the toxins, and retains them in its body to use as a deterrent against predators. If a predator were to eat a pipevine swallowtail, it would likely find the butterfly to be very distasteful. This is such an effective defense mechanism that several other species of butterfly, including spicebush swallowtails and black swallowtails, mimic the appearance of the pipevine swallowtail.

Pipevine swallowtails are listed by the state as a special concern species in Michigan because they are uncommon, and found only in the southern Lower Peninsula (they are a southern species, occurring down to the Gulf Coast) They are also threatened by habitat destruction and the loss of their host plants. In fact, one of their main host plants in Michigan, Virginia snakeroot (*Aristolochia serpentaria*), is listed as threatened in Michigan, which means it is legally protected.

In order to restore and preserve the pipevine swallowtail habitat at Cedar Bend Nature Area, we will continue our invasive species removal work in the area where it was found. Clearing stands of invasive forbs (like garlic mustard) and shrubs (like honeysuckle) will open up growing space and allow more light to reach the forest floor, which will stimulate the growth of the host plants.

From 1995-2004, NAP hosted a yearly butterfly survey with the help of local butterfly experts. For the 2016 survey season, NAP has partnered with the Michigan Butterfly Network (MiBN) at the Kalamazoo Nature Center to restart the butterfly survey in some of our parks and nature areas. In order to participate in the survey, volunteers must attend a mandatory indoor training. The training will be held in Ann Arbor on May 21st from 1 to 4 p.m. Please email NAP@a2gov.org or call 734-794-6627 for more information and to register. ■

Photos: © Shutterstock



VOLUNTEER STEWARDSHIP CALENDAR

SPRING 2016

Volunteers assist NAP in all aspects of our work. Community involvement is vital to the success of NAP's conservation and education efforts. Please join us for one of these events!

For all of our Stewardship Workdays, please wear long pants and closed-toe shoes. Workdays are free and suitable for all ages. Minors must be accompanied by a guardian or have a signed release form. Contact NAP for release forms. Tools, snacks, and know-how provided. Space is limited at our Kickoffs and Trainings so please register! Contact NAP at 734.794.6627 or NAP@a2gov.org.

MARCH

Sunday, March 13, noon to 2 p.m.
Salamander Survey Kickoff & Training
Gallup Canoe Livery Meeting Room,
3000 Fuller Road

You're invited to help monitor salamander populations. Surveying is done three to six times in early spring. New participants must attend this indoor training. Space is limited. Please register by March 9.

Sunday, March 13, 2:30 to 5 p.m.
Frog and Toad Survey Kickoff & Training
Gallup Canoe Livery Meeting Room,
3000 Fuller Road

Help us monitor frog populations. No previous experience required. Family-friendly! Surveying is done at least one night a month, March through June. New participants must attend this indoor training. Space is limited. Please register by March 9.

Saturday, March 19, 10 to 11:30 a.m.
Photo Monitoring Kickoff & Training
Natural Area Preservation Office,
3875 E. Huron River Drive

We need volunteers to take photos at specific locations each season to record the progress of our work. You must have your own digital camera. Come join us at this meeting for more details! Please register by March 16.

Saturday, March 19, noon to 5:30 p.m.
Workday Leader Training
Natural Area Preservation Office,
3875 E. Huron River Drive

This training is for volunteers interested in leading or co-leading NAP stewardship workdays. We will focus on procedures, ecological considerations, and tips for leading a successful event. Must be 18 or older. Please register by March 16.

APRIL

Tuesday, April 5, 7 to 8:30 p.m.
Breeding Bird Survey Kickoff & Training
Gallup Canoe Livery Meeting Room,
3000 Fuller Road

Some experience in bird identification is necessary. Sign up for your favorite park, pick up survey materials, and learn about the 2015 survey results. Please register by April 1.

Saturday, April 16, 9 a.m. to noon
Stewardship Workday
Wurster Park

Spring is here and what better way to get outdoors after a long winter than enjoying nature at Wurster Park. We'll be removing invasive garlic mustard from the park. Please meet at the cul-de-sac on Edgewood Place off of West Davis Avenue.

STEWARDSHIP NETWORK

STEWARDS' CIRCLE

SECOND TUESDAY OF EVERY MONTH,
EACH EVENT HELD FROM 7:30 TO 8:30 a.m.
BRUEGGER'S BAGELS | 709 N. UNIVERSITY AVE.

Are you interested in learning more about how to care for our natural areas? Then join the Stewardship Network's Huron Arbor cluster for an informal discussion on a monthly topic with volunteer and professional land stewards, plus others interested in nature. Free!

For more information go to
www.StewardshipNetwork.org.

Tuesday, March 8: Managing Habitats
for the Massasauga Rattlesnake

Michigan's only venomous snake is the Eastern Massasauga Rattlesnake. We'll talk about how the life cycle of this species drives its habitat needs, and how habitat restoration can affect it.

Tuesday, April 12:
Preserving Property for Conservation

Join us for a discussion about funding land acquisitions for conservation. We will explore public and private funding options and take some time to talk through other methods of protecting land. Come prepared to ask your questions and share the lessons you've learned.

Tuesday, May 10: Bees, Butterflies, and other Pollinators

Pollinators are an important and maybe under-appreciated part of ecological restoration. How can we include pollinators in conservation efforts?

Saturday, April 16, 2:30 to 5:30 p.m.
Turtle Steward Kickoff & Training
Gallup Canoe Livery Meeting Room,
3000 Fuller Road

At least 6 species of turtles live and nest in the city! Help us protect nest sites and locate populations. We'll cover species identification, nest monitoring, and how to report your turtle observations. Please register by April 14.

Sunday, April 17, noon to 4 p.m.
Ann Arbor Area Earth Day Festival
Leslie Science & Nature Center,
1831 Traver Road

This free, family-friendly event features displays from local organizations, live animal exhibits, hands-on activities, live entertainment, and green building features. This event is focused on community education and youth activities. All ages welcome. For more information visit lesliesnc.org/a2earthday.

EARTH DAY

STEWARDSHIP WORKDAYS:

Saturday, April 23, 9 a.m. to noon
Molin Nature Area

Bring friends and family to help celebrate Earth Day by removing invasive plants that crowd out native wildflowers. Meet at the park entrance at the intersection of Powell Avenue and Columbia Avenue.

Saturday, April 23, 1 to 4 p.m.
Redbud Nature Area

This park along Malletts Creek has great forest wildflowers. We will remove invasive herbs that would otherwise take over the park. Meet at the park entrance at the intersection of Parkwood Avenue and Jeanne Street.

Sunday, April 24, 9 a.m. to noon
Huron Parkway Nature Area

Earth Day is April 22, and we're observing it all weekend. Bring friends and family out to lend a hand combating garlic mustard and other spring invasive plants that threaten native plants. Meet us at 3470 Woodland Road, off East Huron River Drive, home of one of the Park Stewards.

Thursday, April 28, 7 to 9 p.m.
Frog & Toad Survey Halftime Kick-off
Natural Area Preservation Office,
3875 East Huron River Drive

Learn to identify and record summer breeding frogs & toads by sight and sound in this second kick-off training. Surveys are fun, family-friendly, and require no previous experience. Please register by April 26.

MAY

Sunday, May 1, 1 to 4 p.m.
Stewardship Workday
Mary Beth Doyle Park

We're joining folks across the country in planting native shrubs and trees on Arbor Day weekend. Meet at the park entrance on the west side of the park, at the end of Birch Hollow Drive, off Stone School Road.

Saturday, May 7, 9 a.m. to noon
Garlic Mustard Weed-Out Day

We need lots of hands to pull garlic mustard at Argo Nature Area, Cedar Bend Nature Area, Hannah Nature Area, Marshall Nature Area, Miller Nature Area, and White Oak Park. See page 8 for more information.

Saturday, May 14, 9 a.m. to noon
Stewardship Workday
Native Plant Gardening
Furstenberg Nature Area

Help maintain the native garden, a living field guide and demonstration of native flora. You'll learn a lot about spring wildflowers from Park Steward and Master Gardener Aunita Erskine. Please meet in the parking lot off Fuller Road, across from Huron High School.

Saturday, May 14, 9 a.m. to noon
Stewardship Workday
Hansen Nature Area

This park contains a glorious flowering dogwood and a pond with many turtles. The wildflowers here are threatened by invasive species; bring friends and family to help remove them. Meet us in the Grace Bible Church parking lot (1300 South Maple Road), 1/3 mile south of West Liberty.

Saturday, May 14, 1 to 4 p.m.
Stewardship Workday
Lakewood Nature Area

This woodland has a spring wildflower display that is being overgrown by invasive plants. Join us to pull garlic mustard and restore the beauty of the park. Meet us at the Lakewood Elementary School parking lot off Galake Avenue (three blocks south of Jackson Avenue).

Sunday, May 15, 1 to 4 p.m.
Stewardship Workday
Leslie Woods Nature Area

This is not a large park, but it has some of the largest trees in the city! Help protect their seedlings by removing invasive garlic mustard and other species. Meet us at the park entrance at the north end of Upland Drive, north of Plymouth Road.

Saturday, May 21, 9 a.m. to noon
Stewardship Workday
Bird Hills Nature Area

Bring your family and friends to our largest nature area; we'll be removing invasive plants that crowd out wildflowers. Join us at the Bird Road entrance on the north side of this park, just west of Huron River Drive. There is limited parking at the entrance, more nearby at Barton Park on Huron River Drive.

Saturday, May 21, 1 to 4 p.m.
Butterfly Survey Kickoff & Training

Search for beautiful butterflies throughout the spring and summer. No experience in butterfly identification is necessary, though it is helpful. Space is extremely limited, so please register by May 18.

Saturday, May 21, 1 to 4 p.m.
Stewardship Workday
Sunset Brooks Nature Area

The active Park Stewards here need your help in this small gem of a nature area. The dogwoods will be blooming about this time; we can admire them while we remove garlic mustard and other invasive plant species. Please meet at the park entrance on Beechwood Drive.



The park has a number of native wetland plants, like the swamp rose, pictured above.

Arbor Hills Nature Area

CONTINUED FROM PAGE 1

frogs, green frogs, gray treefrogs, American toads, spring peepers, and wood frogs. It's one of the best parks in Ann Arbor for treefrogs, and now a good place to hear wood frogs. Some of the wood frogs that were relocated from the construction of Skyline High School in 2005 were released here (some also in nearby Sugarbush Park). We have been happy to find that the wood frog population survived relocation, and their descendants are breeding in the Arbor Hills Nature Area wetlands.

Frog surveyors try out their route in daylight before they go out at night, and on my first visit that spring, I was delighted to find that the woods in Arbor Hills Nature Area have some fine displays of spring wildflowers. Trout lily was abundant! Along with the trout lily, Jack-in-the-pulpit blooms here in the spring, as well as bloodroot and May-apple. A NAP survey in 2001 found 138 species of plants - not as high as some of our other natural areas, but not bad for a small park! The combination of woods and wetlands provide for more diversity. The park

has a number of native wetland plants, like the lovely swamp rose that Stewardship Specialist Becky Gajewski photographed last year, and the buttonbush that covers much of the large wetland.

FROG SURVEYORS TRY OUT THEIR ROUTE IN DAYLIGHT BEFORE THEY GO OUT AT NIGHT

The original 1998 botanical survey of the park found two tree species of special note in Arbor Hills Nature Area. Near the path that cuts through the middle of the park, there is a flowering dogwood, a small understory tree with beautiful white flowers. There is also a swamp white oak, a much larger tree near the vernal pool east of the path. Swamp white oak and flowering dogwood are both at the northern edge of their range in southern Michigan, and both are considered to indicate a relatively undisturbed habitat. This is very nice to have in a natural area! ■

NAP's Apps of Interest

In the next few issues we'll be reporting on apps for smartphones and tablets that we think might be interesting and helpful for park friends and volunteers. We'll start with the city's own app, A2 Fix It. This is a tool for reporting non-emergency, non-urgent problems to the City of Ann Arbor from your smartphone, tablet, or computer. This app and web service allows you to report issues related to many types of maintenance concerns around the city, including park maintenance issues or needs, potholes, streetlights out, traffic sign issues, obstructed sidewalks, missed cart pickups, and many more. The app is available for iOS and Android mobile devices, and over the web: A2gov.org/a2fixit.

A2 Fix It is not for emergencies. Please call 9-1-1 for emergencies and crimes in progress. For water, sewer, or flooding problems, please call 734.794.6320 Monday–Friday, 8am to 5pm. During evenings, weekends and holidays, call the Water Treatment Plant at 734.994.2840.

Of course you are still welcome to let us know your concerns about our natural areas to NAP directly by phone (734.794.6627) or by email to NAP@a2gov.org. We're grateful when park visitors share information with us. ■



The app is available for iOS and Android mobile devices.

STAFF UPDATES & NAPpenings

FAREWELL...

NATHAN HELMS Field Crew Leader



I am extremely grateful for the experience and professional development that was provided to me through my two years at NAP. I had a great time, and we were extremely productive this past season; largely due to a high level of volunteer participation. I would like to thank all of the volunteers that dedicated their time in developing their understanding of natural systems and their hard work focused on restoration efforts. This was a great organization to have been a part of and I wish you all a happy, productive 2016.

RAFA CONTRERAS-WRANGEL Field Crew



Looking back at the past year I spent with NAP, I am really grateful for the opportunity to work with such a great organization. Not only am I grateful for all the skills I've acquired, but also the friends I made of my coworkers and volunteers. Thanks to NAP, I will be moving to St. Paul MN to work as a crew leader with the Conservation Corps. I'm also planning on enrolling at the University of Minnesota to get a masters degree in forestry or aquatics.

CATIE WYTYCHAK Park Steward Coordinator



Thank you to NAP and all the park stewards for making my time working with you such a pleasure. I enjoyed learning about our natural areas and all their unique features. I'm now working for the Water Resources Commissioner's Office so am lucky to be able to continue living in beautiful Ann Arbor!

Thank you!

Many thanks to the groups who volunteered with NAP recently. We could not make such a difference without you!

EMU Vision Volunteer Center
UM Alpha Phi Omega Co-ed
National Service Fraternity
UM Engineering Global Leadership Honors Program
UM Phi Sigma Rho Engineering Sorority
UM School of Information students



Thanks and congratulations to these Boy Scouts who completed their Eagle projects in our parks:

BRIAN DOKAS

– Wayfinding signs in Olson Park

IAN RICOY

– New trail liners in Argo Nature Area

JUSTIN ZEFFER

– Wayfinding signs in Scarlett-Mitchell Nature

Conference of Note: Society for Ecological Restoration- Midwest/Great Lakes Chapter

The Eighth Annual Chapter Meeting of the Midwest-Great Lakes Chapter of the Society for Ecological Restoration will be held at Indiana University in Bloomington, Indiana from April 1 to April 3, 2016. This year's meeting theme is Overcoming Challenges to Ecological Restoration in the 21st Century. For more information see chapter.ser.org/midwestgreatlakes/current-meeting/.



Would you like to be part of the NAP Staff team? Follow the city jobs website (a2gov.org/jobs).

Positions can open throughout the year. NAP also has unpaid internships that provide valuable experience!

For internship information contact NAP directly: NAP@a2gov.org or 734.994.6627.



NAP

Spring 2016

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18th ANNUAL | GARLIC MUSTARD WEED-OUT DAY

Saturday, May 7, 9 a.m. to noon



PARTICIPATING PARKS:

Argo Nature Area - Meet at the north end of the Argo Canoe Livery parking lot near the trail head entrance to the woods, 1055 Longshore Drive.

Cedar Bend Nature Area - Meet us at the Island Park parking lot, at the end of Island Drive.

Hannah Nature Area - Meet at the west end of Bath Street, off 7th Street just north of Huron Street.

Marshall Nature Area - Meet in the parking lot off Dixboro Road, north of Plymouth Road.

Miller Nature Area - Meet at the Arborview Boulevard entrance, just east of Wildwood Avenue.

White Oak Park - Meet at the park entrance on White Oak Drive.

Garlic Mustard Weed-Out Day is an annual tradition! Volunteers hand-pull invasive garlic mustard in natural areas all around Ann Arbor! Garlic mustard is an invasive species that can quickly crowd out native plant species and decrease natural diversity in the woods. Identifying and pulling garlic mustard is fun and easy for all ages, making this a great volunteer opportunity for families.