APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2016.** Please include this application form with electronic entry.

PROGRAM INFORMATION

County: Arlington County

Program Title: Magnolia Bog Restoration Project

Program Category: Environmental

CONTACT INFORMATION

Name: Lynne Porfiri

Title: Chief of Staff

Department: County Manager's Office

Complete Mailing Address: 2100 Clarendon Boulevard, Suite 302, Arlington, VA 22202

Telephone: (703) 228-0599 **Website:** www.arlingtonva.us

Email: Lporfiri@arlingtonva.us

SIGNATURE OF COUNTY ADMINISTRATOR OR CHIEF ADMINISTRATIVE OFFICER

Name: Mark J. Schwartz

Title: County Manager

Signature: Mark J. Schwartz Digitally signed by Mark J. Schwartz
Date: 2016.06.01 09:25:42 -04'00'

2016 Achievement Awards
Virginia Association of Counties
Arlington County, Virginia

Program: Barcroft Magnolia Bog Restoration Project
4200 S Four Mile Run Dr, Arlington, VA 22206
Category: Environmental

Project Overview

Arlington County's Department of Parks and Recreation's Barcroft Magnolia Bog Restoration Project serves as a model for natural resource management by highlighting opportunities to incorporate community groups in environmental stewardship activities. The Magnolia Bog is located within the Four Mile Run Watershed at the southern end of Barcroft Park in Arlington County, Virginia. Within this twenty-five acre natural site are 18 separate freshwater springs, 23 plant species found nowhere else in Arlington County, 32 locally rare plant species, Virginia State Champion trees, County Champion and Significant trees, uncommon insects and a variety of locally rare animals. This globally-rare ecosystem, one of less than two dozen known examples in the world, represents just a fragment of the natural landscape that used to be common in Arlington County. The Barcroft Magnolia Bog faced degradation from nearby development, hydrological changes, impacts from invasive plants, and other environmental stressors. County staff developed a five-year plan (2011 – 2016) for restoration that included partnering with volunteer groups such as Arlington Regional Master Naturalists, Earth Sangha, Virginia Native Plant Society, and others. Volunteers engaged in stewardship activities such as invasive plant removal, vegetation inventory, vernal pool construction and native planting. The plan also included contracted removal of invasive plant species, particularly for species that could not be removed by hand. This contracted removal was funded in part by a

"Run for Wetlands" grant, sponsored by volunteers from the U.S. Fish and Wildlife Service. Additional resources were allocated to this project from the Department of Parks and Recreation's 10 year county-wide Invasive Plant Management Program. In 2016, the final year of the project, the Barcroft Magnolia Bog and surrounding buffer area is almost 90% clear of invasive plants. In addition, stewardship activities have resulted in new and increased sightings of long lost animals and plants. New colonies of spring peeper treefrogs, wood frogs, gray fox, yellow-crowned night-herons, and little wood satyr butterflies as well as uncommon plants such as dwarf ginseng, bloodroot, wood anemone, have been found in new locations and are expanding their range inside of Barcroft Park.

Explanation of Challenge

The Barcroft Magnolia Bog is home to the most sensitive ecological community in Arlington County. Barcroft Park contains both globally designated (G-1/S1) and state-rare designated (G3/S3) wetlands, high value natural forests and more locally rare plants than any other site in the county (See Attachment A). Some wetland plant species were reduced to extremely low population levels with little to no natural recruitment observed. In 2010, the Arlington County Board designated this twenty-five acre natural site as a Natural Resource Conservation Area (NRCA), and was listed as the most critical natural site within Arlington County to be threatened by the spread of non-native invasive plants. The resident Magnolia Bog Complex of wetlands (Terrace Gravel Seepage Bog) is one of only two dozen known examples in the world. Over the past ten years, a number of ecological studies and inventories have been conducted at the park (hydrology, native plant communities, geology, and wildlife studies) and collected data

provided the basis for a restoration effort. The collected data showed that invasive plant species represented the greatest long-term threat to rare native plants at the site.

Another important challenge at the Magnolia Bog and surrounding areas relates to water, which is the lifeblood of the wetlands at the site. While historic development has been documented as a source of direct wetland loss in the past, there are also ongoing hydrological concerns with the persistent loss of ground water from wetland areas. In the long term, reduced recharge in the uplands threatens to alter existing wetlands to a drier condition. This change would eventually encourage dry-loving species (xeric) to replace current wetland plants (hydric-mesic), destroying the high value plant communities and habitat within the NRCA.

How the Program was Carried Out:

In 2011, Arlington County's Natural Resource Specialist created the Barcroft Bog Wetland Complex Restoration Plan (now called the Barcroft Magnolia Bog Restoration Project, see Attachment B). The goals of the plan were to:

- Preserve high value natural lands through removal of non-native plant species and targeted reforestation of extant species
- Restore degraded wetlands through re-introduction of historically appropriate native plant species and wildlife
- Stabilize hydrologic regime to former conditions where possible to favor long-term stability of wetland plant communities
- Develop a "holistic" plan that favors an 'ecosystem" approach to ecological management of the site

The Barcroft Magnolia Bog Restoration Project was implemented from 2011 through 2016. Arlington County staff have also developed a long-term plan to maintain the work that has been accomplished as part of this effort.

Innovation through Partnering and Collaboration:

Restoration of the Barcroft Magnolia Bog is the result of a series of successful partnerships between Arlington County staff and local volunteer groups. To accomplish the scope of work, County staff created collaborative volunteer opportunities for planning, management, and monitoring of stewardship activities in this high value natural resource area.

Support and volunteer assistance was sought from the following groups for this project.

- Arlington Regional Master Naturalists (501-C)
- Windgate Townhome Community (residential neighbor)
- Earth Sangha (501-C)
- Virginia Native Plant Society (501-C)
- Remove Invasive Plants (RIP) volunteer group
- AmeriCorps Intern Team

Volunteers helped conduct inventories of invasive plants present at the site and recorded species and site information such as distribution and density. In addition, volunteers also set up monthly work days (Attachment C) and educational opportunities in order to gain more support for the project from the neighbors and local community.

In 2011, Arlington County allocated funds for contracted removal of invasive plant species in the upland forest and buffer zones of the park. County staff coordinated the contracted treatments with the work of the volunteer groups, cutting down on overall costs. Volunteers would do the labor intensive work of cutting the vines from trees, while the contractors would come in after to apply herbicides to the vines on the ground to eliminate problem species. This contracted work has continued through 2016 and has been very successful.

Also in 2011, Arlington County's Parks and Natural Resources Division was awarded a grant to restore an additional 13 acres of Barcroft Magnolia Bog from the Run for Wetlands Grant, sponsored by volunteers of the U.S. Fish and Wildlife Service. The project also included an outreach component focused on educating Arlington residents about invasive plants and the restoration of Barcroft Magnolia Bog.

From 2009 – 2012, Arlington's Department of Parks and Recreation was awarded a grant through the Virginia AmeriCorps program. This grant funded the Four Mile Run Restoration Team over three years. Every year, Arlington County hosted a team of six interns focused on invasive plant removal. In 2012, the final year of the grant, the Four Mile Run Restoration Team began treatment of targeted invasive plants in strategic areas of Barcroft Park to protect the sensitive bog and wetlands. The team used chainsaws and other power equipment, as well as applied herbicides during their year of service. This initial work paved the way for future efforts

to manage other invasive plant species that could be readily controlled with hand removal and other methods that are more appropriate for volunteers (Attachment D).

The 2012 AmeriCorps team members also assisted Arlington County's Natural Resource Manager with expanding the extent of the existing wetlands near the bog and releasing wood frog tadpoles in the new vernal pools (Attachment E). In addition, the AmeriCorps team conducted further inventories at the site and helped lead additional volunteer events. This element represents a small but important set of tasks related to the overall efforts to restore wetland vegetation, habitat, and wildlife historically present at the site. Specific tasks involved the re-direction of water flow and in some cases, increasing the ability for the micro-site to impound water. All work was performed with hand tools under the direction of the Arlington County Natural Resource Manager.

Reintroduction of aquatic wildlife was targeted to a small number of species that were most likely to respond positively within the existing habitat at the site. Specific work tasks involved the hand installation of approximately three artificial vernal pools. Adults in breeding condition, and tadpoles were collected from other parks in Arlington County and were released at Barcroft Park.

In 2013, planting efforts began with the re-introduction of locally native species that presently occur at the site or are reasonably known to have been historically present, but are now extirpated. Both field inventory work and historical collection research results were used to

generate a target list of species for general planting and restoration purposes. Replanting continued at the site annually in targeted locations. In 2016, staff and volunteers will be reintroducing species such as white turtlehead, a wildflower that was once present at Barcroft Magnolia Bog, but hasn't been recorded in recent vegetation inventories.

Financing and Staffing:

As mentioned previously, restoration activities were performed by a combination of contract services, carefully trained volunteers, County staff and AmeriCorps interns.

Contract Services:

Contract Services focused on areas of high invasive plant infestation where several species are concentrated and chemical control offers the only effective solution. Contractors primarily targeted the large-scale treatment and removal of English Ivy, Multi-flora Rose and Lesser Celandine.

County Operating Funds

Calendar year	Hours reported	Total spent
2012	1142.5	$72,545
2013	562.5	$41,625
2014	309	$22,866
2015	231.5	$17,131
2016 (as of 5/12/2016)	96.5	$7,141

Run for Wetlands Grant
FY 2012 – $12,000

County Workforce / AmeriCorps:

AmeriCorps volunteers, with support from the Invasive Plant Program Coordinator and under the guidance of the Natural Resource Management Unit were responsible for working within

the more sensitive portions of the site, carefully utilizing both chemical and mechanical removal techniques. AmeriCorps also partnered with citizen volunteers in less critical sections of the park.

AmeriCorps Grant:

FY 2011 – 3 months of work $139,815/4 = $34,954
FY 2012 – 3 months of work $139,815/4 = $34,954

Citizen Volunteer Force:

Citizen volunteers, recruited and trained by the Invasive Plant Program Coordinator, provided valuable support by removing invasive species (primarily Bush Honeysuckle and Japanese Honeysuckle) that are more easily recognized and are found scattered in sections surrounding the wetlands. Replanting of the site utilized the talents of citizen volunteer groups, with oversight (selection of species, planting locations, timing) provided by the Invasive Species Plant Coordinator and the Natural Resource Specialist. Seed collection was accomplished by County staff, Earth Sangha, and volunteers from the Virginia Native Plant Society.

Arlington Regional Master Naturalist volunteer hours multiplied by the rate of one hour of volunteer service in Arlington County, VA:

2011 – 302 hours x $23.45 rate = $7,081.90
2012 – 250 hours x $23.45 rate = $5,862.50
2013 – 86 hours x $23.45 rate = $2,016.70

Results of the Program:

In 2016, the final year of management, the project site is almost 90% clear of invasive plants. Long-term success will be measured through annual plant surveys within cleared areas for a period of three years to determine if any new species have emerged from the historical seed bank, or if local native plant recruitment through seed drop or vegetative sprouting is evident.

Successful breeding of treefrogs has been observable at the site since they were transplanted in 2012. From the two mating pairs of treefrogs and perhaps 200 wood frog tadpoles that were relocated, there were several dozen of both species calling since 2014. In 2014 staff estimated that there were 48 wood frogs present at the site and in 2016, there were 38 egg masses in two separate areas for an estimated total of 228 wood frogs.

Success of replanting in the short-term has been measured through surveys to determine the survivability of planted specimens, but, long-term, staff will continue to carry out audible surveys to gauge whether the new population has survived the translocation and continues to breed in the future.

Stewardship activities have resulted in new and increased sightings of long lost animals and plants. Gray fox and little wood satyr butterflies as well as uncommon plants such as bloodroot and wood anemone have been found in new locations and are expanding their range inside of Barcroft Park.

Attachments

A. Special features map of Barcroft Park – GIS layer that shows the rare plant communities in and geological features present
B. Barcroft Park Invasive Plant Removal Plan – Management plan written by County staff in 2011
C. Arlington Regional Master Naturalist's First Anniversary at Barcroft blog post – Blog post written about volunteer event at Barcroft Park, originally posted on the ARMN website
D. AmeriCorps treatment photos – Before and after photos of the 2012 AmeriCorps Team's work in Barcroft Park
E. AmeriCorps blog post on tadpoles – AmeriCorps Team 2012 member Antony Lee's blog on the tadpole release and vernal pool creation at Barcroft Park


Champion Trees
Significant Trees
BARCROFT PARK: SPECIAL FEATURES
Springs
Globally-rare Wetlands
State-rare Wetlands
Globally-rare Wetlands
Locally-rare Plants

PARKS AND NATURAL RESOURCES DIVISION
DEPARTMENT OF PARKS, RECREATION AND CULTURAL RESOURCES
ARLINGTON COUNTY, VIRGINIA

January 7, 2011

"DRAFT"
BARCROFT BOG WETLAND COMPLEX RESTORATION PLAN: INVASIVE PLANT SPECIES MANGEMENT, PRESERVATION OF NATIVE PLANT COMMUNITIES, AND RESTORATON OF HISTORICALLY NATIVE PLANT SPECIES

I. OVERALL PROJECT GOALS

- Preserve high value natural lands through removal of non-native plant species and targeted reforestation of extant species
- Restore degraded wetlands through re-introduction of historically appropriate native plant species and wildlife
- Stabilize hydrologic regime to former conditions where possible to favor long-term stability of wetland plant communities
- Develop an "holistic" plan that favors an 'ecosystem" approach to ecological management of the site

II. WORKSITE AND RESOURCE DESCRIPTION

Site/Park: South Barcroft Park - Magnolia Bog Complex,
Acidic Seepage Swamp and Terrace Gravel Forest

Description of Resource:

Lying within the Four Mile Run Watershed, South Barcroft Park houses the most sensitive ecological community in Arlington County. The park contains both globally (G-1/S1) and state-rare (G3/S3) wetlands, high value natural forests and more locally rare plants than any other site in the county. Some wetland plant species are reduced to extremely low population levels with little to no natural recruitment observed. This twenty-five acre natural site has recently been designated by the County Board as a Natural Resource Conservation Area, and is listed as the most critical natural site within Arlington County to be threatened by the spread of non-native invasive plants

in a report issued by County staff in 2010. The resident Magnolia Bog Complex of wetlands (Terrace Gravel Seepage Bog) is one of only 13 known examples in the world. Over the past five years, a number of ecological studies and inventories have been conducted at the park (hydrology, native plant communities, geology, and wildlife studies) and collected data provides the basis for a restoration effort.

III. INVASIVE PLANT REMOVAL COMPONENT

Threat Categories: High Ecological Value – High Risk
High Ecological Value – Monitor
Time Sensitive Resource Protection – Immediate Need

Levels of Invasiveness:

While much of the park is moderately impacted from invasive plants, there are sections of terrace gravel forest and wetlands that are relatively clear but are threatened by expansion of nearby sources. Multiple invasive species are present throughout the park. Multi-flora Rose, Lesser Celandine, English Ivy, and Bush Honeysuckle (Lonicera sp.) represent the greatest long-term threat to rare native plants at the site. The recent appearance of Japanese Stiltgrass and Porcelainberry (Ampelopsis) at the periphery of the central magnolia bog is of high concern and presents an immediate threat to the integrity of the wetland community.

Long-term Goal (2-5 years): (High Value – High Risk)

Restore the entire site to a natural condition, maintainable through a volunteer force. In order to achieve this level, a multi-year program, including the use of professional contract services would be required.

Short-term Goal (1 year): (High Value – Monitor, Time Sensitive Resource Protection – Immediate Need)

A number of activities could be performed by a combination of contract services, carefully trained volunteers, County staff and Americorps to provide immediate protection of valuable plant resources. Activities would include:

Contract Services:

Contract Services would focus on areas of high infestation where several species are concentrated chemical control offers the only effective solution. Contractors would primarily target the large-scale treatment and removal of English Ivy, Multi-flora Rose and Lesser Celandine.

County Workforce / Americorps:

Americorps volunteers, with support from the Invasive Plant Species Coordinator and under the guidance of the Natural Resource Management Unit would be responsible for working within the most sensitive portions of the site, carefully utilizing both chemical and mechanical removal techniques. Americorps would also partner with citizen volunteers in less critical sections of the park.

Citizen Volunteer Force:

Citizen volunteers, recruited and trained by the Invasive Plant Species Coordinator, would provide valuable support by removing invasive species (primarily Bush Honeysuckle and Japanese Honeysuckle) that are more easily recognized and are found scattered in sections surrounding the wetlands. Volunteers would work both independently and in partnership with Americorps members. Both Americorps and citizen volunteers would also be utilized to perform "preventive patrol and removal" of any newly established invasive species within sections of park that are currently clear of infestation.

Technical Support and Planning:

Technical support in the form of GIS mapping, species identification, training, and delineation of impacted areas will be provided by the Invasive Plant Species Coordinator and the Natural Resource Specialist. Prior to the start of the project, an updated final management plan will be developed by County staff.

Project Timing: The removal of invasive plants from the site can take place throughout the twelve-month grant period. A schedule of removal will be developed to favor the most effective protocols based on species selection, i.e. English Ivy and Bush Honeysuckle can be removed during all months of the project, but the window for Lesser Celandine control is restricted to a two week period in the early spring of each year.

Measurement of Results:

Success of efforts will be measured in two formats. Updated GIS maps showing the most current infestation levels and locations will be used as a baseline prior to the beginning of the project. After 12 months, the infestation levels will be re-assessed and mapped to show changes and provide a graphic measurement in terms of acreage cleared. Long-term success will be measured through annual plant surveys within cleared areas for a period of three years to determine if any new species have emerged from the historical seed bank, or if local native plant recruitment through seed drop or vegetative sprouting is evident.

IV. NATIVE PLANT COMMUNITY RESTORATION COMPONENT

Methodology:

By policy, re-introduction of any plant material into the Barcroft site is restricted to pure native species that presently occur at the site or are reasonably known to have been historically present, but are now extirpated. Both field inventory work (completed) and historical collection research results (in-progress) will be used to generate a target list of species for general planting and restoration purposes. In addition, policy requires the use the local ecotype plant material for restoration, if available. Appropriate plant material will be obtained from multiple sources, including purchase from certified vendors, direct seeding, and through field collection and relocation from similar regional sites (with landowner permission).

Procurement of local ecotype plant material:

Arlington County will partner with a local non-profit conservation organization (Earth Sangha) to obtain a majority of the required plant material for this project. Earth Sangha has established a high reputation for both high quality material and their ability to collect local native seed and successfully propagate trees, shrubs and forbs at their local nursery in Fairfax, Virginia. Propagated plant material is then made available to local governmental agencies for use in restoration projects at a reduced price. With sufficient pre-planning time, the County has the ability to “pre-order” or reserve plants currently under propagation to be used during the fall and spring of the project year. To obtain species not currently under production at the nursery or difficult to obtain, efforts will be made to collect native seed in the region for propagation by Earth Sangha.

Plant Restoration Workforce Element:

Replanting of the site will utilize the talents of both Americorps and citizen volunteer groups, with oversight (selection of species, planting locations, timing) provided by the Invasive Species Plant Coordinator and the Natural Resource Specialist. Seed collection would be accomplished by County staff, Americorps members, Earth Sangha, and volunteers from the Virginia Native Plant Society.

Project Timing:

Plant material currently in-stock at the nursery facility may be planted during early summer, early-late fall, and spring of the grant year (depending on species, size of stock, and weather conditions). Hand collection of seed would primarily be confined to late summer – early winter. Material propagated from collected seed would be available for planting from early spring – late spring of the grant year.

Measurement of Results:

Success of replanting in the short-term would be measured through surveys to determine the survivability of planted specimens.

V. HYDROLOGICAL STABILIZATION COMPONENT

Objectives and Scope of Work:

This element represents a small, but important set of tasks related to the overall efforts to restore wetland vegetation at the site. Past hydrological and geological surveys have delineated a total of twenty-three separate springs or seeps within the wetland complex. While a large percentage of of the historical topography and soils are intact, past construction within the park has impacted the water-flow characteristics around several small springs, resulting in either a loss of surface ground water or has re-directed surface flow away from wetland areas. The dryer conditions within these formerly wet zones will impact the ability of mature wetland plant species to survive in the long-term, and present more favorable conditions for the establishment of more xeric species. Specific tasks will involve either the re-direction of water flow or in some cases, increasing the ability to for the micro-site to impound water. All work will be preformed with hand tools under the direction of the Natural Resource Specialist. The hydric soils at the site preclude the use of mechanized or heavy equipment.

Workforce:

The earth sculpturing activities can be performed by Americorps members, citizen volunteers or a combination of the two.

Task Timing:

This task can be performed at any time of the year, but would be easier to complete during the winter period.

Measurement of Results:

Visual surveys or the installation of peizometers would give adequate feedback as to success.

VI. WILDLIFE RESTORATON COMPONENT

Objectives and Scope of Work:

Recent wildlife studies, conducted throughout Arlington County have concluded that the reintroduction of some locally-rare or historically extirpated amphibian species may be successful within some wetlands, including those found at Barcroft Park. The limiting factor at the site currently appears to be inadequate deep-water pools to support seasonal reproduction. Reintroduction efforts would be targeted to a small number of species that would be most likely to respond positively within the existing habitat at the site. Specific work tasks would involve the hand installation of approximately six artificial vernal pools. Adults in breeding condition, or eggs would be collected from other parks in Arlington County or from nearby regional parkland with permission.

Workforce and Timing Element:

Installation of the artificial pools would more easily completed during the winter period, but could be installed at any time. Collection and release of specimens would take place between late-February and early June, depending on the breeding season of each species.

Measuring Success:

Successful breeding may be observable in the short-term, but long-term audible surveys would be required to gauge whether the new population has survived the translocation and continues to breed in the future.

VII. SUPPORTING GROUPS

Support and volunteer assistance will be sought from the Following groups for this project.

- Windgate Townhome Community (residential neighbor)
- Earth Sangha (501-C)
- Virginia Native Plant Society (501-C)
- Arlington Regional Master Naturalists (501-C)
- Remove Invasive Plants (RIP) volunteer group

Prepared by Greg Zell, Natural Resource Specialist
Arlington County, Virginia

ARMN First Anniversary of Barcroft Park Invasive Pull

Posted on **April 8, 2012** by **armneditor**

By Jim Hurley

Dedicated volunteers help monthly with Barcroft Park Invasive Pull, an important ARMN Focus Project. Photo by R. Ayres.

The March invasive pull was the first anniversary of the Arlington Regional Master Naturalist monthly focus work on Barcroft Park. Having bought coffee and doughnuts (hint, hint), I arrived to the area of Barcoft Park we were going to work on an hour before start time to tag Multiflora Rose stems for clipping and digging.

But what was this? Blue dye on the Rose? And then in the same area, blue dye on Japanese Honeysuckle?

Up to twenty people were about to show up to work on the area. And after that, another twenty members of the current Master Naturalist training class were scheduled to arrive for two more hours of work. What were we to do?
This was a good problem to have. The day before, the County had just succeeded in getting a contractor to the park to spray for Lesser Celandine, the beautifully horrific exotic from northern Europe that we Master Naturalists had been preparing the terrain since last October for chemical treatment.

Readers of these posts will recall that we have worked an area some 100 yards long by 10 – 20 yards deep between the biketrail and drainage ditch, clearing old growth Rose, Honeysuckle and Porcelainberry in order to allow sprayers access to the Celandine groundcover. By March 17, with summer having preceeded spring, big swaths of the ground in this area were already a shiny green carpet with bright yellow flowers, quite attractive to the unaware eye. The contractor's focus was the Celandine in and around the Magnolia Bog, radiating out from there, through the planted meadow, and upstream into the area we had prepared. But, highly competent that he is, the contractor also hit our other targets, not only in the area we were working, but across the ditch on the alluvial slope down from Claremont School.

As I said, this was good news, but we had to refocus. While botanizing in the park in January, I had discovered a thicket of mostly American Elm, Ulmus americana, Silky Dogwood and Cornus amomum between the shelter and the stream. Cornus amomum was a new plant to me. It grows in such streamside, floodplain habitats, and this 20-yard thicket was becoming the scaffolding for big Porcelainberry vines, which had climbed the tallest Elm saplings and made the leap to the canopy trees bordering the nearby stream. This was worthy work to be done, and 12 of us cut the vines from the shrubs and saplings, and did our best to dig the massive root systems. My guess is that this thicket was planted in a streamside restoration effort some 5 – 7 years ago, but any preparation of the ground left the existing Porcelainberry infrastructure intact. We did not get all of the roots, and the Porcelainberry will need to be monitored for re-growth.

Then, having taken a natural history tour of the park led by Greg Zell, the current training class arrived at the shelter to make their contribution to the park's ecology. Lynda Kersey, Training Coordinator, brilliantly suggested hitting a 40 x 40 patch of primarily English Ivy some 200 yards up the bikepath from the shelter, between the path and the stream. This area had been a jungle of exotic Bush Honeysuckle, White Mulberry, and Porcelainberry among others, but the woody exotics had

been felled, stems strewn about, leaving Green Ash, Boxelder, Red Maple, Cottonwood, Black Willow, Tulip Tree and other native lowland species to thrive.

An impressive harvest and many smiling faces! Photo by R. Ayres.

And, English Ivy had a foothold there. On a beautiful, clear, warm, still-winter day, we spent an enjoyable, social two hours digging it out, generating an impressive harvest.

Black Haw Viburnum (Viburnum prunifolium). Photo by J. Hurley.

A smaller team cleared a Black Haw Viburnum, Viburnum prunifolium, completely smothered and bent over from Japanese Honeysuckle. Released from its burden, the Viburnum was in full flower ten days later.

The work continues on Saturday, April 21. We have urged the County to bring back the contractor ASAP to hit the 18″ bolts of Garlic Mustard and the Lesser Celandine between the bikepath and stream, and remnant Celandine in areas already sprayed. Barcroft Park is in its spring emergent glory right now. There are dozens and dozens of square yards of Mayapple, Spring Beauty, and Trout Lilly, many in the floodplain and many on the alluvial slope. You can find other spring ephemerals too, and the Lowbush Blueberry is in full flower. And just as gratifying is the sight of yellowing, browning carpets of Lesser Celandine in the areas we have worked on.

Next year, this area will look like areas we worked on last year, in the vicinity of the Magnolia Bog, both sides of the bikepath, which are now mostly free of Garlic Mustard, Porcelainberry, Lesser Celandine and others.

Thanks to all who helped with the Barcroft Park project over this past year. There is more to do, but a visit to the park now will show how much progress we have made.

2012 AmeriCorps team

Volunteers at Barcroft Park

Volunteers at Barcroft Park (geology walk event)

Volunteers at Barcroft Park

Garlic mustard at Barcroft Park

Before

After

Bush honeysuckle (chemical, cut-stump)

- Bush honeysuckle infestation (12/5/11).

Bush honeysuckle (chemical, cut-stump)

Before (12/5/11)

After (4/18/12)

Wintercreeper patch (manual, pulling)

- Dense wintercreeper infestation (11/15/11).

Wintercreeper patch (manual, pulling)

Before (11/15/11)

After (4/17/12)

Weed wrenching at Barcroft Park

English ivy (manual, pull)

Before (2/8/12)

After (4/19/12)

Native seed cleaning

Native seed cleaning

MAR 13 2012
2 COMMENTS
AMERICORPS, BARCROFT PARK

TADPOLES!

In between a couple training sessions we had scheduled for today, Amanda, Casey, and I found some time during lunch to head over to Long Branch Nature Center. At the nature center, we picked up a bucket of recently hatched wood frog tadpoles, which we then released at Barcroft Park (at the same three locations we released the wood frog eggs last Friday). To our great surprise and satisfaction, the eggs we set out last Friday have already begun hatching tadpoles themselves! Our babies can swim! =D


Wood frog tadpoles.


Wood frog tadpoles.


Wood frog tadpoles.


Leaving Long Branch Nature Center with the tadpoles.


Papa Casey watching over the tadpoles during the car ride.


Releasing tadpoles at the first vernal pond site.


Releasing tadpoles at the second vernal pond site.


Pointing at a tadpole that hatched from last week's clutch.


Releasing tadpoles at the third vernal pond site.


All free!


Eggs we released last week. A few tadpoles have already begun emerging.

MAR 09 2012
2 COMMENTS

AMERICORPS, BARCROFT PARK, LUCKY RUN PARK

SALAMANDER AND FROG EGGS!

This morning, we continued pulling English ivy at Lucky Run. We were fortunate enough to be joined by Jim, and with his help, we made it nearly all the way upstream. Soon, the south side of the stream will be free of the English ivy carpet and ready for the meadow plants to establish themselves.

In the afternoon, we had a special event at Barcroft Park with county natural resource specialist, Alonso. As the most ecologically significant natural site owned by the county, the magnolia bog and the seeps feeding it create a unique environment that has made a dramatic transformation since it became protected as a natural resource conservation area. As Alonso explained, many species have been making an appearance here that have previously been absent for numerous years (including frogs, spotted salamanders, and woodcocks, to name a few).

Our objective for today was to locate suitable vernal pond habitats and release wood frog eggs into them, where hopefully a few will survive and grow. We chose three placid locations and emptied three buckets of eggs into them. I can't wait to see how our babies do!


Clearing English ivy at Lucky Run.

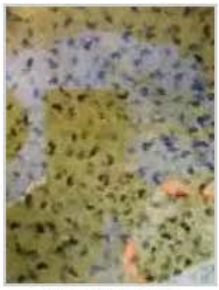

We made many piles.


Cleaning mud off their boots.


Buckets of eggs.


Buckets of eggs.


Wood frog eggs.


Wood frog eggs.

https://runmilefour.wordpress.com/2012/03/09/salamander-and-frog-eggs/