



NEW YORK CITY DEPARTMENT OF EDUCATION (DOE) OFFICE OF SUSTAINABILITY

Sharon Jaye, Director of Sustainability

We have a limited amount of natural resources—you just can't argue with that. This is about dealing with our natural resources in a way that ensures they'll be there for future generations.



The DOE's Office of Sustainability has been working for the last several years on the Sustainability Initiative, aimed at enhancing operations and energy efficiency in our buildings, boosting school recycling activity, and teaching current and future students about the importance of conservation and renewable resources. The office has a staff of seven, with positions that address energy, waste, and compliance, and oversees sustainability initiatives in over 1,800 schools in almost 1,300 buildings. As part of this effort, the DOE has partnered with dozens of other like-minded organizations—local and national - to develop a constant stream of new ideas to implement in the school system.

Start small, build out

As adults, we're trying to break bad habits when it comes to sustainable living, but our children may not have developed those habits yet. While sustainability lessons in every class, grade and school in NYC is the desired end result, we understand that it's best to start small when you're first bringing these concepts into a school. We look for different ways to introduce sustainability into the curriculum, little bits at a time. A teacher could be talking about energy in science class and use light bulbs as an example—teaching the importance of turning them

on and off or calculate the energy savings as you switch from incandescent to compact fluorescent. We encourage everyone to just pick one thing and try it! Check out these Green Curriculum resources for all grades, or connect with Solar One (<http://solar1.org/>) or Children's Environmental Literacy Foundation (<http://celfeducation.org/>) for professional development.

P.S. 57 Hubert H. Humphrey, on Staten Island, is a particular standout. Under the guidance of Sustainability Coordinator Patricia Lockhart, the school has transformed into a model for student-led green activities—from drafting plans for a sea wall around Staten Island, to launching a program to reduce the school's energy use and greenhouse gas emissions. Earlier this year, P.S. 57 received a Green Ribbon award from the U.S. Department of Education in honor of its commitment to sustainability.

Help the 'green' movement in a school

The most important asset for a school Sustainability Coordinator is enthusiasm. You can get trained, you can look at our website for information, you can work with our partners or even be a partner! We just need people who want to take these steps, who

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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



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, New York 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

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E. Shig Matsukawa, Secretary
John Pritchard, Treasurer
Jaqueline Pilati, Program Chair

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E. Shig Matsukawa, Food Waste Recycler
Jacqueline Pilati, City Parks Foundation
John Pritchard, Grover Cleveland High School
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

Happy New Year and Happy Birthday to EEAC! As EEAC enters its 40th year, the organization continues to grow and change. This past year, the Steering Committee carefully reviewed and assessed EEAC and came up with new ways to maximize participation in the organization.

We're hoping to expand upon the diversity of membership benefits. A significant reason to become a member is networking through our programs and meetings. Programs are free for members and are a mixture of social, educational and organizational business. Our Program Committee is currently planning an exciting line-up of events, including a fundraising event to support our 40th anniversary celebration. Check the EEAC website for the most up to date information about programs and meetings. Be sure to sign up for our new Google Group and "like" our Facebook page.

In addition, the organization has reexamined levels of membership to provide even more options. Currently, membership is the most important way to financially support the important services that EEAC provides to the environmental education community. Individual membership has always been an option, but recently an individual lifetime membership option was reinstated at the request of current members. Also consider an organizational membership, which is an economical way for up to five people from your organization to enjoy the benefits of EEAC (see page 10).

EEAC welcomes you and your colleagues to become active in our network. If you want to advance environmental education in New York City, join EEAC or volunteer your time to support a committee. We can all work together to make this the most exciting time in environmental education!

Judith Hutton



NYU Opens a New Science Education and Research Center

On February 5, 2014, NYU officially opened its new science education center. The S. Jhumki Basu STEME (Science Technology Engineering Mathematics and Environment) Education and Research Center is a 6,000 square foot technology-rich environment that will serve as a classroom, research laboratory, and collaborative space for STEME educators at all phases of their careers. It will be a hub for educators, researchers, and STEME faculty from Steinhardt and across the University and will engage NYC public school partners, community organizations and programs in education. It will position NYU as a leader in STEME education, research, and scholarship.

The Center is named in honor of Dr. Sreyashi Jhumki Basu, a deeply admired member of NYU Steinhardt's science education faculty who passed away in December 2008 at the age of 31. NYU is profoundly grateful to the Jhumki Basu Foundation and Jhumki's parents, Radha and Dipak Basu, for their generous leadership gift to launch the Center.

We are especially pleased that the Center is home to the Wallerstein Collaborative for Urban Environmental Education and that Environmental Education will be included in the Center. Future EEAC Steering Committee meetings will be hosted at the STEME Center located at 239 Greene St. 4th floor.

Mary Leou, Director Wallerstein Collaborative

Terry Ippolito, Former EEAC Chair, Retires from EPA Mike Zamm

Former EEAC Chair (2003 through 2006) Terry Ippolito retired as Director of Environmental Education for EPA's Region II this past August after a highly successful tenure that spanned nearly a quarter century. Terry led EPA's EE programs across a broad geographical area which encompassed New York, New Jersey, Puerto Rico, and the Virgin Islands. Terry played an extremely important role in fostering EE throughout this region. In an era when, for the most part, the formal systemic support from the former NYC Board and current Department of Education was inconsistent, Terry, along with educators from NYC DEP, NYS DEC and the NYC Parks Department, provided crucial formal and informal government support for many EE initiatives.

First and foremost, Terry ran the EPA's Grants program in this region which included the arduous tasks of administering the request for proposals process, soliciting participation from organizations across the region, recruiting and supervising evaluators and managing the selection of grantees. The grants, which over the years ranged from \$5,000 to six figures, seeded creative EE programs and supported the delivery of needed services to schools and communities.

From January 2003 through December 2006 (2 terms), Terry was chosen by her peers to be Chairperson of the Environmental Education Advisory Council. She did an excellent job. She preserved the organizational growth achieved during the tenure of her predecessor, Mary Leou, and she added features of her own such as alternating EEAC's regular steering committee meetings at NYU with hybrid meetings, which combined a brief business meeting with visits to outdoor sites, such as Swindlers Cove and the NY Botanical Garden. This approach familiarized members with the sites and helped to increase participation. The quality of the EEAC newsletter continued to improve during this period as well. Before, after, and during her time as Chair, Terry did a great deal to develop EEAC programs and to spur membership. As Chairperson, Terry represented EEAC at the Green Horizons conferences which focused on encouraging middle school students to consider environmental careers. Terry did a terrific job speaking to the youth participants.

For many years, Terry was one of the NYC representatives on the Catskill Watershed Corporation's (CWC) Public Education Advisory Group (PEAG) which reviewed and recommended proposals for funding under the CWC's grants program. Schools and non-profits from the city and the city's West of Hudson watersheds benefitted. Terry represented EPA at conferences from the Science Council of NYC (SCONYC) to the North American Association of Environmental Education (NAAEE) and gave many well attended workshops on EPA's EE strategies including the grants program.

Terry also participated in Teacher Environmental Preparation (TEEP), an effort by EEAC, NYU and GrowNYC to convince schools of higher education to integrate more EE into teacher preparation programs. She traveled with TEEP committee members from Pace University in Westchester County to Rochester in western NY to be at TEEP symposiums.

With all her programmatic and policy initiatives in EE, Terry still found time over the past few years to apply her EE skills with a kindergarten class. The kids' attachment to her and their teachers' appreciation for Terry's work were evident at Terry's retirement party at EPA where the youngsters thanked her.

We wish Terry a happy, well deserved retirement but hope she will continue to lend her skills and expertise to EEAC.



National Wildlife Federation Young Reporters Announces Competition

In the United States, youth between the ages of 13 and 21 are invited to participate in the National Wildlife Federation's national Young Reporters for the Environment competition. They may enter as individuals or as part of a class or group. Participants investigate an environmental issue and report on it in writing, photography, or video. Entries must be relevant to participants' local community, connect to a global perspective, include possible solutions, and be disseminated to an appropriate target audience.

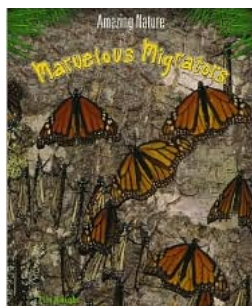
First place winners in each category will continue to the international competition. Submission guidelines here:

<http://www.nwf.org/Young-Reporters-for-the-Environment/About-Young-Reporters/Requirements.aspx>

Emily A. Fano, NYC Outreach Manager Eco-Schools USA, National Wildlife Federation, (646) 502-7096, FanoE@nwf.org

BOOK BUZZ

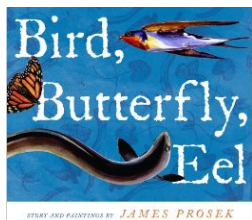
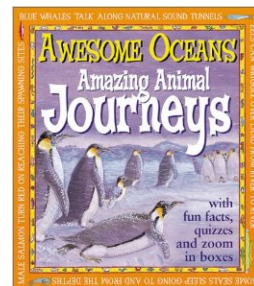
Three New Books about the Miracle of Animal Migration *Lynn Cole*



Time to Move-Arctic Terns see more daylight than any other animal on Earth! I'd never thought about the Tern's Polar home life, always focusing on their to and fro migrations. Author Tim Knight categorizes migrators by style rather than species, with sections such as "Long-Distance Walkers" and "River Adventures" in his well-written *Marvelous Migrators* title from the Amazing Nature Series (ISBN-13: 9781403411495). Mr. Knight closes his book for ages 7 to 9 years with a "Fact File" and an extensive glossary.

Awesome Oceans: Amazing Animal Journeys (ISBN-13: 9780761328148) by Michael Bright covers the same conceptual territory in a more graphically modern volume featuring ancillary information and fun facts on each page. For a slightly older reader,

Awesome Oceans is more comprehensive, covering the why and how as well as perils for intrepid travelers. This text also points out connections, such as comparing eel and butterfly metamorphosis. The illustrations and a few photos, drawn from a number of sources, fill the large format pages with an appealing array of images.



The picture book, Bird, Butterfly, Eel (ISBN-13: 978-0689868290) brings the migration story home, following three (maybe) familiar creatures, carrying us from backyard and pond to global scale and back again. Author James Prosek is thrifty with text, letting his vibrant water colors embellish much of the tale. Several pages show the animals' concurrent lives in panoramic bands across facing pages. I wondered if young children might find those difficult to decipher. Prosek loves his subject and includes detailed explanations about the bird, butterfly and eel migrations. The beauty of picture books is that they work for all ages. This one, with judicious omission of a couple of fac-heavy pages, could be a delightful read with a 3 or 4 year old. Read in full, it provides substantial details about amazing animals.



Gowanus Canal Conservancy Starting Middle School STEM Education Program

Having been designated a Superfund Site in 2010 and now in the beginning of a 12-year, \$500 million dollar clean up, the 1.8 mile long Gowanus Canal in Brooklyn is one of the most polluted waterways in the entire United States.

Through its Clean & Green volunteer program, the Conservancy has witnessed its environmental education efforts increase community stewardship of the Canal. Going forward, the Conservancy is developing a middle school STEM education curriculum to improve environmental literacy through an in-school, standards-aligned education program. The Conservancy's goal is for participating students and teachers to become active stewards of the urban environment, capable of engaging the wider community through sharing projects and knowledge of the environmental health of the Gowanus Canal.

In a year-long curriculum design and pilot process, the Conservancy will begin to collaborate with three partner schools in February 2014. These schools, MS 88, MS 51 and PS 32, are all located near the Gowanus and were selected for their capacity to teach environmental education and for a history of promoting sustainable practices in reducing energy and re-using resources at their schools. An Environmental Justice Grant through the NYS Department of Environmental Conservation is supporting the curriculum development project.

About the Gowanus Canal Conservancy (GCC)

The Conservancy is a Brooklyn-based non-profit organization, founded in 2006, to serve as the environmental steward for the Gowanus Canal and its 3-square mile watershed. The Conservancy's vision is a Gowanus Canal that is open, clean and alive. Contact: info@gowanuscanalconservancy.org

Flashbird

Learning Objectives: Students will...

- ... practice observing field marks and other identifying characteristics of birds
- ... record and share their observations with a partner
- ... use field guides to identify birds

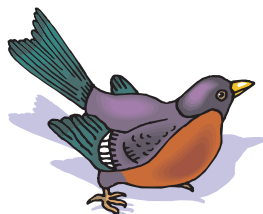
Materials: Pictures of birds (photos, slides, magazine clippings, etc.), *Flashbird observation sheet*, bird field guides.

Background:

Birds have a variety of physical characteristics that can be used to identify them, from size and shape to color patterns and distinct plumage. In the field, birds off move out of sight quickly, and being familiar with a species' most distinctive features aids in identification.

Procedure:

1. Do not let students see any of the bird pictures in advance. Stand at the front of the room and hold up one of the pictures for a reasonable amount of time (10 seconds – more or less according to your judgment). Students should observe the bird carefully and make note of as many features as possible. Withdraw the picture.
2. Give students time to write down all of their observations. Have students pair up to share their observations and try to identify the bird in a field guide.
3. Review and discuss responses with the class before revealing the bird's identity.
 - What clues were most important in making a correct identification?
 - Was there anything about the bird you missed that now seems obvious?
 - Is there anything you'd change about the "technique" you used to observe the bird?
 - Was anything confusing or frustrating about making observations or using the field guides?
4. Repeat the activity as many times as you like. You can vary each round in the following ways to increase the challenge and simulate real-world situations:
 - Vary the distance from the students, or the size of the picture.
 - Use different bird species.
 - Use male and female versions of the same species where the genders appear different (called *sexual dimorphism*).
 - Decrease the amount of time you display the picture.
 - Move around the room while displaying the picture.



Name _____ Date _____



Flashbird



List the observations you made about this bird...

Colors: _____

Shape: _____

Beak: _____

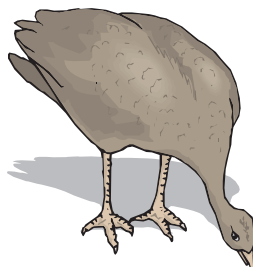
Feet: _____

Other Observations: _____

Use your observations to find your bird in a field guide.

What do you think it is? _____

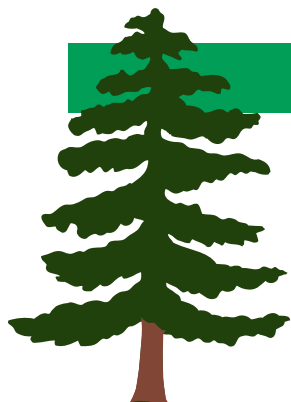
Were you correct? What bird is it? _____



SCONYC Conference March 29, 2014

The Science Council of New York City (SCONYC), is holding its 37th annual conference at Stuyvesant High School on Saturday March 29th, from 8:30 AM to 3:30 PM. There will be workshops and representatives from various professional organizations, non-profit groups, and informal centers of education. A light breakfast will be served, and lunch is available for purchase. Teachers and EEAC members are invited to present a workshop and to network with science teachers from the New York City area.

For further information and to register, go to the SCONYC website at <http://sconyc-ny.org>.



Arbor Day Free Trees Available

New York City Arbor Day will be celebrated on Friday, April 25th. Free trees are available from John Bowne Nursery to be planted in schoolyards, community gardens and parks. They will be delivered to sites early in the week of April 21st by the Parks Department.

For more information, contact Nancy Wolf at jlnwolfnc@aol.com or (718) 834-4589.

2014 Educator Academy in the Amazon Rainforest + Machu Picchu

Apply for \$1000 Professional Development Scholarships --March 1, 2014 deadline

<http://www.amazonworkshops.com/educators--naturalists.html> (case sensitive)

The July 1-11, 2014 Educator Academy is a cross-curricular professional development workshop for K-12 formal and informal educators to learn and use:

21st Century Instruction: 5E Lesson Design, Inquiry-Based Exploration, STEM Problem-Based Learning

Inquiry Protocols: Project Learning Tree, GLOBE, Cornell Lab's BirdSleuth

Global and Cultural Perspectives: Service Learning, Sustainability, Global Education

The Amazon experience is a real world lens through which to view global issues as -- sustainable development, global health, energy, population, water, quality of life and the meaning of service.

a 1/4-mile Rainforest Canopy Walkway and research on Weather and Climate

interactions with Indigenous Yagua, Riberenos and a Village Service Project

ReNuPeru Ethnobotanical Garden and problem solving inspired by Biomimicry

Monkey Island Conservation Project

PLT Certification, BirdSleuth and GLOBE training and PD Hours included. Academic Credit and Machu Picchu Extension optional. Land cost is \$2140, plus air. \$1000 scholarship deadline March 1, 2014. Land cost is \$1140 for scholarship recipients. Space is limited! Register early to secure your spot! See Syllabus on Webpage: <http://www.amazonworkshops.com/educators--naturalists.html> (case sensitive). Contact christa@amazonworkshops.com or 1-800-431-2624.

<http://archive.constantcontact.com/fs159/1108552320218/archive/1114888687764.html>

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want to be a part of this initiative. The Sustainability Coordinator's role is to develop and implement the sustainability initiatives in the school by serving as a liaison between the principal, faculty, students, parents and other school community members to inspire collaboration and involvement. Each school must designate a sustainability coordinator each year, meaning we have over 1,600 coordinators!

The following are some additional resources to help bring sustainability into the school community:

The NYC DOE Sustainability Initiative - To continue to be the leader in sustainable education and operation of sustainable facilities, DOE plans to double its annual recycling rate, to reduce greenhouse gas emissions by 30% by 2017 from DOE buildings and operations, to provide sustainable curriculum resources to principals and teachers, and to participate in PlaNYC initiatives

Green Schools Alliance – To connect and empower K-12 schools worldwide to lead the transformation to global environmental sustainability. (<http://www.greenschoolsalliance.org/>)

GrowNYC – To promote sustainable practices by hosting educational programs, maintaining community gardens, operating the Union Square Greenmarket and much more. (<http://gownyc.org/>)

NYCRecycles – Tips for schools on how to set up a school recycling program, resources for recycling and more

For additional information, please visit our Website at Office of Sustainability or email us at sustainability@schools.nyc.gov



EEAC Happy Hour Fundraiser

Join EEAC for a Happy Hour Fundraiser from 5:30-7:30PM on Thursday, March 6th at Brickyard Gastropub on 53rd and 9th in Hell's Kitchen. Join us for drink specials, snacks, and the opportunity to meet and network with many others in the fields of Environmental Education and Sustainability. We will be asking for a donation of \$5 or more, which will help to support exciting, future EEAC programs throughout the spring and summer. All are welcome! We hope to see you March 6th. For questions and to RSVP please contact Katie Gloede and KTGloede@nyu.edu or (718) 784-1444 ext. 181.



MEMBERSHIP APPLICATION 2014

☐ 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 Prepara-
tion)



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