



**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

Winter, 2017 Volume 16, No. 1

## Strategic Plans

The “Hempstead Plains: A New Living Laboratory”, was the topic of the Faculty Development Spring Roundtable, at Nassau Community College, sponsored by the Faculty Development Committee and held on March 2, 2017.

Betsy Gulotta provided an answer to the question: What Are The Hempstead Plains?; Nina Shah-Giannaris talked about the Sustainable Aspects of The Education and Research Center and SITES; Dr. Paul van Wie gave a summary of the History of the Hempstead Plains; Dr Lisa Filippi showed the science of The Hempstead Plains as a Living Laboratory; and David Stolarz described a Vision For The Future of the Hempstead Plains.

Special THANKS! go out to Barbara McFadden, Chair of the Faculty Development Committee, along with the Roundtable Subcommittee Co-chairs Tom D’Angelo and Julie de la Lastra, along with the rest of the committee, for inviting us to share with a full audience of professors the myriad of educational and research opportunities. Friends of Hempstead Plains looks forward to expanding our interaction with professors and students, as well as adding to the cadre of volunteers who help preserve, restore and maintain the plains.

March 1<sup>st</sup> was the 6<sup>th</sup> Annual Green Day at NCC and was held in association with the American Society of Civil Engineers and featured presentations on geothermal energy, sustainable infrastructure and other topics related to the environment.

FHP once again hosted Covanta on April 5, 2017. Covanta representatives provided everything needed to make an immediate improvement by leading students to gather trash around the campus and sending it for recycling and disposal.

## Editor’s Message

Perhaps you are not on social media. That is okay. You should be able to search for us and see our postings because we are a public listing.

If you are already a member of Facebook, please visit, and “Like” or “Follow” our page. Then our updates should make it into your news stream.

You’d see our video of “Snowfall On The Plains”, with a voiceover by April Beisser reading excerpts from Seasons of Tall Grass Prairie, by Carol Lerner.

You’d learn from the latest updates on butterflies, birds, bees, lichens, and more.

You’d get the invites to our schedule of walks, talks and special events.

You’d see our links to jobs, grants, and internships to help develop your career.

You’d hear about the latest goings-on of other organizations that share our goals.

You’d have the chance to participate in our annual Endangered Species Day photo contest that augments our Conservation Day participation at the Cradle of Aviation Museum. (BTW: you can participate in the photo contest without being on social media – we can post your photos and videos for you, simply email them to [info@friendsofhp.org](mailto:info@friendsofhp.org)).

You’d witness a regular stream of “What’s in Bloom on the Plains” photos and videos throughout the year and follow along with us as we enjoy our regional jewel.

Instagram: #HempsteadPlainsESD2017

Want to see all this on the web page?

Please volunteer to fulfill that open role.

*Please join us for cocktails and buffet reception at  
The Twelfth Annual Prairie Benefit  
on Friday, May 12th at 6 P.M. at  
The Hofstra University Club: David S. Mack Hall*



The American Kestrel. By Harriet Carotenuto

## Society

*Honored Special Guest*

*Dr. John Staude*

*Adjunct Professor of American History at Hofstra University  
A.P. Government and History Teacher at The Wheatley School*

*Corporate Volunteer Honoree*

*Mazars U.S.A. LLP*

*Ed Schart, Lisa Bott, Maryann Richer  
We Are Mazars Committee*

*Community Service Award*

*Uniondale Fire Department*

*2nd Assistant Chief John Skelly*

*Volunteer of the Year Award*

*Joe Grupp*

*Program: "Cargo Containers"*

*Tom Coughlin: MODS of NY*

*Photographer*

*Tom McCloskey*

## Technology

### Using A Phone For Science - Part Two

By David Stolarz

Thanks to a friend, who wrote the book on Mastering ARCGIS, there is now a portable mapping tool for use on the plains using ARCGIS Online.

A Geographic Information System (GIS) is simply a computer map with databases of information attached to it. ARCGIS online is hosted on the internet by the company, ESRI, that provides our mapping software.

My friend's programming and database expertise translated my dream into a reality. Now we can log onto the website, navigate to the program, and map the bushes and trees that need cutting to replicate the role of fire on the grassland prairie by limiting the shade vegetation.

While we currently have our test version limited to a subset of map-able features and their attributes, we can tailor the system to fit our growing needs.

Do you want to learn more about mapping? We hope to host a mapping workshop in the near future. Please send an email to help us get the ball rolling – we need to ensure that there is a demand for our offering.

You can also come out on a volunteer day to see it in action.

Hempstead Plains Tree Survey	
Summary:	Map designed for mobile mapping of trees and shrubs in the Hempstead Plains Preserve, Hempstead, NY
Map by geoteacher Modified: November 17, 2016	
Stars: (0 Ratings, 18 Views)	
Tags:	Hempstead, Hempstead Plains, trees, survey, plains
<b>Deciduous</b>	
VegType	Tree
VegClass	Deciduous
Species	Survey monument
CircumBreastHeight	
Est Height Ft	
NativeStatus	Native
InvasiveStat	Not Invasive

ESRI ARCGIS Online Map of the Hempstead Plains on an iPhone

## Reading

### New Postings on the Website

By David Stolarz

Thanks to the volunteer efforts of Nicole Ciccolella (see her article in Meadowlark, Vol. 15, No.1), there are a few more additions to the website.

Now available on the website are PDF versions of portions of: "Roosevelt [Air] Field's Twenty-fourth Anniversary", an article in Aero Digest from 1932; "Recipes of Historic Long Island" from 1940; "Engineer Section, Headquarters First Air Force", a historical military account from 1944; and "The Hempstead Plains" by Maxwell C. Wheat, Jr., in the Nassau County Historical Society Journal from 1984.

Please consider using these resources for fun and education, and if you have a story to share about trying out the recipes, or maybe you have a personal tie to the history of the plains, please contact us at [info@friendsofhp.org](mailto:info@friendsofhp.org).



Image of the First Air Force Prologue and a Historic Ad for Hicks Nursery.

## Engineering

### Designing a Method of Darkening a Room

By David Stolarz

Sometimes the simple projects take ingenuity. The issue: how to darken the Education and Research Center for presentations? It turns out that black cotton sheets let a large amount of light through, but are very easy to install. Wallpaper material lets very little light through, but are heavy and cumbersome to put in place and remove.

Curtains might be an option, but they have their own drawbacks. First off, they are not inexpensive, and while they could be parted and tied, they would be bunched up right where the rollers for the doors go up and down, so pose a risk to binding in the mechanism, not to mention what they would look like if they got grease on them.

What might be handy would be a large scale version of a window shade that could be pulled down and snapped back up. What would it take to make that? It would need to be lightweight, and have a light-blocking material. The method of attaching it would have to be sturdy and designed to fit the current brackets for the door.

Do we have any engineering students out there who would want to work with us to design and test a variety of solutions? Please contact [info@friendsofhp.org](mailto:info@friendsofhp.org).



Views of Top of Door in Need of Light-Blocking Solution

## Arts

### The Scent of a Blossom: Agalinis Dreams

By Mirium Simun

Agalinis Dreams is at once a tribute to just one tiny and elusive species facing existential threat amidst global mass extinction, and at the same time an inquiry into what is nature, what is native, what it means to 'protect' species, and ultimately what is progress in the technosphere.

Agalinis Dreams is a series of works centered around the *Agalinis acuta*, the only federally protected endangered plant species in New York State. This is a tiny weed that blooms into a pink flower one day a year; a species on the verge of extinction; it is also a parasite, a species that one may argue has persisted only thanks to human activity, and, a legal fiction: in 2008, genetic testing revealed that the species doesn't exist at all (it's discovery as a new species has turned out to be a taxonomic error), yet legal imperatives around species protection mean that even scientists continue the illusion.

FHP directors participated in a ritual of remembering this tiny, beautiful and elusive species whose flowers bloom only one day a year. The ritual performance took place within a 3-channel video installation and series of live ritual performance elements that explored the interwoven relationship of species loss, cultural change, bio-political structures and notions of progress through the story of the attempted revival of the *Agalinis acuta* from the brink of extinction.

The *Agalinis acuta* is so small that its scent has never before been perceived by humans. Using living flower headspace technology to capture the chemical trace of this tiny flower as it grows, the scent of the *Agalinis* has been extracted and recreated for human perception in collaboration with International Fragrance & Flavors.

Agalinis Dreams: Commissioned by the Museum of Arts and Design for [NYC Makers: The MAD Biennial](#).

[www.miriamsimun.com](http://www.miriamsimun.com)

<http://www.newyorker.com/tech/elements/agalinis-acuta-phantom-flower>

## Mathematics

### What Is The Resolution Of An Air Photo?

By David Stolarz

Perhaps a better title might be, "How Much Ground Is In One Pixel Of An Image". Publically available imagery in our area is in the range of 6" resolution. Each pixel of the original image represents a square 6" on each side. But when a drone camera takes a picture looking straight down (gravitationally orthogonal), what is the area of its pixel?

A photo looking straight down varies in resolution moving outward from the center of the. For example, if it is slightly tilted to the point of seeing the horizon, the edge pixels represent infinite distance and area. For now, we will ignore that reality.

In an image taken from 140' high (see Back Cover, Meadowlark, Vol 15, No.1, available on the FHP website), an image with 1920 x 1080 pixels covers an area approximately 80' x 45'. Dividing that ground area by the number of pixels results in a resolution of approximately: 1/2 square inch per pixel.

Granted, that is a VERY rough estimate. As soon as the images are orthorectified, georeferenced, and edge-matched, you will see them in Meadowlark. There may even be a presentation that explains the details, and perhaps even a workshop. Please contact us at [info@friendsofhp.org](mailto:info@friendsofhp.org) if you are interested.



Drone in Take-Off and Oblique Air Photo Looking Toward The Northeast

## Science

### Conservation Project Manager's Report

By Betsy Gulotta

FHP maintained a busy schedule during the fall semester. Over 16 NCC classes visited the plains, as well as students from Hofstra University, high school students from The Wheatley School, and several other community groups. Two successful conferences were held at the Education and Research Center, which brought new faces to the plains: a Landscape Architect's Conference in September that provided professional education credits to the participants, and the annual Grassland Manager's Conference, during which participants shared their grassland habitat conservation and restoration techniques.

In September, at peak blooming time for the endangered Sandplain gerardia, the official count of all plants in the population at the Hempstead Plains totaled nearly 4000, our most successful yield to date. Lacking research information on any correlation between growth and weather or climate, we can only hypothesize that the dry summer contributed to the plant's success, as it prefers to grow in dry sandy soil. This would be a welcome research project for an interested student.

A highlight of the Fall was the Baldwin School District's Family Fun Day, which spanned a two-day period on Nov. 4 and 5. In an effort to inspire K-12 students and their families to visit the Hempstead Plains, the Friends partnered with Baldwin School District environmental consultants, Nomi Rosen and Ralph Smallberg, to sponsor fun activities in environmental education for elementary school students. Activities included a scavenger hunt, poetry and art workshops, and tours of the prairie. Hempstead Plains' "poet in residence" Tom Stock role-played with the students as he took them back to a day in the history of the plains in which they became sheep in the tall grasses, and then encouraged them to write poems about their experiences. Hempstead Plains' Art Director, Harriet Carotenuto, showed the students how to use primary colors to create many different combinations.

Friends of Hempstead Plains is committed to offering meaningful environmental education programs to students and the public. We are excited to work with teachers and school districts to increase the connection between children and their environment. The Hempstead Plains offers a safe, nearby and unique outdoor experience for students to discover and learn about local natural habitats.

# Advertising

## Place Your Advertisement Here

Contact [info@friendsofhp.org](mailto:info@friendsofhp.org)

## Poetry Workshop

By Tom Stock

### Fall Walk On The Hempstead Plains: A Magical Place

Excerpt of an Essay By Tom Stock

Full Text Available Online on the FHP Web Site

[Our Tour Guide, Betsy] ... proudly pointed out several green factors of the center. Solar energy, compostable bathroom, rain collecting on the roof to supply water to the plants there and stored water to flush the composting basin. The center is open for three seasons, closed in winter. The building itself was shaped from four shipping containers. Three garage doors open to break the barrier between us and the landscape. Another unique feature is the living roof. Trays of plants common to the preserve were placed on the roof. Little bluestem, Switch grass, and Indian grass were started in plugs on the ground, then put into trays with absorbent soil and placed on the roof.

During her introductory talk, she explained that the plains were not flat. They were dissected by the headwater channels of several creeks that run south into the Great South Bay: including Valley Stream, Meadowbrook, Milburn Creek, Cedar Creek, and Massapequa Creek. Although the water table has dropped considerably, Meadowbrook still has a trickle of water which swells during heavy rainfall events.

We headed out. Fall is prime time for the prairie. Many plants are mature or just past maturity. Dominating the scene at the start is a field area dominated by Hyssope-leaved Thoroughwort. From a distance, these plants are two feet high with dirty-white flat tops of flowers. Ulrich Lorimer, Curator of the Native Flora Garden at the Brooklyn Botanical Garden and a group from New York City were here to tour the area. I quickly learned that he is an expert botanist. He identified Gray Goldenrod, Rough Goldenrod, and Scented Goldenrod among dozens of other plants. My plant book listed 33 species of goldenrod. I was already confused. We found Indian Grass, Switch Grass, Wild Indigo, Little Bluestem Grass, all natives. "The drought this summer has affected the height of Indian Grass". Betsy said. This grass grows to six feet high. "It is stunted this season." said Betsy.

We headed toward the fence enclosure. This is the place where the globally endangered Sandplain Gerardia is growing. No human foot traffic may enter. "Look" someone called, "A tiny pink flower right near the Fence...Sandplain Gerardia." Someone else said, "It's abundant." I stared out into the space. Hundreds of pink spots popped into sight. "There are almost 4,000 this year." said Betsy. From previous visits, I knew



Tom Stock, Our Poet Laureate, Lounges Among The Grasses

immediately that this was an explosion. Gazing over this enclosure I was enchanted. Among a dazzling assemblage of textures, tiny, delicate, pink flowers, rare worldwide. I feasted for several minutes to let this sight burn into memory. Did the flower save the site, or vice versa? Sometimes I dropped back from the group to inspect more closely. I missed a lot in doing so. Ulrich was identifying plants that were new to the list that Betsy has assembled.

"I want you to see an area nearby." We followed her to a field that looked strange. There were no non-natives. All the growth looked to be about 18 inches high. It is the most beautiful part of the preserve I've ever seen. There is nothing like what was seeing anywhere else on Long Island. Here was the way the plains looked 200 years ago. Ulrich called "Blue Curls" and immediately crouched. I saw tiny specks of blue and I fell to my knees to look close. "Blue Curls are an unusual member of the mint family." Perhaps only a foot high, it grew under the canopy of larger plants. I noticed that there were several flowers on the ground. I found this information on the internet: "*Trichosterna dichotomum*, flowers fall off at midday. Blossom opens in the morning and only lasts a half day." It was impossible to avoid stepping on the plant. I delicately picked up a fallen blossom. Less than a half inch in size, it had three arching anthers that arise from behind the throat of the flower and block the entrance. This is its strategy to insure future generations. An insect cannot avoid bumping into these overhanging anthers and insuring pollination. For me, the area immediately took on a sacred tone. We all stepped carefully.

(Read the full version on the FHP website Library)

## FHP Upcoming Events

### Annual Prairie Benefit Cocktail Party

May 12, 6 PM. At Hofstra. See Page 2 for Details,

### Endangered Species Day Celebration

Even though Endangered Species Day (ESD) is officially on May 19 this year, since we are caretakers of an endangered species, the Sandplain Gerardia, every day is ESD for us. Please use the #HempsteadPlainsESD2017 when posting your photos online this year. Thank you.

### Education and Research Center Spring Open House

Date and Time To Be Determined

### Friday Afternoon Walks at 3:30 PM

April 7 and 21, May 5 and 19, June 2 and 16, July 7.  
Bring your camera, binoculars and sneakers.

### Saturday Morning Volunteering

Saturdays from 9:30 AM to 12:00 PM  
(Weather permitting)

April 8 and 22, May 6 and 20, June 3 and 17, July 8.  
Bring gloves, rakes and clippers. Call to schedule additional workdays.

### Sunset Talks

We plan to accommodate speakers, so  
Please visit the website for schedule.

### Special Events

FHP can host your class, troop, or family outing.  
Contact us at [info@friendsofhp.org](mailto:info@friendsofhp.org)

Help Wanted! See Special Projects on our website.

## Partner Events

### EMPL

East Meadow Public Library hosts science, art and learning activities year-round.

Please see: <http://www.eastmeadow.info/>

### North Shore Land Alliance

Please visit: <http://northshorelandalliance.org>

### South Shore Audubon Society

[http://www.ssaudubon.org/ssas\\_events.html](http://www.ssaudubon.org/ssas_events.html)

## Student Perspective

Transcribed By David Stolarz

The Center for Student Involvement at Adelphi University facilitates a "Panther [their mascot] Day of Service". The goal of the service event is to give back to the communities that surround Adelphi University.

Students work with their peers, faculty and staff at different service locations around the island on various projects. ([http://events.adelphi.edu/au\\_event/panther-day-of-service/](http://events.adelphi.edu/au_event/panther-day-of-service/))

Professor Carol Lucas led students Ashis Maloo, Zene Ezell, Sharia Hornedo, Gina Faiella, and Bruce Yang on their day of service. What follows are excerpts from their description of their participation:

"This is the first year that this is being organized and we came here to volunteer for this beautiful area that is the last remaining prairie."

"One part that I really enjoyed was when we were cutting down the trees and Ash took it upon himself to go up there and break the branches". "We had a lot of fun doing it, as well as learning about the history of the prairie and how it is being preserved". "Even though it is very cold and windy outside and I cannot feel my hands."

"We used tools to cut down the branches and clear out the unwanted trees to allow the native plants to grow in population and size."

"It was a lovely experience - the best exercise, and a way to make new friends". "I think it was a great learning experience overall and I had a lot of fun working with everyone". "Besides helping out the environment, I believe it was good to get involved in teamwork and it embodied what the day of service is all about."

"It makes you wake up early on a Saturday!" "For international students, it's a good way to go to places and see the area we live in and learn about it, as well."



## Sandplain Gerardia



*Agalinis acuta* Blooming In The Sun In September

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at Nassau Community College, Inc.  
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