



PoLAR Climate Change Education Partnership: Connecting People with the Poles

The polar regions are some of the fastest changing places on Earth. The Western Peninsula in Antarctica and areas within the Arctic Circle are warming at rates nearly double the global average. But why should environmental educators in New York City concern themselves with addressing climate change issues that are occurring thousands of miles away, when there is already so much to focus on in our own backyards? The answer: what happens in the polar regions does not stay in the polar regions. Sea level rise, which will have major impacts on New York City's coastline, is driven in part by the melting of ice sheets and glaciers in faraway places like Greenland and Antarctica. Emerging research points to linkages between rapid Arctic warming and changing patterns in extreme weather events similar to Hurricane Sandy. Changing temperatures and landscapes in the Arctic are also likely to affect the migratory patterns of birds that fly from and through NYC on their way to far northern breeding grounds.

The Polar Learning and Responding Climate Change Education Partnership (PoLAR Partnership) is working to improve public understanding of and response to climate change through the creation of innovative educational approaches that connect lifelong learners to the polar regions. Supported by a grant from the National Science Foundation and hosted by the Columbia Climate Center at the Earth Institute, Columbia University, the PoLAR Partnership is an interdisciplinary collaboration between climate scientists, formal and informal educators and game designers. In an effort to catalyze new ways of learning about climate change, we are developing educational activities and game-like resources that serve as user-friendly models for educators and are fun to use in homes, classrooms, museums, and communities.

Games and interactive activities are increasingly used to help inspire curiosity, collaboration, optimism and problem-solving among a wide variety of audiences. By encouraging the use of social, creative and game-like approaches in formal and informal educational settings, we hope to inspire new methods, practices and policies for climate change education. Lifelong learners, including teachers, college students, community leaders, parents and grandparents are today's decision makers and are more likely to make informed decisions if they understand the scientific evidence of climate change and its social, economic and environmental impacts. Formal and informal educators are a key part of PoLAR's target audience because they play a crucial role in helping to build climate literacy within their schools and communities.

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EEAC NEWS.....

Steering Committee Meetings

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 February, June and October. We would love your ideas!

Newsletter Committee & Contributors

Kim Estes-Fradis
Joy Garland
Lenore Miller, Newsletter Editor



Water Flow

Beautiful sound of water,
Running through the rocks.
Floating through the streams,
To drink in New York City.

By Mauricio, Margaretville Central School,
West of Hudson Watershed



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

Judith Hutton
The New York Botanical Garden
Teacher Training
2900 Southern Boulevard
Bronx, 10458
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.

EEAC Officers

Judith Hutton, Chairperson
E. Shig Matsukawa, Secretary
John Pritchard, Treasurer
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* 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

EEAC has fostered high quality environmental education in NYC for 40 years, and we want you to be part of the next 40 years of the organization's future! This issue will give you a glimpse of programs we lead or support and spotlight new opportunities for citizen-led action coming up this fall both locally and globally.

It's so important to know about the origins and history of this great organization. To that end, we are soliciting written memories from our "old timers" as well as expressions of the hopes from newer members as we reach this milestone. Send them to the Editor: lmiller296@aol.com

Thank you to our programming committee for planning an amazing celebratory event. Our 40th Anniversary party and Annual Meeting is scheduled for Tuesday, November 18th between 7:30-10:30pm at Brooklyn Brewery. You won't want to miss it. Tickets are available through Eventbrite. Just search [EEAC NYC](#) to reserve your spot as well as to renew your membership. See flyer below.

EEAC also wants to keep you connected to the EE Community. Our programming line-up for the upcoming year includes resume writing for emerging professionals, programs on Climate Change and Fracking, as well as a visit to the Urban Farm Lab at New York University. Check the [EEAC NYC](#) website for the most up to date information about programs and meetings. Sign up for our Google Group, "like" our Facebook page or follow the organization on Twitter to keep up with environmental education news, jobs and events.

I look forward to working with you as we celebrate 40 years of Environmental Education with EEAC!

Judith Hutton

THE ENVIRONMENTAL EDUCATION ADVISORY COUNCIL (EEAC)

Presents

ANNIVERSARY CELEBRATION

Come celebrate the past 40 years of EEAC and contribute to the vision of the next 40 years of outstanding environmental education in New York City.

TUESDAY, NOVEMBER 18th, 2014
BROOKLYN BREWERY
(79 N 11th STREET BROOKLYN, NY)
7:30-10:30 P.M.



TICKETS ONLINE \$40, AT DOOR \$45
INCLUDES BUFFET &
UNLIMITED BROOKLYN BREWERY
CRAFT BEER



FOR TICKETS & INFORMATION:
www.eeac40thanniversary.eventbrite.com | [f](#) /EEACNYC | [t](#) @EEACnyc

#EEAC40th





City that Drinks the Mountain Sky

Trace the path of life's quintessential liquid from mountain-top to New York City tap.

Learn about the New York City water supply system as told through mask and puppet theater.

Two School Performances

Friday, October 24, 2014

10:15 – 11:15 am & 12:00 – 1:00 pm

Tickets are \$5.00 for students, parents and chaperones (free for teachers and school staff) or \$4.00 if paid in advance.

BMCC Tribeca Performing Arts Center | Borough of Manhattan Community College

199 Chambers Street, Manhattan, (Between Greenwich and West Streets)

For reservations, call the box office - (212)346-8468

Through a shimmering tapestry of poetry, puppetry, and music, City that Drinks the Mountain Sky brings alive the landscape of the Catskill Mountains – from the Ice Ages to today – to portray the on-going partnership to protect this flowing treasure.

This dazzling show, suitable for students in grade 4 through college, will take you into the heart of a watershed. You will see how forests act like kidneys, filtering water as it moves towards streams and reservoirs. You will meet some of the engineers and laborers who built the reservoirs and aqueducts. And, you will discover how this enormous water project brought profound changes to the Catskill Mountain communities and New York City.

The New York City water supply is one of the engineering wonders of the world. From the Catskill Mountain watersheds, gravity helps to deliver over 1 billion gallons of drinking water to the faucets of 9 million people who live, work and visit New York City and upstate communities in a journey that spans more than one hundred miles.

Click [here](#) for a City That Drinks The Mountain Sky Study Guide for Educators



This performance has been made possible by the

New York City Department of Environmental Protection and BMCC Tribeca Performing Arts Center.

The NYC Department of Environmental Protection is pleased to announce performances for school groups of City that Drinks the Mountain Sky, an epic story of the New York City water supply system as told through masks and puppet theater with live music.

Performances will take place at the Borough of Manhattan Community College Tribeca Performing Arts Center in Manhattan on Friday, October 24 at 10:15 and noon. A flyer with program details is attached. You may also view program information and a Study Guide for Educators on our website.

Please note that this performance aligns with Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

For example:

- Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions).

- Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.

For reservations, please call the Tribeca PAC at (212) 346-8468. Tickets sell out quickly, especially for the early show, so please plan to call and make reservations as soon as you can. Please feel free to contact us at educationoffice@dep.nyc.gov with questions.

Kim Estes-Fradis | Director of Education | NYC Environmental Protection |
(o) 718-595-3506 | kime@dep.nyc.gov

Please participate in DEP's annual Water Resources Art and Poetry Contest at www.nyc.gov/dep.

Become a fan of NYC Water at facebook.com/nycwater

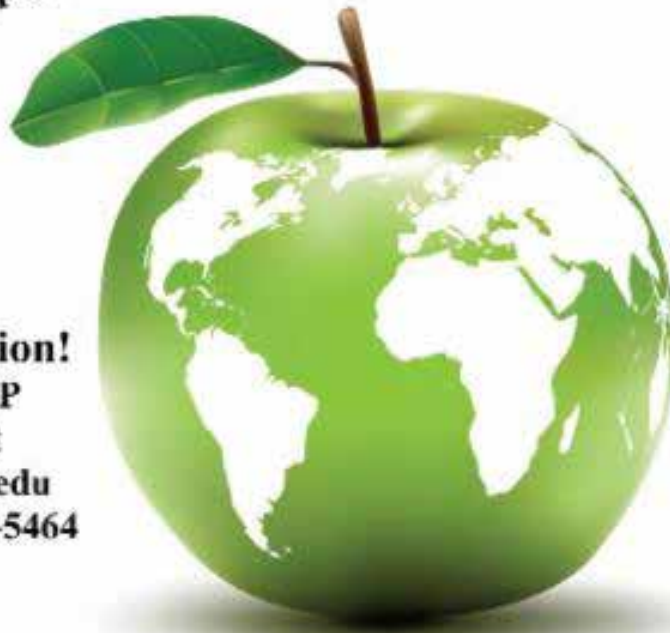
New York City Outdoors!

An Environmental Education Expo

**Light refreshments
and raffle prizes too!**

**Learn about in-class
programs and field trips!**

*Composting
Growing oysters
Overnight field trips
Fishing and seining
Gardening
Using the City's parks as a
classroom
Harvesting solar power
Citizen science programs
And much, much more!*



Free Admission!

**Please RSVP
to Tania at**

tg1045@nyu.edu

or call 212-998-5464

**Wednesday, October 15th, 2014
The Kimmel Center, NYU
60 Washington Square South
Eisner & Lubin Auditorium
4:30 p m to 7:30 p m**



**NEW YORK CITY
SOIL & WATER CONSERVATION DISTRICT**

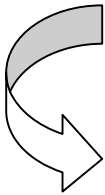


THE RIVER PROJECT

Citizen Science



Franklin



What is Citizen Science?

Citizen Science refers to the active participation of amateur or nonprofessional scientists in scientific research on a volunteer basis. It is a way for the public to contribute to a variety of important projects, often through the use of online technology available to anyone with access to a computer, a tablet, or even a smart phone.

The idea of citizen science has been around for a long time. Just think about "gentleman scientists" like **Ben Franklin**, **Isaac Newton**, and **Charles Darwin**, who were self-taught and often self-funded in their pursuit of new scientific knowledge. In fact, this was the way science was typically done until the mid-20th century, when universities and government laboratories became the primary employers of "professional" scientists.

Who are Citizen Scientists?

Today, almost anyone can be a **citizen scientist**. All it takes is enthusiasm for learning, a topic that interests you, and the willingness to do a little work.

Citizen scientists are found all over the world and from all walks of life. Children and adults, men and women, teachers and students, individuals and groups are all part of today's citizen science effort.

What Does a Citizen Scientist Do?

Citizen scientists typically help with the **collection** and **analysis** of **data** about the environment here on earth as well as the universe beyond. Projects exist for a wide range of skills and levels of involvement. For example, some simply ask you to count and identify birds in your backyard, while others will teach you **protocols** for sampling and testing water quality using scientific equipment.

Much of the information gathered by citizen scientists is sent to comprehensive project databases through internet resources including websites and smart phones apps, where it joins data gathered by thousands of other people, sometimes from all around the world. With so many people gathering and reporting information, it becomes much easier for scientists to make important breakthroughs on issues that directly affect the health of our planet, its plants, animals, air, and water.



Continued from page 1

The PoLAR Partnership encompasses a suite of tools, activities, and resources, including the following:

American Museum of Natural History Online Climate Change Course for Teachers

The AMNH online teacher professional development course on Climate Change explores the science of climate change, with a special emphasis on the important role played by the polar regions. During this 6-week course, middle and high school teachers learn the basics of how the climate system works and consider the possible consequences of climate change for our planet. Teachers discover valuable resources, tools and activities that can be implemented in their classrooms and also contribute to a curriculum repository. The course is offered several times throughout the year, and can be taken for graduate credit. A stipend is also available to those who qualify. For more information, visit: www.amnh.org/learn/climate.

Strategic Management of Resources in Times of Change (SMARTIC)

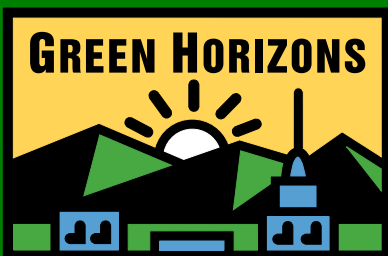
In this marine spatial planning activity, participants take on the roles of key Arctic stakeholders. Players set resource conservation and development priorities based on changing conditions in the region, and negotiate to resolve conflicts and manage competing interests. SMARTIC can be used as a facilitated classroom activity, suitable for high school and college students, and is available online at www.camelclimatechange.org/view/article/175297/.

National Climate Assessment Education Resources

Released in May 2014, the National Climate Assessment (NCA) offers a wealth of information related to climate change in the US. In an effort to help educators identify opportunities for utilizing the NCA, a network of climate change education experts developed a series of regionally-focused guides that highlight key messages from the report and feature relevant online resources. Visit: www.climate.gov/teaching/2014-national-climate-assessment-resources-educators to explore the NCA teaching resources, including the PoLAR-produced Alaska Region guide.

For more information on other projects from the PoLAR Partnership, visit thepolarhub.org.

Jessica Brunacini, Project Manager, PoLAR Partnership



Green Horizons 2014
Friday, October 17
Snug Harbor Botanical Garden, Staten Island.

For info: JLNwolfinc@aol.com



MEMBERSHIP APPLICATION 2014-2015

☐ 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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