

Natural Area Preservation News

Protecting and restoring Ann Arbor's natural areas and fostering an environmental ethic among its citizens

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Winter 2003

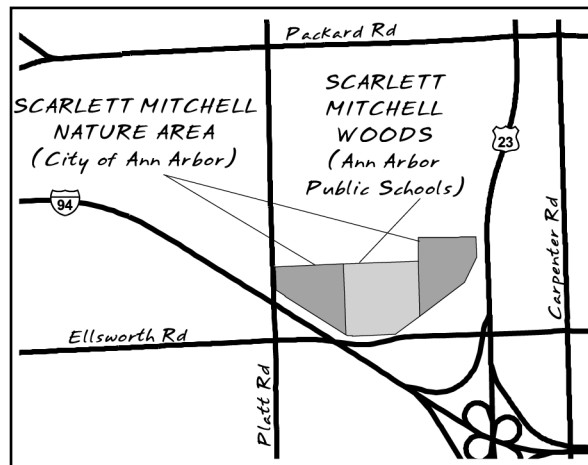
Scarlett Mitchell Nature Area *by Maggie Hostetler*

Bob Gould, a resident of Colonial Square Apartments in southeastern Ann Arbor, looks out his window every winter morning at an amazing sight in neighboring Scarlet Mitchell Nature Area. Says Bob, "It's uncanny, every day at 10 am a fox goes by—going from east to west, never the other way." A fox in the middle of the city is just one of the delights that Scarlet Mitchell serves up. The mixed habitats of the 88-acre nature area (oak forest, wet meadow, shrubland) off of Platt Road are home to a cornucopia of plant and animal life.

Birders have spotted Virginia and sora rails, scarlet tanagers, cuckoos, indigo buntings, green herons, Baltimore orioles, owls, wood ducks, a hooded merganser and even the magnificent yellow/orange Prothonotary warbler. The park is an excellent site for observing migrating birds, and a total of 37 species have been documented as nesting there.

In the park's vernal pools that form in the glacial valley of the park, NAP Botanist Bev Walters has located a plant found nowhere else in the city—False Loosestrife (*Ludwegia polycarpa*). Other rarities are Marsh Speedwell (*Veronica scutellata*), False Pimpernel (*Lindernia dubia*), and Rough

Goldenrod (*Solidago rugosa*). A total of 283 native species live here.



Scarlett Mitchell Nature Area

Park Stewards: Bob Gould, Judy Schmidt, Manfred Schmidt

Acreage: 88

Habitats: Woodland, Sedge Meadow, Pond, Shrubland

Native Plant Species: 283

Nesting Bird Species: 37

Butterfly Species: 21

Not so rare in the park is a sight that brings delight to the soul of any adult—groups of school children enjoying nature. The Ann Arbor Public Schools Environmental Education program sends all second graders to the park for a plant community walk and all third graders for a pond-dip trip (they use nets to dip tiny animals out and then, after observing them, gently return them to the water). The groups are small—about eight kids each—led by staff and volunteer naturalists.

Program coordinator David Szczygiel is continually amazed by the curiosity of the children. "A trip is never boring for me. We teach the kids to pay attention, use their senses and explore. Once they get interested they start asking about everything they see." Among the finds—a honeybee nest, a flying squirrel's tail, bullfrogs, snails, and many types of mushrooms. "One child showed me an oak leaf with little galls all over it.

Inside each gall was a little wasp. I learned that these are oak spangles. I've been going in there for seven years, and I just learned about oak spangles."

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Coordinator's Corner

Post-Operation Recovery

Mom came to visit recently. It wasn't a pleasure trip however; she needed heart surgery, and the U of M sounded like a better choice for such things than the small town hospital near her home in rural Illinois. The surgery went fine in the skilled hands of her exceptional doctors here, and she made an excellent recovery over the first few weeks. Of course, during that time mom was following "doctor's orders" faithfully, taking her medications on schedule, doing her exercises regularly, and most importantly—walking. Her doctor is a strong proponent of walking, as often and as far as possible. So for the first few weeks, while staying with me here in Ann Arbor, mom did a lot of walking. She was feeling great. But then she moved back to Illinois.

Complacency can be a terrible thing. We've all experienced it. Things are going along really well so we ease up a bit and relax and before we know it, things have taken a turn for the worse. So it was with mom. She had been feeling so good that she didn't think she had to be as diligent about walking. And soon her health declined—to the point that when she returned for a follow-up with her doctor three weeks later, he took one quick look at her and said, "YOU have not been walking enough." He could see it in her general appearance, and it was confirmed by the fluid accumulating in her lungs, easily visible on the X-rays. But it was something he said later that really stuck with me, "You took a perfectly good operation I did and are ruining it by not following through with your walking!"

Well, mom got the message. She became an avid walker again, and the change was quite dramatic. Within three weeks her lungs were clear and she felt great. She's now on her way to being better than ever. It's not always that easy to turn things around when repairing damaged ecosystems.

Like mom, NAP learned its lesson the hard way. In 1995 we devoted a lot of resources to clearing invasive shrubs from Furstenberg Park. The place looked great after that dense thicket had been removed, and the wildflowers responded well to the additional sunlight the following spring. "Well done," we congratulated ourselves as we checked that site off our list and moved on to the next park. But then something unanticipated happened—the shrubs grew back! Oh sure, we expected some of that, and had been prepared to do some follow-up in case any of the shrubs resprouted. But we weren't prepared for the millions of new buckthorn seedlings that came up out of the seed bank. We should have planned to return to the site religiously to pull or torch the seedlings. We should have planned to burn the site over the next few years to discourage new buckthorn seedlings, and perhaps we should have planted a cover crop of annual rye to give us the fuel to allow us to do that. But we didn't do any of those things. As a result, the seedlings came back thicker than ever and within a few short years we were once again back to a dense stand of shrubs. We had, in short, taken a perfectly good invasives-removal operation and had ruined it by not following through adequately.

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Natural Area Preservation

is a Division of the City of Ann Arbor
Public Services Area

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

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For up-to-date information on
stewardship activities, call the
"hotline" at 734.996.3266.

If you would prefer to receive
your next newsletter via e-mail
please call NAP.

Volunteer Year In Review *by Jason Frenzel*

For a second year in a row, I will now attempt to amaze and astound you with volunteer-related data! During fiscal year 2002/2003, 554 NAP volunteers put in 4445 hours!!! While this is amazing, it is a slight decline from last year (4634). Now, I know what you're thinking, "That's only 4%, that's not even statistically significant." Well I aim to do better next year, but I will need your help.

Some more highlights from this year... 305 people attended the 48 NAP workdays, for a combined 1190 hours of work. The 28 Park Stewards threw in 1175 hours (two individuals donating over 100 hours each!). 32 Burn Crew volunteers raked in 265 hours. Lastly, 64 inventory volunteers have reported 139 hours so far. (But this does not capture the entire survey season.) I expect this number to increase to about 800 volunteer hours.

The largest single volunteer effort we had this year, by far, was Dan Mitchell's Eagle Scout project. He continued a path in Dolph Nature Area, which Wes Weaver started on his Eagle project. Dan then constructed a beautiful overlook to one of the ponds in the park. He and the rest of Troop 4 put in hundreds of hours of service and raised hundreds of dollars for this project. THANK YOU very much for all your hard work, determination, coordination, and perseverance!

Now I will deliver unto you some total numbers from NAP's amazing Volunteer Database. Just as background information, this database tracks all the data from 1998 through the present, though it does have some information from volunteer efforts starting in 1994. It should also be noted that this program has been known to eat data as well as users.

So, the astounding Volunteer Database tells us that NAP has had, at the bare minimum, 20,500 volunteer hours donated to Ann Arbor's natural areas! It also has given me permission to let you know how many hours have been volunteered per park in the history of NAP, so here goes:



Argo: 515
Bandemer: 230
Barton: 990
Bird Hills: 1272
Black Pond Woods: 732
Bluffs: 263
Brown: 676
Buhr: 277
Cedar Bend: 810
Cranbrook: 204
Dolph: 858
Fritz: 226
Furstenberg: 1078
Furstenberg Native Plant Garden: 622
Gallup: 445
Greenview: 147
Hansen: 69
Hollywood: 202
Keubler Langford: 284
Lakewood: 78
Leslie Woods: 187
Marshall: 633
Maryfield Wildwood: 76
Miller: 192
NAP Native Plant Garden: 120
Oakwoods: 105
Redbud: 253
Scarlett Mitchell: 905
Sugarbush: 187

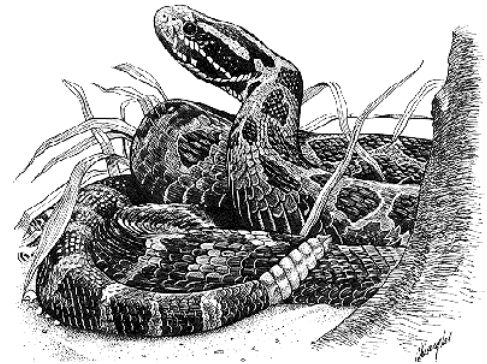
Only with many, many volunteers like yourself can we make all the necessary improvements to our parks. So, if you find you have a bit of extra time on your hands, or you'd like to do something constructive while out in nature, come on out! In conclusion, thank you to all of the wonderful people who have worked with us to make the parks better places! And of course, thank you, oh Volunteer Database.

Make sure to check the Stewardship Calendar for this spring's training sessions: Frog and Toad survey, Burn Crew training, and the new Salamander survey.

Massasauga Sighting *by David Mifsud*

In late August an Eastern Massasauga Rattlesnake (*Sistrurus catenatus catenatus*) was recorded in a remote, untrailed portion of an Ann Arbor City Park. Historically, this species has been reported in other parts of the City, but this is the first park location. It is also an important find because this species is becoming increasingly rare over much of its range. Habitat loss and degradation are the main reasons for the decline. Additionally, persecution by humans has also had a negative impact on Massasauga populations. In October 1999, the U.S. Fish and Wildlife Service added the Eastern Massasauga to the candidate species list (in danger of extinction within the foreseeable future). The Massasauga is also listed by the State of Michigan as a "Species of Special Concern."

Misinformation and negative publicity surrounds this



unassuming snake. Massasaugas are docile and secretive and will try to escape rather than fight. They rarely attempt to bite unless highly agitated. You are quite unlikely to ever encounter one though. It has taken NAP's Herpetologists nine years to encounter one in our parks. So celebrate the fact that at least one of our parks is worthy to be their home.

For more information regarding the Eastern Massasauga Rattlesnake check out <http://herpcenter.ipfw.edu/>

Biocontrol: Another Tool Against the Invasive Wave *by Eric Ellis*

Biocontrol is the newest addition to NAP's Integrated Pest Management plan. There are varying definitions of biocontrol, but generally speaking, it is the planned release of a pest's natural enemies (predators and/or parasites) to reduce the pest populations and their impacts. This isn't a new technique; biocontrol has been around for thousands of years. For example, there is evidence of early Chinese and Middle Eastern orchard growers using predacious ants to control insect populations on their trees. If you have a cat to kill the mice in your basement or have released ladybugs into your garden, you've also practiced biocontrol.

As with other invasive-control techniques, biocontrol has positive and negative qualities. Let's talk about the bad news first. Biocontrol is expensive to initiate, research, and set up. An invasive-species researcher once told NAP that it takes approximately \$1 million to successfully research and introduce a biocontrol species. The initial start-up costs are so high because researchers have to be sure that the introduced biocontrol species will not start killing native species after the invasive population has diminished.

On the positive side, once a biocontrol species is introduced, follow-up costs are very low to nil and the pest's populations are kept in check. Over the long run, biocontrol tends to be less expensive compared to tradition-

al control techniques such as manual removal or herbicide use. Biocontrol is a bargain considering that Cornell University estimates invasive species cost the U.S. \$138 billion every year. Biocontrol also has very little to no harmful impact on humans and the environment, especially when compared to certain pesticides.

In Ann Arbor NAP has recently collaborated in the introduction of two biocontrol species on one of the most dreaded invasives, purple loosestrife (*Lythrum salicaria*). The two beetle species (*Galerucella californiensis* and *G. pusilla*) were initially released in 2001 into Plymouth Park. In 2002 they were released in Gallup Park. This year the locations expanded to other parts of Gallup Park and to Bandemer Park. So far we have seen good results with excellent loosestrife dieback, especially around the Youth Fishing Pond in Gallup Park.

We are eagerly awaiting the results of research on other biocontrol species, especially to control garlic mustard and other common invasives in our area. NAP will continue to consider biocontrol as part of our Integrated Pest Management strategy to keep our natural areas healthy.

For more information on biocontrol check out <http://www.anbp.org/index.htm>.

Winter 2003 Natural Area Preservation Volunteer Stewardship Calendar

DECEMBER

December 9, Tuesday

Stewards' Circle, 7:30 to 8:30 am

Location TBA (hopefully in the Dana Building on U of M's campus)

This month's topic: Sharing technological resources. Many of us have designed databases for keeping track of volunteers, scheduling work to be done, etc. Join us for this look at different examples of these databases. Bring a CD, we'll delete data from the files, and you can take home a database that will meet your needs.

JANUARY

January 13, Tuesday

Stewards' Circle, 7:30 to 8:30 am

Bruegger's Bagels, North University
This month's topic: Trails. Locating trails in a preserve or natural area can be one of the most significant things done there. It impacts how people will use the area, even how they will perceive it. Trails also have a major impact on vegetation, animal life, soils, and microorganisms.

FEBRUARY

February 29, Sunday

Salamander Survey Kick-Off Meeting, 10:00 am to 12:00 noon

Leslie Science Center Nature House
Join Ann Arbor's (and Michigan's) first salamander-monitoring program. With your help, we will learn a great deal about these species' population densities and distribution around town. Volunteers with a bit of identification experience and a willingness to get muddy, please apply. There will be a \$10 fee associated with the kick-off and survey to cover the cost of materials provided to volunteers. Please register by calling NAP.

February 29, Sunday

Frog and Toad Survey Kick-Off Meeting, 1:30 to 3:00 pm

Leslie Science Center Nature House
Volunteers can learn more about Ann Arbor's amphibians while contributing to our inventory efforts. The meeting will cover general information about the annual survey and is required training to participate in the survey. Route sign-up will also take place. Please call the NAP office to register or for more information.

MARCH

March 2, Tuesday

Public Meeting - Prescribed Ecological Burn Program, 7:30 to 9:00 pm

Leslie Science Center Nature House

Fire is used as a restoration tool in some of Ann Arbor's natural areas. This meeting will provide information and an opportunity for discussion about NAP's Prescribed Ecological Burn Program.

March 3, Wednesday

Prescribed Burn Crew Training, 12:00 to 5:00 pm

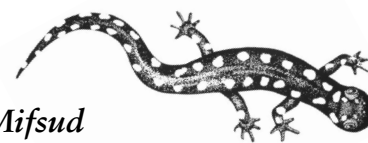
Leslie Science Center Nature House
This is the required training session for all volunteers interested in assisting with the prescribed burns to be held this spring and fall. Burns take place Monday through Friday between 10:00 am and 6:00 pm. Pre-registration is required by February 23, as enrollment is limited. Please call the NAP office to register or for more information.

March 9, Tuesday

Native Landscaping Workshop, 7:00 to 9:00 pm

Leslie Science Center Nature House
Interested in native plants? Would you like to learn how to establish them in your yard? Then this workshop is for you! Topics will include site assessment and preparation, seed and plant selection, installation, and maintenance. Program fee: \$15. Please pre-register by March 1, by calling NAP.

Salamander Monitoring Program *by David Mifsud*



That's right, NAP will begin its first salamander-monitoring program in the spring of 2004!!! This is the first such program to be initiated in our State. The study will cover 10 wetlands, looking specifically at the presence of salamanders, their population size, and their distribution. This will be the pilot year for the program, so we are currently collecting information and selecting potential study sites. If you know of any site you think would be an ideal place to survey, please let us know. We are cur-

rently seeking volunteers who are looking to have fun and also have experience in the identification of salamanders. This survey is more interactive than our Frog and Toad Survey, so you may end up muddy. The kick-off will be Sunday, February 29, from 10:00 am to 12:00 noon. Refreshments will be provided. Registration is \$10 dollars. This covers the cost of your field guide, funnel traps, and snacks. For more details, see the Stewardship Calendar above.

Staff Updates

hello...



Laurel Malvitz—I am very excited to be back in Ann Arbor. I graduated from the School of Natural Resources and Environment in 2000 with a BS in Resource Ecology and Management. Since then, I worked for the

U of M, The Nature Conservancy, and the Stewardship Unit of the Michigan DNR. I've only spent six months not living and/or working in Ann Arbor. It's good to be home!



Lauren Theodore—I recently moved to Ann Arbor after a summer spent traveling out West. I've been living in Atlanta, Georgia for the past three years, most of which was spent working as a biologist for the National

Park Service at Chattahoochee River National Recreation Area. Originally from the Boston area, I hope that the South has not completely ruined my tolerance for winter weather—I'm extremely excited to see snow again!



Steve Wilson—I've been an outdoorsman from the start. Growing up in northwest Ohio, I stuck close to my roots by attending college at The Ohio State University. I earned a B.S. in Natural Resources, graduating in

June 2000. Some of my past work experiences include working for such agencies as the Ohio Department of Natural Resources, the Bureau of Land Management, and Winous Point Nature Conservancy.

farewell...



Ross Orr—In my 13 months at NAP I've learned a huge amount and gained enormous respect for the hard work that goes into controlling the invasives in Ann Arbor's parks. And this gray-beard will always cherish the

way my twenty-something colleagues made me feel like one of the gang—tutoring me on the finer points of such phrases as, "dude, that is so sketch." But along with the camaraderie, there are also those mysterious rashes, clammy Tyvek suits, sunburns, hornet stings, and 40-pound water backpacks. So for the moment I've decided to pass the baton to my more resilient young friends and move on. I hope to stay in touch with NAP for possible future mischief; and I'm sure you'll be seeing me at a few burn days soon...

around town...



Lily Greta Gray Wright, the newest addition to the NAP "family". Past NAPper Dana Wright had a beautiful baby girl on October 12, at 4:37 am, weighing in at 8.5 pounds. We hear that the whole family is doing quite well.

***NAP wishes you the best!!!

Coordinator Corner *continued from page 2*

Hopefully we, like mom, have learned from our mistakes. If you go to Furstenberg now, and look toward the east end of the parking lot, you'll see that we're re-attacking the invasive shrubs in this area. But this time we're going a bit more slowly, fully anticipating the amount of follow-up this site will require and being careful to not "bite off more than we can chew." This time we know we're in it for the long haul. Ecological restoration, like good

human health, is not a one-time operation. It's a long-term commitment that requires regular maintenance. But the rewards, be they a carpet of spring wildflowers or the strength to go for a walk to enjoy those flowers, are well worth the effort.

- David Borneman,
NAP Manager

NAPpenings

Thank You For Your Help At Our Workdays...

- YMCA Youth Volunteer Corps—for many, many workdays this summer
- Incoming Ave Marie students
- Professional Volunteer Corps
- The ENTIRE Green Hills 7th grade
- U of M Law School students
- Circle K
- EMU GREEN
- U of M Project SERVE, also for numerous workdays

Study Conducted at Kuebler-Langford Nature Area

University of Michigan researcher Raymond Barbehenn has published a paper with fellow researchers Ann Walker and Farhad Uddin. They have been studying seasonal changes of antioxidants in the leaves of sugar maple (*Acer saccharum*), red oak (*Quercus rubra*) and trembling aspen (*Populus tremuloides*). They speculate that tannin-tolerant caterpillars maintain higher concentrations of antioxidants than do tannin-sensitive species. The research was conducted at Kuebler-Langford Nature Area and Matthaei Botanical Gardens. Their interest in this topic stems from the theory that higher concentrations of antioxidants improve the fitness of herbivorous insects. To find out more about this study, contact Raymond Barbehenn at rvb@umich.edu.

17th Annual WAM Conference-Woods and Water

Join the Wildflower Association of Michigan, other landowners, professional growers, designers, environmentalists, educators, and municipal employees on March 7th and 8th at the Kellogg Conference Center on the beautiful Michigan State University campus. Program topics will include: wetlands; watersheds; managing small family woodlots; fun topics like frogs, dragonflies, and orchids; and technical discussion regarding restoration projects and green roofs. For full conference information, check the WAM website at <http://www.wildflowersmich.org>. Register by contacting Marilyn Case at MCCase15300@aol.com or 517.630.8546.

Southeast Michigan Stewardship Network (SN)

The SN continues to hold monthly Stewards' Circles. These informal discussions with professional and volunteer stewards are a great chance to explore ecological stewardship further. Everyone is invited to participate (see the Stewardship Calendar on page 5 for more details). You can visit their web site at www.snre.umich.edu/stewardshipnetwork to learn more about upcoming workshops in the "Continuing Professional Education Series," as well as information about the many stewardship opportunities in the region. The SN has recently launched the site and is continually adding new elements and expanding others, so visit regularly.

Scarlett Mitchell Nature Area *continued from Page 1*

Judy Schmidt, with her husband Manfred, helped to save Scarlett Mitchell from development 35 years ago. She is one of the volunteer naturalists who loves seeing the kids learn. "On a trip last May", she recalls, "a little girl almost cried because she had tripped in the mud-a few minutes later she was petting a leech. No one had ever said to her-'Oh, a leech is yucky.'"

Another common sight at Scarlett Mitchell are work groups. Neighbors have put in over 900 hours cutting buckthorn, putting wood chips on trails, pulling invasive plants, and building birdhouses.

Still Scarlett Mitchell remains a work in progress. Efforts are needed to beat back the thickets of invasive buckthorn that edge the woods—but even this work can be a delight. Manfred Schmidt has chopped down acres of buckthorn and over the years has grown fond of his old

foe- "When you cut them the heart wood is very beautiful, and they are so tenacious." He's been at it for 35 years but is not done yet "In winter, he says, there is nothing better than two or three hours of buckthorn cutting."

Scarlett Mitchell, an island of nature in the urban landscape, nourishes the souls of young and old. Judy Schmidt notes that the Colonial Square Cooperative where she and most park neighbors live is tight quarters, "What makes living in the close space liveable is having this greenspace nearby."

Stealthy Invaders *by Bev Walters*



I've long grown sweet woodruff (*Galium odoratum*) as a groundcover in my garden without the least concern that it's an invasive species. After all, Ed Voss writes in Michigan Flora that it is "rarely escaping" and

notes just one occurrence of this in northern Lower Michigan. So I was surprised several years ago when I saw it covering large areas in an Oakland County woodland. Shortly afterwards, I started encountering it in local natural areas—just small, isolated patches, but it made me question my initial lack of concern.

Then last year, the Park Stewards at Scarlett-Mitchell Nature Area alerted us to a strange plant rapidly creeping into the woods. When I investigated, there was indeed an unfamiliar carpet of mottled leaves and yellow flowers marching over the wildflowers. It turned out to be golden archangel (*Lamiastrum galeobdolon*), a plant in the mint family. Since then I've noticed it being marketed as adapted to dry, shady conditions. No doubt it would

be perfectly at home in our upland, oak-hickory natural areas. Pretty scary...

Though these two species are not yet of concern to most people who monitor invasive species, we at NAP have decided to target them along with buckthorn and garlic mustard. They've demonstrated bad behavior locally, like the better-known invaders, and we don't want to give them the opportunity to gain the same notoriety.

Purple winter creeper (*Euonymus fortunei*) is another ornamental groundcover that has already proven to be highly invasive elsewhere and has been showing up more frequently of late. It is very similar to English ivy and will also climb up structures and trees. But unlike its counterpart, purple winter creeper readily produces fruit that is eaten and dispersed by birds. So far it's turned up in 10 local woodlands.

Being alert to new, potentially invasive plants is one of the many challenges faced by people who work protecting natural areas in an urban environment. These plants have tried to slip in under our radar, and we at NAP appreciate the extra eyes of our park friends in helping us spot these unwanted newcomers!

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