

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 2006

Park Focus: Barton Through the Ages...

by Tamara Convertino

Just by chance, a NAP alumnus was sifting through some old family photos and found the negatives from a roll of film his father had taken, flying over Ann Arbor, in October of 1957. One of these old photos hangs in the NAP office now.

If you can imagine flying over Ann Arbor in 1957, we are looking northwest over Longshore Drive and Argo; following the river upstream; under M-14, which is not yet fully constructed, to the Barton oxbow (see photo on page 6). If it weren't for the characteristic sinuous curve in the river or the straightaway of the railroad tracks, you would barely be able to recognize the Barton Nature Area that exists today. There are a handful of large trees on the east side near the railroad tracks and a pocket of smaller trees in the center of the land. Besides these, the landscape is incredibly open. It appears as if the park was farmed or grazed at some point in the past.

NAP has other old black and white pictures as well. Several photos have been taken looking down from the open fields of Bird Hills and across the river to the Barton oxbow: an open expanse of field on an anonymous Michigan winter day over fifty years ago.

There is nothing like old pictures and stories to fuel my imagination. I am first a biologist, interested in numbers and species counts and ecological processes. But I am also a poet, engulfed in the mythology of a place: the

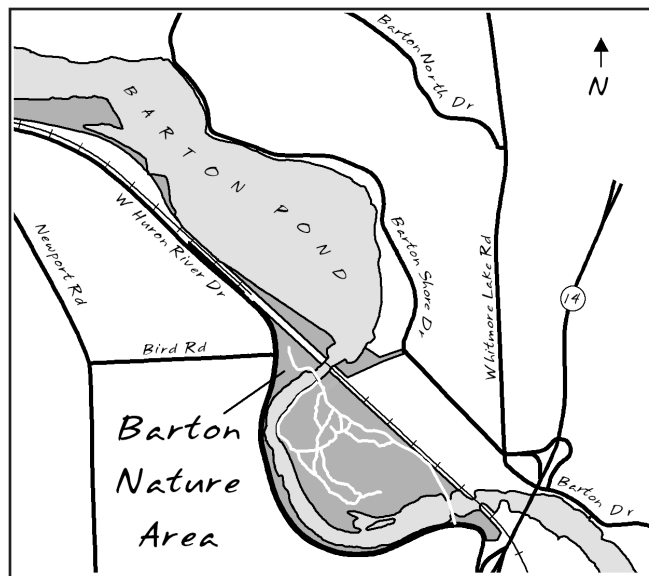
connection between a natural area and the old pictures, postcards, and stories associated with it. It is like a marriage between scientist and mythologist: the mind and the heart. The two sides combine to tell the whole story of a place: what the land used to look like; what animals, plants, and people lived there; what the land looks like now; and what the land will look like in years to come.

When my friend Eleni heard about the old picture hanging in the office and that I was in charge of writing about the park for the newsletter, she wanted to tag along to discover the stories from the pictures and the narratives left behind in the land.

We begin our walk and exploration at the southeast footbridge. The sky is bright blue, with only a few wisps of clouds. The sun is bright

and beating down on the tops of our heads. And the chlorophyll in the leaves is just starting to break down; hints of reds and oranges are beginning to show their way through.

From the center of the bridge, we stop to admire that characteristic bend in the river: the same bend so easily identified in the old black and white photos. I found an old postcard on the Ann Arbor District Library website with the title "Broken Dam and Old Mill." From that curve in the river, I believe the base of the footbridge was actually built on the site of this old mill. The "Broken Dam" was constructed from dirt and stones, and was built (and destroyed) before Argo and Barton



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Coordinator's Corner

A Restoration Success Story—By the Numbers

One of the challenges we face is communicating to the public, and to our own new staff members, the progress we're making controlling invasive plants and bringing back native ecosystems. "Before and after" photos are dramatic but not very quantitative, and sometimes it's nice to have hard numbers to help tell our story.

So, one of the things that we've been tracking in recent years is "hours of effort." If 4 staff members spend half a work day (4 hours) pulling weeds at a site, we record that in our database as 16 hours of effort controlling that particular invasive at that site using that method on that date. Although there are still some bugs to work out of the database, we are finally starting to accumulate enough good data to more quantitatively tell our restoration success stories.

Here's one example from our purple loosestrife control efforts at Barton Nature Area. The fens and sedge meadows there are of a high enough quality that it is worthwhile to remove the purple loosestrife by hand, rather than waiting for the biocontrol agent—the *Galerucella* beetle—to get established. "By hand" is, however, a much more labor-intensive method. Licensed applicators spray a small amount of wetland-safe herbicide into the palm of a glove, wipe that glove up individual stems of every purple loosestrife plant at the site, then break off, bag, and remove every flowering head of the plants. (They do this in sweltering hot weather wearing chemical-resistant—hot!—Tyvek jumpsuits.)

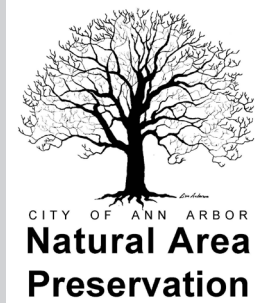
Is all this hard work paying off? Yes! And finally we have the data to support it. In 2003, the first year for which we have good data, the NAP field crew spent 108 hours controlling purple loosestrife at Barton. In 2004, they spent 44 hours, and in 2005, 43 hours. Finally, in 2006, they only had to spend 28.5 hours. What's more, this was the first year they were able to treat all the loosestrife at the site!

Now that doesn't mean that we've forever eradicated purple loosestrife from Barton. More will appear there in 2007. But hopefully the amount of effort needed to control what comes back will be even less than was needed this year. And that will allow us to shift our resources to another site that we haven't been able to get to in the past, and to start collecting data to tell another "restoration success story" there. Stay tuned!

-David Borneman, NAP Manager

One touch of nature makes the whole world kin.

- William Shakespeare



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

Volunteer of the Year Award

Congratulations to Gwen and John Nystuen – NAP’s 2006 Volunteers of the Year! John and Gwen have spent hundreds of hours inventorying, protecting, and promoting the welfare of our local amphibians. They have helped NAP conduct our Frog and Toad Survey since its inception 12 years ago. They also have volunteered with our Salamander Survey since it began three years ago! They’ve helped us compile data, take pictures, and were the first folks to document the Tiger Salamander in Ann Arbor parks!

Gwen and John have a very impressive resume of volunteer activities, including helping create the Michigan chapter of the Sierra Club (and still working on their local newsletter), working with the Ann Arbor Natural Features Commission (which created the city natural features ordinance), and working on the Michigan DNR’s Frog and Toad Survey. They’ve also volunteered with the Mallets Creek Association, the Ecology Center, the League of Women Voters, the Burns Park Neighborhood Association, and the Huron River Watershed Council. Gwen currently serves on the Parks Advisory Commission. Lastly, they helped in the creation of NAP!

David Mifsud says, “it’s not only the hundreds of hours they volunteer, but their continued passion and positive energy!” We at NAP thank John and Gwen for all they’ve done for NAP, our community, and our environment!



John and Gwen Nystuen accept their award at the Volunteer Appreciation Potluck, November 14, 2006

Don't ask so much what the world needs. Go out and do what makes you come alive, because what the world needs most are people who have come alive.

-Howard Thurman

Volunteer Year in Review

by Dana Wright

Like Jason Frenzel, I started out with NAP as a burn crew volunteer. Donning a bright yellow suit and a 40-pound water backpack was my first experience volunteering. The NAP staff did such a great job making me feel like my work was appreciated, and we had so much fun; it barely felt like work at all. After that experience, I have been hooked on volunteering (and on burning). Of course, that’s what we want to happen to all of you as well! Since officially joining the Outreach Team this year, I have had many opportunities to share my enthusiasm and pass on the appreciation.

We like to impress you folks with lots of numbers at this time of year: how many volunteers we had, how many hours of their time they donated to us, and how much of our work was done by these wonderful people. Unfortunately, our database is sick, and these always impressive numbers are unavailable at this time (though they’re bound to be even more impressive

than last year). Wonderfully, we have a volunteer (yeah volunteers!) spending many hours getting the database back on track and making improvements along the way! Thank you Bob Balicki! I would also like to extend a special thanks to Aunita Erskine, last year’s Volunteer of the Year, who continues to be an outstanding help to us in many arenas; AC Tanner, who has been a very dedicated volunteer Park Steward with us since 2000 and who joined our burn crew this year; Ralph Powell, who has been photo monitoring for us since forever and who is always enthusiastic about new projects; and to Mark Mainieri, who started coming to workdays this spring and can’t seem to get enough. Thank you volunteers for a great season! Our stewardship workdays have been successful, our birds, frogs, toads, and salamanders have been counted, photographs have been taken in all the important places, and we have burned many acres of natural area. Thank you all for your wonderful help!

Herp Update (and the New High School)

by Dave Mifsud

The 2006 field season will go down in my mind as one of the best years to survey amphibians and reptiles! A mild winter, followed by a cool spring, and warm (not hot) summer, made for a great year. The frogs were calling all over the place! We are still compiling the results, but so far things look good at many places in the city.

This year was also good for salamanders! Not only did we record observations from known sites, but we also documented Spotted Salamanders (*Ambystoma maculatum*) at Sugarbush Park, which constitutes a new record for this species. This is very exciting because Sugarbush was also a site selected to be a part of the translocation effort (removal of wildlife from one site and introduction to new location) for frogs from the new Ann Arbor High School site. In addition to finding Spotted Salamander adults and egg masses, we also documented the reintroduction of the Spring Peeper (*Pseudacris crucifer crucifer*) and Wood Frog (*Rana sylvatica*). Neither species was observed in Sugarbush over the last few years, and habitat isolation restricted the ability of new animals to recolonize this beautiful natural area, despite the presence of suitable habitat. This year, we observed adults, eggs, and tadpoles during our work at Sugarbush.

At the new high school site, Wood Frogs and Spring Peepers were doing extremely well. These and four other frog and toad species successfully bred and produced young in both natural and created wetlands:

the Gray Treefrog (*Hyla versicolor* and *H. chrysoscelis*), Green Frog (*Rana clamitans*), and Eastern American Toad (*Bufo americanus americanus*). The Chorus Frog (*Pseudacris triseriata triseriata*) was present in smaller numbers and was not observed breeding, so it may take longer to reestablish, but we will continue to monitor its success. In addition to frogs and toads, we observed three salamander species breeding in both natural and created wetlands: the Spotted Salamander, Eastern Newt (*Notophthalmus viridescens*), and most notably the unisexual hybrid Ambystomid (*Ambystoma spp.*). All three were documented producing recruits in 2006 (little baby salamanders and newts). And we can't forget about the Red-backed Salamander (*Plethodon cinereus*). This species is terrestrial, so it does not require wetlands, but it does need healthy woodlands to survive. Our survey efforts showed all life stages of this species at the new high school site! Much more work needs to be done to track the long term success of amphibians at this site, and we also need more data on the success of the snake species there, but this is a great start!

It is not just today's effort that counts, but also the effort from years past that makes our work today possible. The continued effort of volunteers like you who inventory parks, listen for frogs and toads, restore habitats, and take time out of your day to rescue wildlife, makes this all possible. Thank you all so much for your hard work this and every year. You make NAP the success that it is!

Barred Owls

by Dea Armstrong

This past spring and late summer, NAP received several reports of Barred Owl calls at Bird Hills and Eberwhite Woods. (In previous years, they were heard in Barton.) This is great news and could mean that a pair of Barred Owls is trying to set up a home in our parks.

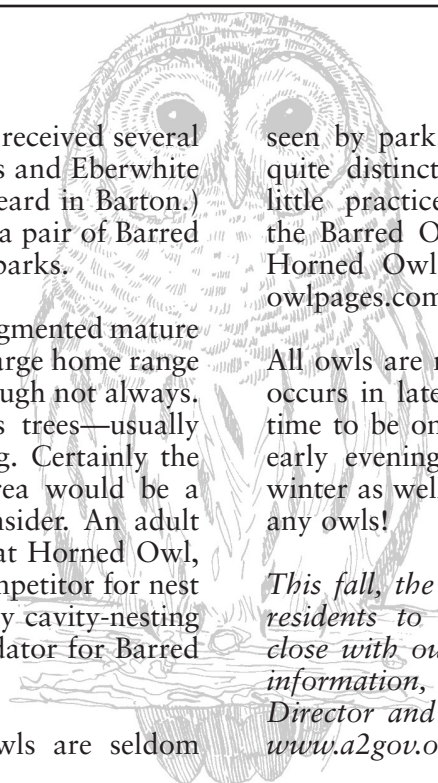
Barred Owls prefer large blocks of unfragmented mature forest with some conifers. Often, their large home range (400 acres) is associated with water, though not always. They seek to nest in large, deciduous trees—usually in cavities on the side or top of a snag. Certainly the Barton-Bird Hills-Kuebler Langford area would be a site that a Barred Owl pair might consider. An adult Barred Owl's main predator is the Great Horned Owl, which would also be the most likely competitor for nest sites in our parks. Raccoons enjoy many cavity-nesting birds' eggs and are also a common predator for Barred Owl young.

Because of their nocturnal nature, owls are seldom

seen by park visitors. However, Barred Owl calls are quite distinctive and can be easily identified with a little practice. The “who-cooks-for-you-all” call of the Barred Owl is distinctly different from the Great Horned Owl's call. To hear both, check out www.owlpages.com/sounds.php.

All owls are most vocal prior to nesting season, which occurs in late winter and early spring. This is a good time to be on the alert for their calls, especially in the early evening. Birds are known to call during early winter as well, so listen up and let us know if you hear any owls!

This fall, the Leslie Science Center welcomed in some residents to its new raptor facility! Come visit up close with owls, hawks, falcons, and more. For more information, contact Francie Krawcke, Educational Director and Bird Curator, at 734.997.1553, or visit www.a2gov.org/flsc.





Prescribed Ecological Burn Public Meeting & Crew Training

Burn Crew Training
Thursday, March 8, 2007
12:00 noon - 5:00 pm

Pre-registration required by March 3.
This is the required training session for all volunteers interested in assisting with prescribed burns, to be held this spring and fall. Burns typically take place Mon-Fri between 10:00 AM and 6:00 PM.

Public Meeting
Wednesday, March 7, 2007
from 7:30 - 9:00 pm

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 the Prescribed Ecological Burn Program.

SALAMANDER SURVEY KICKOFF
Sunday, February 25, 2007 10:00 am - 12:00 noon
Leslie Science Center Nature House,
\$10.



FROG & TOAD SURVEY KICKOFF

13th Annual
Frog & Toad Survey!
Sunday, February 25, 2007
1:30 - 3:00 p.m.
Leslie Science Center
Nature House



NAPpenings

Thank You...

- ♥ Keith Miller for your (tax-deductible) donation
- ♥ Pfizer for matching Keith's donation
- ♥ Bruno and Johanna Giordani for your donation
- ♥ Northville High Interact for removing shrubs at Furstenberg
- ♥ Greenhills 7th graders for trail work at Barton
- ♥ UM Scholars for removing shrubs at Argo
- ♥ Junior High Youth Gathering for trail work and invasives removal at Ruthven
- ♥ Youth Volunteer Corps for help during the summer
- ♥ UM Discovery Camp for helping at Furstenberg
- ♥ UM Delta Sigma Theta for trail work at Cedar Bend
- ♥ Students at Rudolf Steiner for work at Bird Hills
- ♥ Students at Ann Arbor Academy for pulling garlic mustard at Bluffs
- ♥ All the volunteers at Garlic Mustard Weed Out Day!
- ♥ Scout troop 161 for pulling garlic mustard at Marshall
- ♥ Master Gardeners for ongoing support at the Furstenberg Native Plant Garden
- ♥ Volunteers from Safe House for pulling garlic mustard at Forest and Parker Mill
- ♥ Alpha Phi Omega for ~200 hours of volunteer work
- ♥ Temple Beth Emeth for all their work at Argo for Mitzvah Day
- ♥ Members of SOLAR (School for Outdoor Leadership, Adventure, and Recreation) for joining us on National Public Lands Day
- ♥ Professional Volunteer Corps for helping at Dicken Woods

NAP Blog

You can read and respond to what our crew does on a semi-day-to-day basis. Check out www.a2nap.blogspot.com.

Waste Knot

NAP is now a Washtenaw County Waste Knot Partner! The Waste Knot Program provides recognition, technical assistance, and education to organizations that exhibit leadership in waste reduction and recycling. NAP is proud to join the ranks of other Waste Knot recipients.

8th Annual National Invasive Weeds Awareness Week

The 8th Annual National Invasive Weeds Awareness Week (NIWAW 8) will be held in Washington D.C. from February 25 to March 2, 2007 to focus national attention on the impacts of invasive weeds. Events address the role of the Federal government in dealing with invasive weed problems. The schedule will provide ample time for attendees to meet with their Congressional delegations, individual federal agencies, and each other. For more information, check out www.NAWMA.org.

A little volunteer help...

NAP is looking for a part-time office assistant to join our team. Projects include helping Dave do anything he needs (he's so good at keeping us hopping), working on data input for our volunteer and inventory database, answering the phones, and all sorts of other fun things that fall into our lap.

Park Focus: Barton Through the Ages... *Continued from page 1*

dams were built. We hunt around awhile under the bridge but find no signs of an old mill. However, we do notice that the trail on the other side of the river is built up with dirt and lots of stones: potential evidence of the old dam.

From the middle of the foot bridge, we look across over the cattail marsh and wetland area. Every summer, the crew spends several hot, humid days in the wetland controlling invasive purple loosestrife. From old photo point pictures, one can see that the work is paying off and that this area is not as dominated with this beautiful and deceiving purple-flowered plant as it was a few years ago (see the Coordinator's Corner on page 2 for more on this).

Eleni points out three swans near the cattails. The pair had their nest right over there, on a point of the wetland that juts out into the river. In the early spring, I watched while the female sat on the nest and the male stood tall and on guard. Four cygnets hatched, but as we approach winter, only one remains. In the 1970s the residents near Barton worked very hard to have pairs of swans introduced to the area. It was thought that not only would they be aesthetically pleasing, but they would also help manage undesirable aquatic vegetation.

We cross over the bridge and step onto the foot path, which was constructed in 1991, along with the bridges, to create public access to the existing informal network of trails. This trail is wide and wood-chipped. Several weeks ago, the crew, along with 70 seventh graders from Greenhills School, spent the morning running back and forth along the main trail with loads of wood chips in plastic sleds. The group comes every year to happily volunteer and make the park more user-friendly.

Once we leave the section built on top of the ridge,

the main trail is lined with large bur oaks, which must be the large oaks from the old aerial photo. They are beautiful, with twisting, long, outreached branches. The massive old oaks have been liberated from the tangle of invasive woodies by the hands of numerous workday volunteers dating back to the first Barton workday in 1995. If you take a closer look, you will see lots of new oaks in the understory. Further down the trail, on the right hand side, I point out a patch of black raspberry under some younger oaks. I tell Eleni how, in the spring while pulling garlic mustard, I unintentionally scared a pheasant off her nest here. There were 14 speckled eggs nestled in the mesh of vines.

Eleni asks what this place used to be. I don't really know. All we have are those old photos and the clues left behind in the seed bank, I tell her.



Aerial photograph of Barton Nature Area (in upper left) taken by Lyman Orr, October 1957.

The City acquired Barton from Detroit Edison in 1963. There are not many clues left about the actual history of the land. I can only guess based on the pictures and what the

park looks like presently. The photos show an open expanse with only a handful of big trees, so we can presume that the land was grazed or farmed.

The present vegetation gives us plenty of ideas about the history of land. It suggests that a majority of the oxbow was prairie and oak savanna prior to being farmed. The area became old field after being abandoned. Currently, Barton is a matrix of old field, dry prairie, wet meadow and shrubland, mesic forest, and emergent marsh.

As we walk along the trail, the oaks fall out and the vegetation becomes thick and shrubby. Look to the right, just above the shrubs: a huge pear tree bearing tons of fruit! Another hint to Barton's history.

On the other side of the shrub thicket and between the railroad tracks is a recovering prairie. Prairies are plant

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Park Focus: Barton Through the Ages... *Continued from page 6*

communities that thrive with fire; it is not a coincidence that one is so closely associated with the railroad. Historically, sparks from trains would ignite the adjacent vegetation, maintaining prairie communities. The plan for this part of Barton is to open up corridors through the thicket, giving the high quality prairie plants on the other side a passageway to disperse to the old field on the other side of the trail. Eventually, there will be enough fuel for a very hot fire to go through the old field vegetation once more, as it did in some of NAP's earlier burns here. A hot fire would help to control some of the woody invasives that are a problem in this park and would bolster the prairie natives. The crew will be working here during the winter to continue creating these corridors by controlling invasive shrubs like buckthorn and honeysuckle.

We continue down the trail, stopping at the bench. We look into the mesic forest and point out the basswoods and the open understory, which is filled with wildflowers in the spring. If we continue to walk on the main trail, we will end up at the footbridge and the dam. We could continue along the dam beside Barton pond, but I really want to show Eleni the old field. So we take the next trail on the left, into an archway of honeysuckle and buckthorn.

This area is a patchwork quilt of open areas and islands of shrubs. Barton is special because it highlights what an old field can be: there are pockets of high quality plants; it provides a complex habitat for wildlife, which includes some amazing birding opportunities; and it provides a wealth of opportunities for the community. There is a non-stop trickle of hikers, walkers, runners,

bikers, birders, fishers, and canoeists. It is a very social place.

The new trail we are on comes out in the open area of the old field; this is the main stage for the woodcock show in the spring. The burns that NAP conducts here serve as an important tool in maintaining and creating venues for the woodcocks to dance and attract females. I tell Eleni about the squat little birds, their huge beaks, and their amazing aerial acrobatics. She smiles and says we will have to come back in the spring.

There are many side trails. We find that some lead us to scenic views of the river and others end in the middle of thickets. We discover some young oaks in the sandy soil. The trail we are on presently loops around near the river, back through the shrubs and ends near the massive oaks on the main trail. Time to head home.

News Flash: This November, while crashing through dogwood shrubs at Barton Nature Area with Tony Reznicek (U of M Botanist), we (well, OK, "he") stumbled upon a new population of a state-threatened plant: Spiranthes ovalis, Oval Ladies'-tresses - an orchid (but a tiny one that's not so showy). Tony thought this was only the 5th or 6th known population in the state (one of the other ones is at Swift Run Marsh in southeast Ann Arbor).

If you would like to help us remove invasives, conduct burns, or count woodcock, please give us a call and let us know!

Staff Updates

hello...

Bonnie Wessler

Hello NAP! I am the newest NAPper, looking forward to a NAPtastic experience here with NAP. Transplanted from Ohio, I received my B.S. in Urban & Regional Planning from Eastern Michigan University and am currently pursuing a master's in the same from the University of Michigan. While here at NAP, I will be working on integrating our databases and our maps to make tracking our progress a bit easier.



Michelle Crowder

Greetings! As a native of southeast Michigan, I am happy to be back among its big oaks and diverse natural communities! I attended the University of Michigan as an undergraduate, where I studied biology and ecology. The next couple of years I spent living, working, and traveling in western North America and the land down under. Most recently, I completed a master's degree in Botany at the University of Vermont, where I studied genetics of small plant populations. I look forward to reacquainting myself with this great community as Outreach Assistant and hanging out with fellow plant aficionados/nerds.

Your Role in the Spread of Invasives

by Lara Treemore Spears

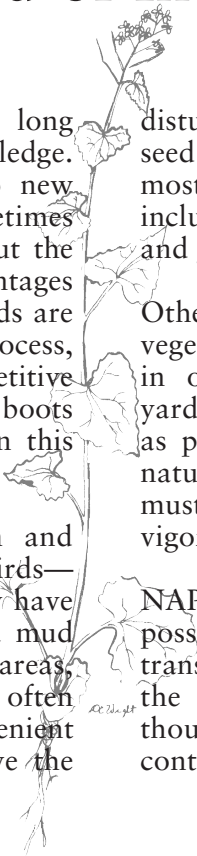
Imagine a device designed to be transported long distances by others without their consent or knowledge. When moved to new areas, it has access to new opportunities and untested conditions. Sometimes conditions are favorable and sometimes not, but the free transportation gives the device definite advantages over less mobile objects of a similar nature. Seeds are some of the best natural examples of this process, and invasive species are some of the most competitive exploiters of free transportation. Your muddy boots or your pet's feet may even be participating in this dynamic.

Although some invaders, such as buckthorn and honeysuckle, have berries that are dispersed by birds—another unknowing transportation agent—many have small seeds that adhere to boots and paws via mud and other substances such as tree sap. In natural areas, the first place new invasive plants appear is often alongside trails. Trails are particularly convenient highways for invasives because trail edges have the

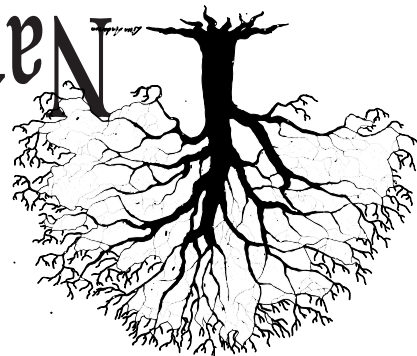
disturbed soil preferred by many invasive plants for seed germination. The invasive species transported most frequently by humans are those with small seeds, including garlic mustard, dame's rocket, bittercress, and Japanese knotweed.

Other inadvertent transportation of invasives occurs vegetatively, when stems or roots of plants end up in our natural areas and re-sprout. Dumping of yard waste into parks is one way that plants such as periwinkle and creeping-charlie get a foothold in natural areas. One of the reasons we “hang” garlic mustard out to dry after pulling it is to prevent its vigorous root system from regrowing.

NAP's recommendation is to stay on trails whenever possible. This reduces the likelihood that seeds will be transported to new areas of the parks and minimizes the trampling of native wildflowers. With some thought and careful footwork, it is possible to avoid contributing to the spread of invasives.



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