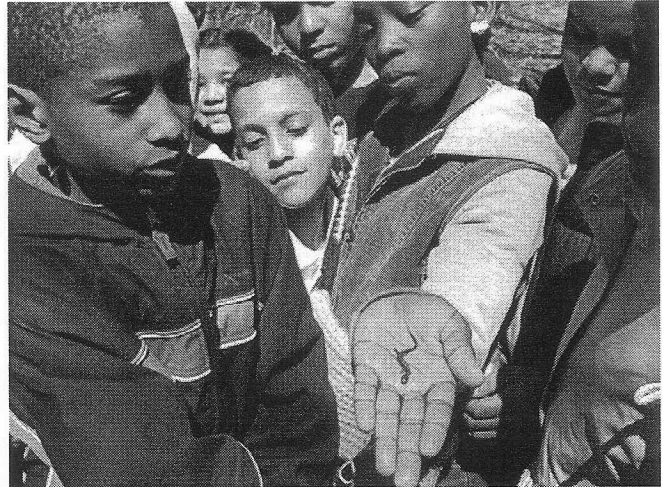




Bronx River Alliance Education Program

Anne-Marie Runfola, Bronx River Education Coordinator



On June 11th, 2007, along the banks of the river in Drew Gardens, the Bronx River Alliance formally launched the *Bronx River Classroom: The Inside Track for Educators*. The goal of the guide is to pique professional and personal interest in river-related activities and to help educators incorporate the local environment into their programs. This project originated with the Bronx River Alliance Education Team, a group of teachers, non-formal educators, scientists, and community members who meet regularly to identify projects, share resources, and plan activities for educators who would like to use the river as a living laboratory. The team knows firsthand how difficult it can be merely to organize permission slips for a field trip, let alone create meaningful activities tied to learning standards. Thus, the guide aims to provide educators with an "inside track" on the Bronx River—how to get there, what to do on site, what resources are available, and sample lessons to get one's feet wet, so to speak.

The Inside Track is just one resource available through the Alliance's Bronx River Classroom program (BRC), which offers consultations, professional development opportunities, a lending library of equipment, and support for in-class activities and field trips to the river. In turn, the BRC is part of the overall Bronx River Education Program, a place-based education initiative engaging students in real activities in their own neighborhoods as a way to learn academic subjects and to develop as contributing members of their communities and future stewards of the Bronx River.

All along the river, Bronx River Education Team members can be found actively engaging youth and adults in hands-on activities using the watershed as a living classroom. For the past two years, for example, DeWitt Clinton High School students have gathered at the 219th St. boat launch. They announce the results of their dissolved oxygen tests before sliding canoes off the dock and continue their monitoring work by boat. Nearby, in a forested area of the Bronx Zoo, a sixth grader from MS180 released an ovenbird last year after a researcher recorded data and banded it, as part of the class study of migration and ecosystems. Farther south, community members at the Bronx River Art Center are creating eco-videos and others plant butterfly bushes in Drew Gardens. Teens with Youth Ministries for Peace and Justice prepare to speak at a public meeting about the cleanup of a future park, and in Hunts Point, young adults practice tree pruning through Sustainable South Bronx's B.E.S.T. Program. At the mouth of the river, Rocking the Boat students row toward the artificial oyster garden they are monitoring with the New York City Department of Parks & Recreation Natural Resources Group. The list continues to grow.

The Education Program contributes to the overall mission of the Bronx River Alliance, a non-profit organization that acts as a coordinated voice for the river. Working closely with the New York City Department of Parks & Recreation and more than 100 other partner organizations, the Alliance works to

Continued on page 7

UPCOMING EEAC EVENTS.....

Steering Committee Meetings

EEAC Steering Committee members meet on the third Wednesday of every month (except August). Upcoming EEAC Steering Committee meetings are September 19, October 17, and December 19. Steering Committee meetings are held at New York University, Pless Building, 32 Washington Square Park East and Washington Place in the 5th floor Conference Room. 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.

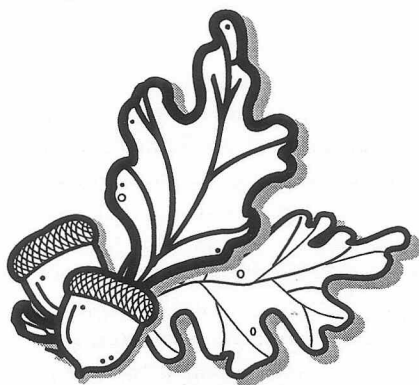
Meetings are occasionally held at New York City sites associated with our members. Please be sure to contact an EEAC Steering Committee member or visit the EEAC website at www.eeac-nyc.org to confirm meeting location and schedule.

Newsletter Deadlines

The Newsletter deadlines are the first Monday in April, July, October and January. Send articles as Microsoft Word attachments to lmiller296@aol.com.

Newsletter Committee

Meg Domroese
Kim Estes-Fradis
Michelle Fufaro
Joy Garland
Jane Jackson
John Lancos
Regina McCarthy
Jay Holmes
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 Web site 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

c/o Teresa Ippolito
Environmental Education Coordinator
U.S. Environmental Protection Agency, Region 2
290 Broadway, 28th Floor
New York, NY 10007-1866

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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*Affiliations for identification purposes only.

GET CONNECTED!

If you are a member of EEAC and want to be part of information sharing and on-line discussion on the EEAC listserv, contact:

Cfranken@schools.nyc.gov

THE CREATION: An Appeal To Save Life on Earth

by E.O. Wilson (W.W. Norton & Co., Inc.; \$21.95)

A Review by Joy Garland

After attending the presentation, arranged by Dr. Mary Leou, by the famous environmental biologist E.O. Wilson, at New York University, I eagerly waited in the long book signing line for his signature. Dr. Wilson addressed his book as a letter to an unnamed Southern Baptist pastor, believing that "religion and science are the two most powerful forces in the world today" and if theological differences can be put aside and common ground found, we may yet be able to save half the species of plants and animals that are slated for extinction by the end of the century.

Wilson is perplexed as to why so many religious leaders have not made protecting the Creation as urgent as other human-centered moral concerns. Although people are naturally drawn to nature, they often lack a sense of personal stewardship for it or imagine they are somehow separate from it. He believes the lack of good science education combined with the mind-boggling explosive growth of the biological sciences contributes to this alienation around the world. One criticism of Dr. Wilson's reasoning is that it does not include the effects of war and poverty (where people do what they do merely to stay alive), or greed and power (where corporations or governments practice unsustainable and/or unjust policies.)

Divided into "themes", the fourth section of the book is of special interest for teachers and parents. The first theme is "How to Learn Biology and How to Teach It". Here Wilson shared his own experience as a learner in the presence of three exceptional teachers. All of them were passionate about their subject and had high expectations for quality "hands on" work from their students. The first, Septima Smith, expected excellence and got it. Her students investigated things that mattered to them by scanning their own blood smears or looking for parasites in their own stool samples with exactitude and thoroughness. Wilson said, "Because she cared, I cared." One mentor, Alan Archer, treated the 18-year-old Wilson as a fellow professional and gave him confidence as well as a way to speak as a research scientist. Another, Ralph Chermock, instilled in his students the need and passion to do direct field work that contributed to their knowledge and love of discovery as they encountered and recorded their ecosystem's diversity of flora and fauna.

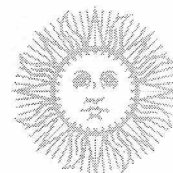
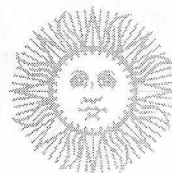
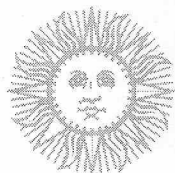
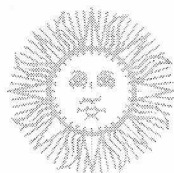
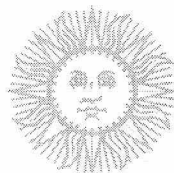
Under the second theme, "How to Raise a Naturalist", parents and teachers are advised to begin early to encourage young

children to make their own discoveries of the natural world by trips to the fields, woods, seashore, botanical gardens, zoos and aquariums. Self-discovery promotes self-confidence and a love of learning, but parents can help by providing field guides, binoculars, and a hand lens or microscope along with lots of encouragement and praise which reinforces the positive experience.

The third theme, "Citizen Science", calls on ordinary people to join the ranks of science researchers to explore and document the many unknown and unclassified species co-inhabiting the planet. This involvement usually begins with what is known as a bioblitz. People gather in an area with a few experts to guide them and, after a pep talk, fan out for a 24-hour period to record all the life forms they observe. They gather to share their data and follow up with experts. There are other participatory programs here in the New York area such as G.L.O.B.E. (Global Learning and Observations to Benefit the Environment) at Queens College with Dr. Allan Ludman. There, teachers who have taken the weekend program teach their students to test the water, soil, and air and then send their findings to NASA which collects the data from around the world.

In the last section of his book "Reaching Across", Dr. Wilson, a professed atheist, hopes that he and the clergyman can put aside their different world views about how Creation began in order to concentrate on saving Creation through their common efforts.

(For readers who might like to explore how a faith in God and a faith in science can be harmoniously combined into one worldview, you might want to check out The Language of God: A Scientist Presents Evidence For Belief by Francis S. Collins (Free Press, 2006.) Dr. Collins, one of the world's leading scientists, is head of the Human Genome Project which has helped to unravel the stunning sequencing of DNA, the code of life. Collins began as an atheist, but became a theist at 27 in his third year of medical school while working with patients whose faith informed their response to their illness. His debate with Professor Richard Dawkins of Oxford University, author of The God Delusion, can be found in the November 13, 2006 issue of Time magazine.)



National & International EE News

By John Lancos

Kids for Saving Earth

Clinton Hill was a special youngster who was intensely interested in the world around him, and wondered why we were poisoning our planet and neglecting our precious plants and animals. Before he died tragically of cancer at age 11, he started a club for kids dedicated to peaceful earth-saving actions. He called it "Kids for Saving Earth." After his death, his parents established Kids for Saving Earth (KSE) as a nonprofit organization, based in Minneapolis, with thousands of kids doing good Earthworks.

KSE kids gave speeches at the UN, rode on a KSE float in President Bill Clinton's inaugural parade and participated in thousands of grass roots activities to help protect the environment. In 1994, Clint's father William died of cancer. His mom Tessa is now President of KSE Worldwide with a network of over 7,000 schools and environmentally concerned kids and adults.

The mission of KSE is to educate, inspire, and empower children to protect the earth's environment. KSE Worldwide provides action-oriented educational materials, either free or for purchase from their store, for kids, families, groups, classrooms and schools. Materials include posters, certificates, guidebooks, pins, clothing and CD's. Some of their programs and materials are available electronically for easier access and less expense to KSE and educators. A few examples of programs KSE offers include: The KSE Children's Forest, The Arctic is Cool, The KSE Rainforest, The Rock the World Concert Kit and CD, The Call to Action and The Wonderful World of Water.

Educators can access EE curriculum for all ages, and can join KSE for FREE. Schools or classes can even have their own free web page on KSE. For further information about KSE membership and programs, visit them at www.kidsforsavingearth.org, or call them at 763-559-1234.



Make Earth Day Everyday!

By Michelle Fufaro

THE ECO-FRIENDLY VACATION

With summer's arrival, most of us are looking for a relaxing getaway. Whether you are going somewhere local or seeking out a vacation overseas, you can make your trip as eco-friendly as possible. Below are some websites and resources that provide tips on greening your vacation.

1. National Geographic's The Green Guide

<http://www.thegreenguide.com/>

This website is chock full of tips and articles on how to create and plan a sustainable vacation. It provides information on topics such as planning a fuel efficient road trip, venturing on a car-free vacation and choosing green hotels and accommodations. This guide is the perfect starter tool for a green getaway.

2. The Lonely Planet

<http://www.lonelyplanet.com/responsibletravel/>

This website provides a travel kit with information on how to be a responsible traveler. The site includes what to do before you leave home, how to minimize your vacation's eco-footprint and seizing optimum moments to view wildlife. It also includes information on how to be economically and socially responsible during your travels.

3. Responsible Traveling

<http://www.responsibletravel.com>

This site provides information on eco-friendly vacations, adventure vacations and ecotourism. Responsible Travel also gives details on environmentally friendly hotels and accommodations, including a list of 10 questions to ask a hotel to determine how eco-friendly they really are. It also provides tips on what to do before and during your travels.

4. The Ecology Center

www.ecologycenter.org

Another great site chock full of information on how to prepare for and enjoy a low environmental impact vacation. It provides great links, resources and tips.

5. Orbitz

www.orbiz.com

Orbitz has a page on its site called "Eco Tourism". The page includes pertinent how-to's of traveling green including top eco-friendly destinations, hotel information, national parks and actual travel tips.

INVASIVE SPECIES

Designed for the After School Conservation Club Program

by NYSDEC Region 2 environmental education staff

Objective: The purpose of this activity is to teach students how easy it is for invasive species to take over native populations.

Materials: none

Background:

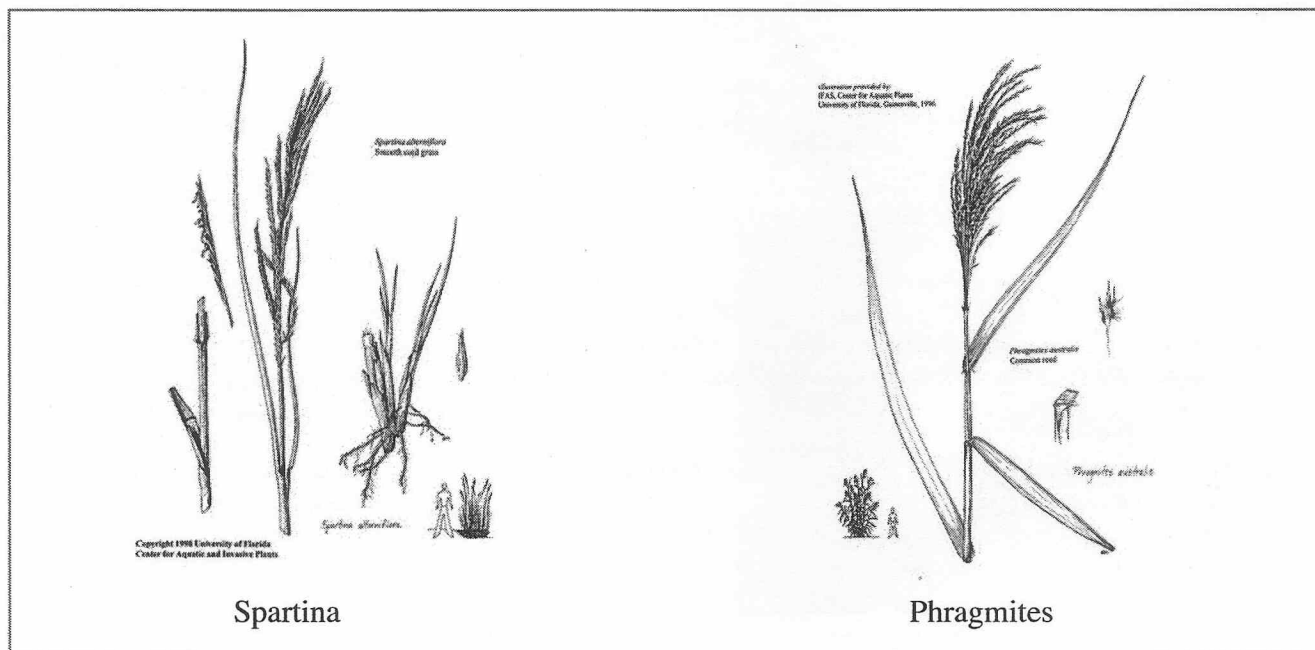
Invasive species can be plants or animals that take over and outcompete native species for space and resources. The native species are eventually replaced by the invasive species. It is important to note that not all invasive species are non-native species; a few invasive species are native. The invasive species that takes over tends to become the dominant plant in that area. This decreases the area's biodiversity.

For the purpose of this lesson, students will learn about the relationships between Phragmites and Spartina. *Spartina alterniflora* is a native plant that grows in New York State along tidal salt marshes. It helps prevent coastal erosion. It also serves as food and cover for marsh wildlife. This Spartina grass is being replaced by *Phragmites australis* another grass which grows in similar areas. The Phragmites, however, does not serve local birds and mammals with food nor adequate shelter.

Procedure:

1. Have three quarters of the students be the native plant, Spartina. Have the other quarter of the class be the invasive plant, Phragmites.
2. Tell all the native plants that they will need to run around (within the established boundaries) waving their arms and yelling "Spartina, Spartina, Spartina" in a high-pitched voice.
3. Tell all the Phragmites that they need to wave their hands in front of their faces yelling "Phragmites, Phragmites, Phragmites" in a very low, growling voice.
4. The plants that are Phragmites are attempting to tag all the Spartina plants.
5. Once a Phragmites tags a Spartina plant, the Spartina plant is transformed into a Phragmites plant and then has to act like one.
6. Eventually, all the Spartina will be changed into Phragmites.

Wrap Up: Ask the students what happened when they played the game? Why did the Phragmites take over (tolerate lower salinity, reproduce faster, no natural predators are some suggestions)? What types of consequences do invasive species have on the ecology of a given area?



RESOURCES:

By Betsy Ukeritis

Books:

The Live Earth Global Warming Survival Handbook

by David De Rothschild - 2007 (\$14.95)

This is the "official companion" to the Live Earth Concerts that took place on 7-7-07 to promote awareness of climate change and what people can do to help. This book gives 67 ways a person can take steps to fight climate change. There are the quick top 10 easy steps list on page 12 that include: say "no" to plastic bags, bring your own mug, and adjust your inside climate by two degrees - drop the heat by two degrees or increase the temperature for AC by two degrees. For more information on Live Earth, visit <http://www.liveearth.org/>.

The Green Book: The Everyday Guide to Saving the Planet One Simple Step at a Time

by Elizabeth Rogers and Thomas M. Kostigen - 2007 (\$12.95)

This book gives clear directions and answers to questions about how a person can help fight climate change with simple steps. There is a section on things to do at home; when making entertainment choices; when you are traveling; using communications or technology; while you are at school, at work, or shopping; using health and beauty products; playing sports; saving money and managing finances while thinking of the environment; building a new home or renovating; and going carbon neutral. Scattered throughout the book are short commentaries from some well-known names: Owen Wilson, Dale Earnhart, Jr., and Will Ferrell to name a few.

On-line Newsletter

Go Green!

By the US Environmental Protection Agency (EPA) - <http://www.epa.gov/newsroom/gogreen/>

America is shifting to a "green culture" where all 300 million citizens are embracing the fact that the environment is everyone's responsibility. To help, you can sign up to receive EPA's new consumer newsletter, GO GREEN! EPA launched this monthly email newsletter to provide "what you can do" information about activities and events that we can use in our homes, communities, and offices.



EEAC's Kominski Award Given to Two Students at the 2007 High School for Environmental Studies Graduation

June 26, 2007 Avery Fisher Hall

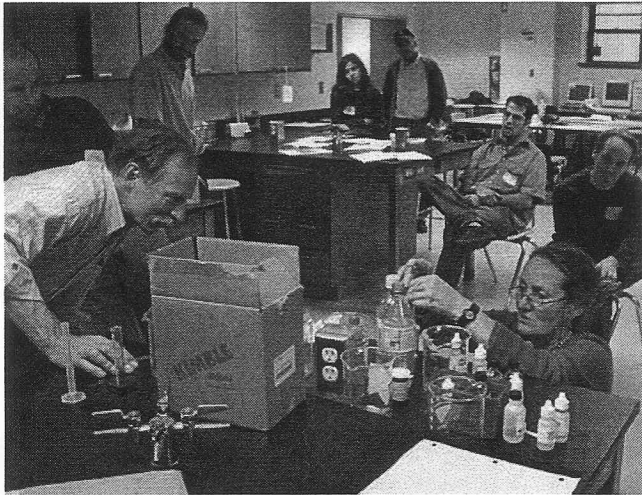
By Mike Zamm

Two \$150 awards were given to Kitty Ng, a leading organizer of the school's award winning recycling programs, and Bryan Maitland, who was involved in a multitude of environmental projects in his four years at HSES.

The 2007 awards were presented by Nia Rhodes Jackson, Executive Director of the Friends of HSES, and Mike Zamm, EEAC and the Council on the Environment of NYC. Remarks at the time of presentation were as follows:

"We congratulate the class of 2007 on four years of successful effort. In your time at HSES you have performed thousands of hours of community and environmental service in the City of New York. Through the internship program, the recycling club, the hiking club, Go Green, The Nature Conservancy summer internships, the Training Student Organizers Program and other programs you have made NYC and our region a better place to live.

Today we honor the memory of the first project director and acting principal of the High School for Environmental Studies (HSES), John Kominski, who opened the doors with ten teachers and 150 students in September 1992. Through the generosity of the Environmental Education Advisory Council, a consortium of environmental education individuals and organizations in NYC who worked closely with Mr. Kominski, we present the John Kominski award to two students who have embodied the community service and environmental education spirit of John Kominski and HSES."



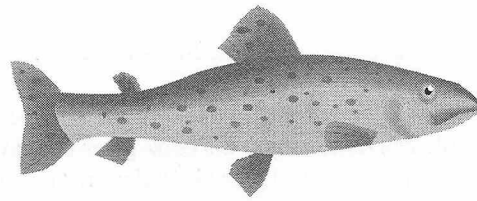
Paul Mankewicz helps Jacqui with a dissolved oxygen test.

Continued from page 1

protect, improve, and restore the Bronx River corridor and greenway so that they can provide healthy ecological, recreational, educational, and economic resources for the communities through which the river flows. The Alliance is governed by a board representing the diverse communities along the river. Teams of partner organizations and agencies guide the Alliance's four program areas—outreach, greenway, ecology, and education.

Many opportunities exist for serious and engaging projects along the Bronx River and in the interconnected natural areas in New York City. To review the educator's guide and use it as a jumping off point, visit www.bronxriver.org and click on the link to the *Bronx River Classroom: The Inside Track for Educators*. For a hard copy of the guide, write to anne-marie.runfola@parks.nyc.gov or stop by the Alliance office at the New York City Department of Parks & Recreation's Bronx Headquarters, 1 Bronx River Parkway, 718-430-1846. Visit the river, try a lesson, join the Bronx River Education Team. Most importantly, let us know how we can help you make the local environment, and the river running through it, a centerpiece of your program.

N.B. *The Inside Track*, created together with Jill Weiss, an environmental education consultant and the chairperson of EEAC, has already garnered great feedback from the public. The Alliance will submit the guide to the North American Association for Environmental Education (NAAEE) to be reviewed using the Guidelines for Excellence developed as part of the National Project for Excellence in Environmental Education. Once reviewed, a link to the guide will be placed on NAAEE's national website as a resource, and hopefully, as a model for all.



The Trout in the Classroom (TIC) Fall Teacher Conference will be held on Oct. 11.

It is a chance for teachers from all over the southern part of the state to meet and discuss TIC. All educators who participate in TIC, and any who are interested in finding out more, are welcome to attend.

Please contact Rochelle Gandour,
NY TIC Coordinator,
rgandour@tu.org
or 917-803-0743, for more details.

“The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air.”

The Earth Charter
www.earthcharter.org

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If sustaining Organization, Name of Contact Person _____

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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-c3 organization.

I would like to become involved in a committee.

Please provide me with information about the following committees:

☐ Exhibits ☐ Programs ☐ Website/Listserv ☐ Technology ☐ Remembrance Fund
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Please complete the application and mail it, with your payment, to:

Teresa Ippolito, Environmental Education Coordinator, U.S. Environmental Protection Agency, Region 2,
290 Broadway, 28th Floor, New York, NY 10007-1866

ENVIRONMENTAL EDUCATION ADVISORY COUNCIL

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