



Gateway: A Place to Learn from Super-Storm Sandy



Hurricane Sandy rendered significant damage to all the National Parks of New York harbor, especially Gateway National Recreation Area located on waterfront shore areas. The damage to all units of the park was sufficient to necessitate their closure for the safety and well-being of employees and visitors. Some areas, including Miller Field and Riis Park are being used by multiple agencies for emergency work, and may still be closed.

Many people are now referring to hurricane Sandy as a super-storm, the truly “perfect” storm. The confluence of elements—a tropical depression developing into a hurricane, coupled with a different storm from the west—all driven by the jet stream created a super-storm event that has never been known in recorded weather history. The storm drove head-on into the Jersey shore and New York harbor, delivering blows that have left permanent scars. Because the New York Harbor, framed by Staten Island and Long Island, creates a

funnel that magnifies the force of wind-driven water, the storm surge surpassed all previous weather events.

A National Park Service Incident Management Team, IMT (“disaster management team” in previous times) was organized just a few days after the storm to assess the damage and begin to provide stabilization and remediation. In addition to assessing the damage to Gateway, the team members travelled to all the National Parks of New York Harbor, and Long Island to create a report for the National Park Service Director Jon Jarvis and senior NPS management.

The IMT created in response to Sandy had the largest number of participants ever assembled by the NPS. More than one thousand employees from Alaska to Puerto Rico, were involved over the course of nine weeks. Specialized crews

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EEAC NEWS.....

Steering Committee Meetings

The upcoming meeting is March 7 at the Horticultural Society (see. p.5). Other meeting dates TBA. Please visit the EEAC website at www.eeac-nyc.org for meeting locations or contact an EEAC Steering Committee member. All steering committee meetings are open to anyone interested in learning about environmental education in New York City and sharing information about special programs and projects.

Newsletter Deadlines

If you would like to submit an article for the newsletter, please email it as a Microsoft Word attachment to lmiller296@aol.com. The newsletter deadlines are the first Monday in April, July, October and January. We would love your ideas!

Newsletter Committee & Contributors

Kim Estes-Fradis
Michelle Fufaro Beach
Joy Garland
Jane Jackson
Regina McCarthy
Lenore Miller, Newsletter Editor
Betsy Ukeritis



The Environmental Education Advisory Council (EEAC) would like to acknowledge the support of the New York City Department of Environmental Protection (DEP) for helping to produce the EEAC newsletter. Visit the DEP website at www.nyc.gov/dep, email educationoffice@dep.nyc.gov or call (718) 595-3506 for information about DEP's education resources for students and teachers.

ENVIRONMENTAL EDUCATION ADVISORY COUNCIL

Betsy Ukeritis
NYS Department of Environmental Conservation
47 - 40 21st Street, 1 Hunters Point Plaza
Long Island City, NY 11101
www.eeac-nyc.org

This newsletter is a publication of the Environmental Education Advisory Council (EEAC), a voluntary organization of educators, classroom teachers, administrators and other professionals in active support of quality environmental education.

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Betsy Ukeritis, NYS Dept. of Environmental Conservation
Mike Zamm, GrowNYC

* Affiliation for identification purposes only

GET CONNECTED!

The EEAC listserv has migrated to a new home at EEAC-NYC@googlegroups.com. If you are a member of EEAC and would like to join the listserv contact Carol Franken at carolfranken@gmail.com

MESSAGE FROM THE CHAIR

It's been a trying, crazy time. First SuperStorm Sandy, immediately followed by Winter Storm Athena, and just recently Winter Storm Nemo found us. The storms all showed us vulnerabilities and fears, but more importantly, volunteerism, helping our communities and one another, joining forces to work together to rebuild. Much of this issue is dedicated to stories about SuperStorm Sandy and the implications and impacts we are still facing from her wrath, both on the natural resources side of things and the human side. Professionally, I didn't get out into the impacted areas; I was stuck in the office coordinating some of the NYSDEC's response and making sure our response staff was working safely. I do know that despite breakdowns in some systems, it was the neighbors helping neighbors and strangers coming in to help strangers that really had the lasting impact on others. Rebuilding takes time, hard work, and strength to see it through, something New Yorkers always seem to have plenty of when push comes to shove.

As the season warms up, I urge us all to still seek volunteer opportunities to help areas hardest hit by these storms because the work is not done. And for those who have already volunteered, thank you. Now get outside and enjoy the weather: snow, wind, rain aside!

Betsy Ukeritis



Office of Education
Bureau of Communications and Intergovernmental Affairs
59-17 Junction Boulevard
Flushing, NY 11373

**27th Annual
Water Resources
Art and Poetry Contest
2013**



**March 1, 2013
Deadline for Submitting Entries**
www.nyc.gov/dep/artandpoetry

BOOK BUZZ

MAN GAVE NAMES TO ALL THE ANIMALS

By Bob Dylan

Illustrated By Jim Arnosky

As a young teacher in the late 60's, I had a wonderful record of Pete Seeger singing Woody Guthrie songs. Those songs still come to my lips whenever I see a young child. (Those were in the good old days of teaching when we really encouraged play because we knew it was good for kids!) In this playful spirit, I am delighted to see books that are now written to accompany Bob Dylan songs and come with CD's. They would be a great gift from grandparents or great-aunts or uncles who want kids to share part of their own formative years. There is a whole series with CD's made for young children. I think other nature-minded educators will love this book by Jim Arnosky.

This is the most beautiful book I have seen by Arnosky. The illustrations of animals from around the world are not organized by habitats but instead are artistically grouped. This book has 170 different animals and they are listed at the end of the book so it can be a fun activity to search for each species listed. I counted 23 local to New York; there may be more. Some are whimsically placed on each other like the Monkey on the Lion and the Macaw on the Donkey. In a marsh, you'll find a Wild Pig eye-to-eye with a Great Blue Heron with a Plover staring up at the Wild Pig.

This book really is such a delight. To find other similar books that pair Bob Dylan songs with CD's, go the Amazon Children's Books and put Bob Dylan in the Search box.

High Rock Conservation Center

Did you visit High Rock Park on Staten Island
during the 1960's, 70's or 80's?

Did it make an impression on you?

Do you remember the visit?

What did you learn there?

What did you find out about the natural world?

Send your experiences or stories to lmiller296@aol.com
for a book that is being written about that remarkable place.



Join the Horticultural Society of New York, the NYC Youth
and School Garden Network, and
The Environmental Education Advisory Council
for

Climate Change Seeing the Forest for the Trees

Presented by Paul Reale

**Thursday, March 7th, 2013
5PM**

**The Horticultural Society of NY
148 West 37th st. 13th floor
New York, NY 10018**

The world is a complicated place with so many major issues. Some people, including Paul Reale, believe that addressing climate change should be at the top of our to do list. Really? More important than EVERYTHING else? Come hear Paul put Climate Change into perspective, developed in part with his extensive experience with Al Gore's Climate Reality Project. Stay for Q & A, and then enjoy tasty beverages and the HUDSON VALLEY SEED LIBRARY exhibition.

As an environmental consultant, Paul Reale has worked with Natural Resource Defense Council and Urban Green Council promoting lease language that removes a barrier to energy efficiency projects in commercial buildings. He has also consulted on projects involving aquaculture (fish farming) and energy economizers for outdoor electronics. Paul teaches executives, professionals, building operators and others on numerous environmental topics, including the NY State energy conservation construction code, green building operations and maintenance, and NY City's Green Greater Buildings Plan.

Paul is founder and CEO of Green Allowance, a home energy conservation startup, and he co-founded the Carbon Squeeze – a community-wide environmental initiative focused on reducing carbon emissions. As a volunteer for Al Gore's Climate Reality Project, Paul has presented to over 7,500 people the science and facts about climate change. He has a Masters of Engineering and is a LEEP AP.

RSVP to Michele Israel no later than March 4th.

We need a head count. Thanks.



for supporting employee emergency needs, conducting damage assessments and removing debris in affected areas were centered and housed at Gateway's headquarters at Fort Wadsworth on Staten Island.

Gateway's recovery efforts began by thoroughly inspecting historic, recreational and natural resources so that the park can make wise decisions about their future uses. To accomplish this inspection and analysis project, the team included many professional disciplines, including staff responsible for facilities and structures, as well as natural resource specialists and cultural historians. They visited each of the park sites and areas for observation, documentation, to take photos, to begin emergency repairs and plan for eventual clean up.

We are pleased that we were able to open the Jamaica Bay Wildlife Refuge, Frank Charles Park, Hamilton Beach, and Great Kills Park. Other areas of the park may reopen shortly; others will take longer, perhaps months. Recovery and repairs will take time. We ask for the public's patience while we survey and inspect a 26,000-acre park with some 600 structures.

The IMT recovery process included photographic documentation of the storm damage. The team took pictures

just a few days after the event, capturing some dramatic and amazing images demonstrating the power of the storm and its effects. These pictures tell the story of what happened and are the basis for an exhibit: Hurricane Sandy: Before and After, now on display at the Jamaica Bay Wildlife Refuge Visitor Center (One Cross Bay Boulevard, Howard Beach, open daily from 9 to 5). The exhibit will be up for the next several months. For information about the exhibit, go to <http://www.nps.gov/gate/parknews/sandypix.htm>; and to see a web exhibit click on the first line of text: "Hurricane Sandy: Before and After," a photo exhibit (a big file so it takes a while to load, be patient). The exhibit compares large scale aerial images from before the hurricane and photos taken afterward by NPS employees from the IMT so that the public can witness the damage to the park.

"While these pictures demonstrate damage, the take-away message should not be one of doom and gloom, but rather one of resilience," stated Gateway Superintendent Linda Canzanelli. "There is still a lot of work to do and some things have changed forever. But the park is reopening, the natural areas will rebound and park visitors will be welcomed back."

Part of our resilience is recognition that the natural and cultural landscape has been altered by the storm--the dunes at Fort Tilden, the ponds at Jamaica Bay-- for example, in some cases permanently. These changes mean that we cannot do everything we once did in the same ways. The changes to the landscape also mean change in habitats for the species.

The recent severe weather events in the last two years - Irene, the December 26 blizzard, and Sandy - also point us to the consideration of weather, climate change, global warming and changes in migration patterns as topics for interpretation, education programs, teacher workshops and study sessions. The potential to use the storm and its massive impact on our coastal areas, has given us tremendous educational opportunities - from including observation and discussion of severe storm impacts in our existing programs, to designing new programs that focus on climate change and environmental resilience.

Adapting to a New Gateway: Lesson Plans and Program Activities

We are adapting our educational programs to reflect the changes that severe recent storms have had and may in the future have on the park's coastal habitats. For example, our 4th through 6th grade program Habitats by Land and Sea is now focusing on how habitats have been changed by storms and what effect that might have on the species that depend on them. Including weather and climate as elements, the program now helps students understand how super storms occur, as well as what happens as a result of those storms and what the cumulative effect might be. We are also working with schools and partners to provide service learning opportunities, by organizing field expeditions to restore habitats (replanting, reseeding, dune/sand/shoreline management) to help the park ecology recover.

A new program, Bird Migration and Climate Change offered at the Jamaica Bay Wildlife Refuge, is designed to help middle and high school students understand and observe seasonal changes as species arrive and leave our area; post-Sandy student observations will likely be altered as species may appear at different times—and appear in new geographic zones.

Professional Development for Teachers: Working with Scientists

Continuing our successful “Seminars in Science” workshop series offered in 2012, we are again planning workshops designed to bring teachers together with scientists, this year to discuss issues related to the recurrence of severe weather events, changes in migration patterns, climate change and global warming. We are working with several classroom teachers, field researchers, and our partners at Brooklyn College - as a community of learners - to create lessons and

activities that teachers and their students can use to collect and analyze data around these issues. Our professional development workshops this spring will seize the teaching opportunities that Sandy presented to us; with our partners, we will investigate the subjects of climate change, storm effects, and migration patterns, and consider how these topics and remediation efforts and stewardship may be incorporated into current science classes.

Working with Partners/Student Participation

Creating strong partnerships with like-minded organizations are the key to rebuilding a stronger park. We are building partnerships with conservation and education organizations such as the National Wildlife Federation, to develop opportunities for student and teacher involvement in Calls to Action, such as developing classroom extensions and field sessions that will include habitat remediation and restoration. Our goal is to have students participate in hands-on activities: beach sweeps, clean-ups, reseeding, and replanting. If your organization is interested in partnering in these types of educational activities, please contact Education Specialist Dan_Meharg@nps.gov.

As we continue our recovery, repair and remediation, areas of the park will continue to reopen, the natural areas will rebound and visitors will be welcomed back. We also recognize that with disaster comes opportunity on many levels especially to involve the many interested people who have volunteered their assistance.

But as we survey these changes in our landscape, shore line, and streetscape, we see that our world has changed. We realize that we cannot do everything as we used to, that some things have changed forever. We remember that the only constant is change. And as our environment changes around us, we, as the most adaptive species on earth, will acclimate and teach it to our children.

Charles Markis
Interpretive Specialist, Gateway National Recreation Area
Feb. 7, 2013





MEMBERSHIP APPLICATION 2013

☐ New Member

☐ Renewal

Name: _____

Address: _____

Apt. _____ Zip Code _____-____

If Sustaining Organization, Name of Contact Person

Business Phone () _____

Home Phone () _____

Affiliation (for categories other than Sustaining Organization): _____

Title/Position: _____

Address (for categories other than Sustaining Organization):

E-mail address: _____

Mail completed form and check to:

John Pritchard, Treasurer, EEAC, 72-35 Metropolitan Avenue, Apt. 2C, Middle Village, NY 11379.

Date: _____

Please check the appropriate calendar year membership category:

☐ \$ 20 Regular ☐ \$ 50 Sustaining Organization

☐ \$200 Individual Life Membership

Please make checks payable to EEAC.

Thank you!

EEAC is a 501-(c)3 organization.

I would like to become involved in a committee.

Please provide me with information about the following committees:

☐ Communications ☐ Programs ☐ Membership

☐ TEEP (Teacher Environmental Education Preparation)



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Betsy Ukeritis

NYS Department of Environmental Conservation

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