



**FRIENDS
of HEMPSTEAD
PLAINS**
at NASSAU COMMUNITY COLLEGE

The mission of the Hempstead Plains at Nassau Community College is to preserve, restore and manage the Hempstead Plains prairie habitat on the campus of Nassau Community College and foster good stewardship of the land through education and research.

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Meadowlark



Friends of Hempstead Plains at Nassau Community College

Summer, 2016 Volume 15, No. 2

Strategic Plans

The Friends of Hempstead Plains has a vision for the future that makes the most sense for the college, the local community, and the members who want to see that we maximize the benefits of this prime resource.

Toward that vision, we are updating our Comprehensive Management Plan. Last updated in 2010, the document guides our efforts toward ten main goals:

- I. Develop methodology to restore the Plains
- II. Site management; clean up the site and identify it to the public
- III. Biological Management; Preservation: Maintain and increase abundance of globally endangered species, sandplain gerardia, Agalinis acuta, and other rare species
- IV. Biological Management; Weed Removal: Remove non-native invasive plant species
- V. Grassland Habitat Restoration: Increase abundance of native plant species with same genotypes as historic Hempstead Plains
- VI. Develop sustaining partnerships with others involved in grassland management.
- VII. Establish and maintain interpretative trails, stations and literature for self-guiding tours.
- VIII. Develop lists of flora and fauna that live on the Hempstead Plains, as seen throughout the year.
- IX. Provide educational opportunities for school and college classes and researchers to visit and learn about the Hempstead Plains.
- X. Encourage research at the Hempstead Plains.

We have been making great progress on all of these fronts, and will be ramping up the development and use of our new Education and Research Center to expand the achievement of these goals, as well as embracing new technologies to refine and improve our methods and efficiency.

Thank you to all of those who contribute their funds, resources, time, talent, energy, thoughtfulness, AS WELL AS those who learn and benefit from it all.

Editor's Message

Time flies when you are having fun, and even when you are not!

Want to have some fun with us?

Just put yourself forward and share the skills you have, or ones you want to build; you never know how far it can take you.

However, please be careful about how you define "fun".

I think it is fun to meet new people and learn about their point of view, cooperate with them and see what they can teach me, learn whatever I have the aptitude for, and even stretch to learn new things, all while achieving a greater good. Then celebrating those authentic accomplishments with a prairie benefit cocktail party, a sunset chat with friends, or by just sharing a smile of gratitude.

How do you define fun?

This issue focuses on our partners. We have found kindred souls out there in the community (can organizations have souls?) and have held hands with them as we grow our new world.

The Education and Research Center has brought a number of people in, and we hope to share all of what they do with you in the very near future. Please keep in touch with your emails, and your donations.

Come share fun with us at our next sunset walk, volunteer day, nature walk, special event, or by sponsoring color for our newsletter. Contact us by email at info@friendsofhp.org.

Be our partner.

Society

By David Stolarz

Annual Prairie Benefit Honors Leaders

On May 19th, the Hofstra University Club was once again the home to the FHP Annual Prairie Benefit cocktail party. Amidst delicious food, great conversations, outstanding awardees, as well as the legendary raffle, attendees supported environmental science, education, conservation and restoration.

Did you miss it? It is not too late to show your sincere support by using our self-addressed envelope to support the mission. Every person who sends a check will receive special recognition in our next newsletter (unless they choose to extend their personal expression of caring for a conscientious organization via the selfless joy of anonymity).

For more photos from the event, please visit our website: www.friendsofhp.org.



Brian Schnieder, NCDPW



Annetta Centrella-Vitale and Eric Roll



Keynote Speaker James Mckenna explaining the military history of the plains.

Engineering

By David Stolarz

Joyce and William O'Neil Green Roof

Thanks to a generous donation from the Joyce and William O'Neil Foundation, the FHP constructed an innovative roof made of living plants. What does it take to make a green roof? An engineer, of course!

But what does an engineer do that earns a commanding salary?

Measure, apply standard rules of math, and ensure that a structure is safe, economical, and fit for the intended purpose.

In the case of a green roof, one aspect is the weight of the "soil", and the strength of the support structure to hold it. Visit the plains and see our sample of roof soil in a can. Let's see:

Sample Size of Roof Soil = .625 foot high cylinder, with
Radius = 1.75 inches (or 0.14583 ft.)

Volume of a Cylinder, $V = \pi r^2 h$

Sample Size Volume, $V = (3.14)(0.14583)^2(.625)$

Sample Size Volume of Roof Soil = .041758366 ft³

Sample Size Weight of Roof Soil = 3.7 lbs

Soil Density = 3.7 lbs. / .041758366 ft³ or 88.6 lbs/ft³

Approximate Weight of Roof Soil = 106,325 lbs.

One Ton = 2,000 lbs. How many tons? _____



Photo Showing The Growth On The Green Roof





Betsy, Joe and Lauren Weeding The Roof.

Mathematics

By David Stolarz

Using Surveying To Map Invasive Species

In the technology section below, I describe how the BOCES students circumscribed polygons with a compass. Why would we do that?

Measurements of the areal extent of invasive species are a component of our comprehensive management plan and guide our remediation and restoration efforts.

As anyone who has purchased a home or land knows, a licensed surveyor needs to define the boundaries of the property. That definition includes distances and angles. They are measured with a high degree of accuracy and precision. When mapping vegetation, a handheld compass will often suffice to define the angles.

Specifically, we placed a rubber band around the vertical axis of the smartphone to assist in aligning the device to the string that the students had placed on stakes around the invasive species. A reading was obtained directly from the device and entered into a spreadsheet of values. Then the distance from stake to stake was measured with a tape measure, around until the starting point was reached.

The "Closure Error" is calculated by seeing where the final stake should be as compared to its actual place.

North Shore Land Alliance Plains, Pollinators, and Preserving Land

By Amanda Furcall, North Shore Land Alliance

North Shore Land Alliance (NSLA) is an accredited land trust whose mission is to preserve and protect, in perpetuity, the green spaces, farmlands, wetlands, groundwater and historical sites of Long Island's north shore for the enhancement of quality of life and benefit of future generations. Since its founding in 2003, NSLA has protected over 1,060 acres of land in pursuit of that mission.

This summer two interns from NSLA's Joyce and William O'Neil Steward Program are collaborating with Friends of Hempstead Plains. They have started work on a variety of projects including creating a calendar of plants' bloom times, removing invasive species, and conducting a survey of pollinators visiting the Plains. This survey will highlight the beauty and importance of the plant/pollinator relationship as well as how valuable the Hempstead Plains are to preserving these declining pollinator populations.

Open Space Stewardship

FHP Hosts Science Conference

By David Stolarz

North Shore Land Alliance (NSLA) recruited and directed four student interns in an inaugural effort to provide hands-on experiences in environmental science while at the same time fulfilling their organization's mission.

Amanda Furcall provided an overview of the North Shore Land Alliance, as well as an update on their project to use goat grazing to control invasive plants. Jeb Polsteing and Conor O'Sullivan led an interactive discussion on the optimal techniques for planting trees.

Conor also reported on his water quality investigation at the Clark Preserve. Jeb described how to perform a Forest Inventory and gave his results on the Wawapek Preserve.

Joe Murphy shared his love for the pollinators on the plains, and presented the results that he and Lauren Weller obtained in their survey of the Hempstead Plains.

Finally, FHP volunteer and Molloy College student, Laura Gaffney, shared her historical research on the Native American uses of the plants of the Plains.

FRIENDS OF HEMPSTEAD PLAINS AT NASSAU COMMUNITY COLLEGE
 And
 ECOLOGICAL LANDSCAPE ALLIANCE
 Present

INSPIRATION FROM A PRAIRIE

Friday, September 23, 2016 (rain or shine)

For Ecologists, Landscape Designers, and Landscape Architects (CEU's provided)
 Hempstead Plains Education and Research Center

Nassau Community College
 Garden City, NY



MORNING SESSION (CEU's 3.5 hours toward courses of learning)

8:30—9:00 Sign-in, Coffee and Refreshments

9:00—9:05 Welcome and Announcements

9:05—10:00 Vinnie Simone, Director of Planting Fields Arboretum, "Creating a Pollinator and Bird Friendly Landscape"

10:00—11:00 Rich Gibney, RLA, ISA, "Native Plants and their Cultivars in the Designed Landscape"

11:00—11:15 Break

11:15—12:15 Arlie Rollins, NYC Parks Department, Green Roofs, "Growing Endangered Native Plants on Green Roofs"

12:15—1:00 Lunch

AFTERNOON SESSION AND ECO TOUR (CEU's 2.5 hours toward educational activities)

1:00—2:15 CeCe Haydock, RLA, LEED AP, and Lisa Cowan, RLA, "Crediting Hempstead Plains: SITES and Sustainability"

2:15—3:30 Betsy Gulotta, Conservation Project Manager, Friends of Hempstead Plains, "Native Habitats and Wildlife; includes walking tour of Hempstead Plains"

This landscape architect educational program offers 6 hours of NYSSED continuing education under the subjects of horticulture, sustainable site development and design, green roofs and water/stormwater management.

NYS registered landscape architects interested in earning CEU's are required to sign in before the start of each session. A certificate of attendance is given at the end of each session. You must be in attendance for the entire session to receive a certificate. Sign-in sheets will be removed after the welcome and introductory remarks. If you arrive after the sign-in sheet is removed or leave before the end, you will not receive a certificate of attendance.

REGISTRATION FORM—fill out and return to:

Betsy Gulotta, Friends of Hempstead Plains, Dept. of Biology, Nassau Community College, Garden City, NY 11530

NAME _____

COMPANY AFFILIATION _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

PHONE _____

EMAIL: _____

NO. OF REGISTRANTS _____ MORNING SESSION \$70 _____ AFTERNOON SESSION \$50 _____

TOTAL AMOUNT SUBMITTED _____

MAKE CHECKS PAYABLE TO: **Friends of Hempstead Plains**

MAIL TO: Betsy Gulotta, Dept. of Biology, Nassau Community College, Garden City, NY 11530

Seating is limited; if your check is received after the limit is reached, we will contact you to determine if you want to remain on the waiting list. No refunds after Sept. 20.

Science Partner

The South Shore Audubon Society Visits The Hempstead Plains

By Betty Borowsky
President, South Shore Audubon Society

On May 15, 2016, the South Shore Audubon Society, led by Joe Landesberg, conducted their Sunday morning bird walk at the Plains. They were welcomed by Betsy Gulotta, who provided a brief introduction and then a tour of the new Education and Research Center. Participants were delighted with their visit, enjoying the tour, and learning about the history of the Plains as well as the history of the Friends of the Hempstead Plains. After that the group set out to identify birds in every part of the preserve.

During the two hour walk, the following 14 species of birds were identified:

Canada Goose 11	Flyover	American Robin 5
Ring-necked Pheasant 1		Northern Mockingbird 4
Killdeer 2		European Starling 3
Mourning Dove 3		Yellow Warbler 3
Warbling Vireo 2		Song Sparrow 1
Tree Swallow 8		Bobolink 1
Red-winged Blackbird 10		American Goldfinch 1

Several of these species are common throughout Nassau County (Canada Goose, American Robin, European Starling), and can be found in many habitats. But several of the others are restricted to grasslands, and were special to find.

Ring-necked pheasants are about the size of a large chicken, and the male is quite spectacular. Although It is an introduced species, it is not invasive.



<http://animalia-life.com/birds/ring-necked-pheasant.html>

But the highlight of the walk was spotting another grasslands species, the bobolink. This is a native bird that requires grasslands habitat: and, as grasslands have disappeared in our area, the bird has become quite rare.



Greg Lasley/VIREO

<http://www.audubon.org/field-guide/bird/bobolink>

Altogether it was a very enjoyable and informative morning, and even this very brief bird survey showed how important it is to continue maintaining and preserving the Hempstead Plains.

Arts

Endangered Species Day Facebook Photos

By David Stolarz

FHP participates in Endangered Species Day (ESD), a national day of recognition sponsored by U. S. Fish and Wildlife Service (see <https://www.fws.gov/ENDANGERED/esday/index.html>). While ESD was held on May 19, 2016, the organizers encourage flexibility in the timeliness of the celebration.

In the past we held art and photo competitions that requested participants to submit hard copies of materials. This year, we are taking a new, innovative and simpler approach: a Facebook and Instagram photo competition. Please include the Instagram hashtags: #HempsteadPlains and #EndangeredSpeciesDay2016. The goal is to use the power of social media to expand the reach of our efforts at sharing knowledge and opportunities for education, restoration, and conservation of the Hempstead Plains while encouraging students to develop multimedia communication skills.

We plan to host photo opportunities at the plains, and to iron out the details of how to implement our plans during the Fall. Keep in touch by finding and “Liking” our Friends of Hempstead Plains Facebook page.

Reading

New Edition To The Library

By David Stolarz

Since our Prairie Benefit keynote speaker, Jim Mckenna, from the Cradle of Aviation Museum, discussed the military history of the plains, I went on another mission to an online auction site to see what else we could obtain for our library. Sure enough, there was something that looks really interesting: Office of Engineering, First Air Force Portraits.

Our library is growing in leaps and bounds, and includes maps, air photos and historical records. One example are the documents and photos from the controlled burn that the Nature Conservancy orchestrated. We are planning to host a meeting to share the treasure trove.

What a great opportunity for a graduate student project to examine the before and after environmental impact and social issues of that effort.



Technology

Using A Phone For Science

By David Stolarz

Sometimes the simplest advancements can make the biggest impact. As a person with a visual disability, it was hard for me to read the old-fashioned compass as I was teaching students how to create a polygon around a plot of the invasive species, Cypress Spurge.

Furthermore, the students experienced difficulty using the compass due to the smallness of the numbers and the variance in the pointing of the needle, so were disinclined to participate in a fundamental learning opportunity. After a short demonstration of the compass feature on many of their smartphones, I had their attention, and they expressed their full desire to learn something new about their phone, along with a real-world science application for it.

Are you a student eager to have fun performing a community service that may (or may not) fulfill a homework assignment or final project? Help us by making a video showing how to use all of the compass functions of a smartphone on the plains. We have mentors that can help make it happen, and we will post it on our website under Special Projects.

Be our Partner!



FHP Upcoming Events

Inspiration from a Prairie

Ecological Landscape Alliance Workshop Meeting
(With Continuing Education Units Available for Professionals)
September 23 @ 8:30 am EST - 3:30 pm EST

Tom Stock: Poetry Workshop

At the Hempstead Plains
October 1, 2016, 10:00 AM - 2:00 PM
Register by email to tstock39@gmail.com
Free to Friends of the Hempstead Plains members
\$5 for non-members Bring lunch and drink

Endangered Species Day Celebration

Facebook and Instagram Photo Contest
Open Until Thanksgiving

Education and Research Center

Fall Open House

Date and Time To Be Determined

Help Wanted! See Special Projects on our website.

Partner Events

EMPL

East Meadow Public Library is hosting Discover NASA, an interactive, fun science exhibit, open to mid-October. <http://www.eastmeadow.info/>

North Shore Land Alliance

The North Shore Land Alliance is a not-for-profit land trust formed to protect and preserve, in perpetuity, the green spaces, farmlands, wetlands, groundwater and historical sites of Long Island's north shore for the enhancement of quality of life and benefit of future generations.

<http://northshorelandalliance.org>

South Shore Audubon Society

From September through June, the South Shore Audubon Society conducts a birdwalk at a different site in Nassau County beginning at 9:30 AM. Walks are free and open to the public, see:

http://www.ssaudubon.org/ssas_events.html

Prospective Eagle Scout, Christian Ferris, assembled and installed display boxes on the plains.



Conservation Report

By Betsy Gulotta

We have been busy at the plains this summer. Habitat restoration is proceeding nicely. Our college intern, Alex Beach, is back for his fourth summer to help mow the invasive plant parcels with our small brush hog. We also welcomed two new college interns, Lauren Weller from SUNY Cortland and Joe Murphy from Hofstra University, who are working under a grant from North Shore Land Alliance. Lauren and Joe are helping at some of NSLA's open space properties and also get to experience the prairie one day a week. In addition to helping cut shrubs and pull weeds, Lauren and Joe are doing a pollinator survey and constructing a blooming calendar for the flora at the Hempstead Plains. A third intern, Laura Gaffney, a history major from Molloy College, is researching the many ways that prairie plants were used by Native Americans and early settlers.

In June, the accounting firm of WeiserMazars LLP, of Woodbury, chose the Hempstead Plains for their community service day (see back cover). Between 20 and 30 energetic employees visited the plains with clippers, loppers and work gloves and everyone worked for several hours to eliminate invasive shrubs. Their hard work and expertise made quite an impact and cleared a nice section of the prairie. We are grateful for their generous service.

This summer also brought to fruition three Eagle Scout projects. Boy Scout Christian Ferris from Troup 243 of Garden City designed and installed three display podiums at the trail head, with illustrations of some of the important plants and animals that are likely to be seen in the prairie. Christopher Levano from Troop 243 designed and built two periscopes that allow one to see the roof top vegetation from the ground. James Rumsey from Troop 55 of Garden City designed, constructed and installed a fence around the cistern (rain barrel) that collects water from the roof. James will also be making informational displays about solar energy and the compost restroom features.

Several Nassau Community College classes from the Biology, Physical Science and English departments visited the plains this spring and summer, as well as an Ecology class from Hofstra, and an Environmental Science class from Briarcliff College. NCC offered a faculty development workshop for professors of all departments to encourage the fullest use the new Education and Research Center.

The Friends are also working to establish partnerships with Baldwin School District and East Meadow High School, and hope that more primary and secondary schools will take advantage of this great educational resource. The Friends are working to establish a schedule of regular open hours for the building and plains. Meanwhile the Center is open for walks and volunteer workdays. See www.friendsofhp.org

Hard Work



Accounting Firm WeiserMazars LLP Improving The Plains

FRIENDS OF HEMPSTEAD PLAINS
at Nassau Community College, Inc.
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