

# Environmental Education and the New York State Living Environment Core Curriculum

by Claudia Toback

hoever says that environmental education doesn't exist within the New York State Learning Standards hasn't scrutinized the Living Environment Core Curriculum. Although environmental concepts are not enumerated as such, they are definitely well integrated within the key ideas and performance indicators.

Several years ago, the New York State Education Department, in collaboration with science educators, developed the MST (Math/Science/Technology Education) Learning Standards. Science concepts are found within Standard 4, commonly referred to as the science content standard. Standards 1,2, 6 and 7 are viewed as the process skills and associated concepts that are to be integrated with the content.

A brief overview of Standard 4: The two major content topics are the Living Environment (Biology) and the Physical Setting (Earth Science, Chemistry and Physics). Most of the environmental concepts are found in the Living Environment, although they also can be found in the major understandings of the Physical Setting.

A review of the Living Environment Core Curriculum:

Key Idea 1: Living things are both similar to and different from each other and from nonliving things. Within this key idea are three performance indicators with their major understandings. A careful reading of major understandings 1.1a-f would coincide directly with concepts found in teaching about the environment. Examples include: food webs, ecosystems that stress biotic and abiotic relationships, population studies, and cyclic changes and equilibrium factors.

**Key Idea 3:** *Individual organisms and species change over time.* The concept of mutation and linking it to environmental factors as causal agents is found in major understanding 3.1d while the possible reasons for species extinction is found in 3.1l.

Key Idea 4: The continuity of life is sustained through reproduction and development. Clearly, the concept of embryonic development encountering environmental risks is found in major understanding 4.1h

Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life. Within the three performance indicators are several major understandings that are directly related to environmental education including: solar energy as the source of the biotic world, transfer of energy within biotic and abiotic systems, the causes, treatment and prevention of diseases related to environmental factors, and feedback mechanisms.

Key Idea 6: Plants and animals depend on each other and their physical environment.

**Key Idea 7:** *Human decisions and activities have had a profound impact on the physical and living environment.* These two key ideas have an array of what environmental education is all about!

For further examination of these key ideas in both the Living Environment and Physical Setting, please go to the following Web site: http://www.emsc.nysed.gov/ciai/mst/pub/

EEAC's New Web site: www.eeac-nyc.org

# UPCOMING EEAC EVENTS.....

#### **Steering Committee Meetings**

EEAC Steering Committee meetings are always the third Wednesday of every month (except August) but this year the November and December meetings will take place on the second Wednesday of the month due to holiday schedules.

#### Upcoming meeting information:

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 except for the November Annual Meeting, location to be announced. Upcoming meetings will be on November 13, December 11, and January 15.

#### **Newsletter Deadlines**

The Newsletter deadlines are the first Monday in April, July, October and January. If possible, please E-mail articles to **joy.garland@verizon.net** and send longer articles as an attachment in Microsoft Word or on a floppy disc in MS Word. Typed articles should be sent to the Editor's address below.

#### **Newsletter Committee**

Meg Domroese Kim Estes-Fradis Jay Holmes Kenneth Kowald Lenore Miller Joy Garland, Newsletter Editor, 440 East 20 Street, Apt. 7F, New York, NY 10009 (212) 673-6732 or e-mail: joy.garland@verizon.net

The Environmental Education Advisory Council (EEAC) would like to thank the New York City Department of Environmental Protection (DEP) for supporting the publication of this newsletter. For information about DEP's education resources for students and teachers, visit the new DEP's Web site: www.nyc.gov/dep or call the new phone number, (718) 595-3506.

### NOTE CHANGE OF CAROL'S E-MAIL

If you are a member of EEAC and want to be part of the information sharing and discussion on the EEAC Listserve contact:

Cfranke@nycboe.net

# ENVIRONMENTAL EDUCATION ADVISORY COUNCIL

c/o Jay Holmes Education Department American Museum of Natural History Central Park West at 79th Street New York, NY 10024 EEAC Web site: 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 environmental education. It is available free upon request.

#### EEAC OFFICERS

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\*Affiliations for identification purposes only.

### **CHAIR'S MESSAGE**

#### Dear EEAC,

It has been an pleasure to serve as Chair of EEAC these past four years, and five years prior to that as Vice Chair of Programs during Mike Zamm's tenure. I am grateful to all of you for your tremendous support all these years. I especially want to thank the Executive Committee members who have served with me: Ken Kowald, Vice-Chair of Issues; Terry Ippolito, Vice Chair of Programs; Millard Clements, Secretary; Kim Estes-Fradis, Membership Secretary; Joanne Dittersdorf as Treasurer, and more recently Treasurer, Jay Holmes. Special thanks to Carol Franken who serves as Chairperson of the Nominating Committee and Joy Garland, our newsletter editor. I am also grateful to all the Steering Committee members who serve on our committees and have provided the organization with leadership, wisdom, and dedication. You are a remarkable group of people that I have had the pleasure of knowing and working with.

EEAC is at a unique point in its history. It has the potential to grow even bigger and better and lead the way into the next decade. Terry Ippolito will assume leadership of EEAC on January 1, 2003. Terry's talent, vision, and experience make her an exceptional leader. She will be supported by a terrific slate of officers and steering committee members that will take EEAC to new heights. I will continue to be an active member of EEAC and I will, of course, continue my work as Director of the NYU Wallerstein Collaborative for Urban Environmental Education. Thank you all for your support. It has been a honor and a privilege to serve you. With best wishes for the future,

### TEACHER ENVIRONMENTAL EDUCATION PREPARATION (TEEP)

The TEEP program was established in the fall of 1999 as a partnership between EEAC, the Wallerstein Collaborative for Urban Environmental Education at NYU's Steinhardt School of Education, and the Council on the Environment of New York City. This collaboration has been created to foster more environmental education in teacher preparation programs at colleges and universities throughout the state of New York.

Three statewide symposia have been held thus far at Pace University in Pleasantville, NY; SUNY Cortland, and Teacher's College, NYC. TEEP Committee members have worked on developing a Web site, a power point presentation, and the Lyris network to facilitate communication among TEEP partners. On November 15, the fourth TEEP Symposium will take place in Albany, NY at the State Education Department, 89 Washington Avenue.

A new idea has emerged about exploring the establishment of a statewide center for Environmental Education, possibly at SUNY Cortland. The proposed Center would be a collaborative initiative between New York State public and private universities and the TEEP network dedicated to supporting the development of teacher education. Other agenda items include developing a survey to address the need for increased teacher preparation in schools of education and support to environmental science and environmental studies educators within their institutions. Please contact Mike Zamm at (212) 788-7932 for more information.

Mary J. Leou, Ed.D., Chair

# EEAC'S MISSION STATEMENT:

Founded in 1974, EEAC is a non-profit, tax deductible organization made up of dedicated educators, youth leaders, environmental professionals and students. EEAC members work together to stimulate and encourage environmental education in New York City and the surrounding region.



### **Dates to Remember**

The Bruner Foundation has issued its 2003 Call for Entries for the **Rudy Bruner Award for Urban Excellence**. Deadline for submissions is Monday, December 16. Write to the Foundation at 130 Prospect Street, Cambridge, Massachusetts 02139, or telephone (617) 492-8401, x 184, for applications.

January 2 is the deadline for entries in the American Museum of Natural History's Young Naturalist Awards program. By calling (212) 533-0222, you can receive project guidelines, examples of past winning work and this year's entry form. There will be 12 cash awards and winners will have their entries published, be treated to a tour behind-the-scenes at the Museum, and meet scientists.

Now on view through February 11 is "**Urban Neighbors: Images of New York City Wildlife**." The venue is the D. Samuel and Jeane H. Gottesman Exhibition Hall in the Main Branch of the New York Public Library. The exhibit contains more than 220 historic and contemporary illustrated books, photographs, engravings, lithographs, woodcuts, maps, threedimensional pieces, cartoons and magazine covers, from the mid-17th century to the present.

You have until March to see "**The 20th Century Borough: 100 Years of Modern Architecture in Queens**," at the Queens Historical Society, located in the Kingsland Homestead, 143-35 37th Avenue, between Parsons Boulevard and Bowne Street, in Flushing. The telephone number is (718) 939-0647, x 17.

### **Around New York**

The Council on the Environment of New York City has announced the release of a number of new publications helpful for teachers and others who wish to incorporate environmental education into regular classroom lessons and special programs. Here are the titles: *Energy & Energy Conservation Education, Service & Action, Greenpoint/Williamburg Environmental Curriculum, Training Student Organizers Curriculum (Revised Edition), Urban Environmental Education,* and *Infusion of Environmental Concepts Into the High School Curriculum.* To order copies, write to the Council, Suite 228, 51 Chambers Street, New York, NY 10007, or telephone (212) 788-7900.

The Watershed Agricultural Council is offering **Watershed Forestry Bus Tours Grants** through June 30, 2003. Because there is no application deadline, all awards will be made on a rolling, competitive basis while limited funding is available. To learn more and to receive an application, write to Kevin Brazill, Watershed Forestry Program Specialist, 33195 State Highway 10, Walton, New York 13856-9751, or call (607) 865-7790. "Alien Stingers" is a new indoor exhibit, just opened, at the New York Aquarium in Brooklyn. The exhibit includes corals, sea anemones, and what are commonly called jellyfish, which are not fish at all and are actually called ocean jellies. One of the features of the exhibit is to allow the visually impaired to experience this undersea adventure through sound sculpture, tactile modeling, and poetry reading.

**The Hudson River Foundation** supports scientific and public policy research, education and projects to enhance public access to the Hudson River. It has just published a booklet detailing its grants from 1994 through 2002 and which contains a call for proposals for 2003. To receive a copy, write to Suite 915, 17 Battery Place, New York, NY 10004, or telephone (212) 924-8290.

**Partnerships for Parks** is featured in a new book, *Garden Guide: New York City*, by Nancy Berner and Susan Lowry, which profiles more than 100 public gardens. The publishers, The Little Bookroom, have extended a discount on bulk orders available through the Parks Library in the Arsenal in Central Park. For information, call (212) 360-1240.

The Earth Pledge Foundation. a non-profit group that promotes sustainable agriculture and environmental preservation, has built a rooftop garden on East 38th Street in Manhattan. Known as the Green Roof, it can be seen by calling the Foundation at (212) 725-6611. In these times of drought, it is interesting to note that the Green Roof will collect about 75 percent of the water that falls on it.

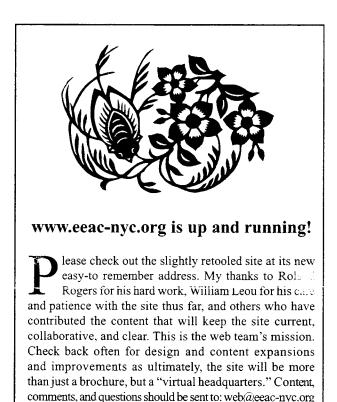
**Riverside Park** is long and narrow, although it covers 323 acres. Now, a long and narrow very detailed map of the park has been published by the Riverside Park Fund. It may be obtained for \$2 by sending a check and a self-addressed stamped envelope to the Fund. Suite 249, 475 Riverside Drive, New York, NY 10115. The telephone number is (212) 870-3070.

If all goes as planned, by the time you receive the 2003 Fall/ Winter edition of this Newsletter, the **Greenbelt Nature Center** will be open on Staten Island. It will serve as the gateway to this 2,800 acre wonderful natural resource. According to Parks officials, it will be "biking, casual visitors, new visitors, and organized groups." A new perimeter bike trail and pedestrian trail are also being planned. Be on the lookout. )

Not surprisingly, conservation is (or should be!) back on everyone's list of top priorities and Con Edison has just issued *Everyday Energy-Saving Tips and Appliance Guide booklets*, which may be ordered by calling (800) and 4488. They are free of charge.

# **ENVIRONMENTAL RESOURCES**

The Water-Wise Council of New York was established in 1995 as a non-profit public/private partnership to promote water conservation throughout the State and in the Greater New York Metropolitan Area through educational publications and events, demonstration projects, and research. It has issued *The Water Saver's Guide to Landscaping and Gardening*. Copies, at \$18, may be ordered from Cornell Cooperative Extension of Rockland County, P.O. Box 1000, Thiells, New York 10984. If you need further information, there is a fax number: (845) 429-8667.



This is very exciting, but only the beginning. There is a standing call out for "environmental education in action" photos. The site will be much more exciting with better visuals. We have held off on the redesign for this reason. We want to send a "five borough" message. Roland and I have media experience, and we will be certain to edit pictures that won't work for various legal reasons. So, if you are not sure, please inquire at the above address. Photos should be sent with cardboard inserts and PHOTOS: DO NOT BEND on the front. They will be returned to you immediately after processing by our energetic staff! Jill Weiss, 41-29 46th Street #4C, Sunnyside, NY 11104. If you can send them electronically (web@eeac-nyc.org), that is even better.

Thanks and Regards from Jill, for the EEAC Web team of Jill and Roland

### **Items of Interest**

A new ferry operated by the New York Water Taxi has been named the Michael Mann in honor of our former chair of EEAC and the late husband of Marcia Kaplan-Mann. Free rides were given in late September and early October. More information can be obtained by calling (212) 742-1969 or by going to their Web site: www.nywatertaxi.com. For those who might have taken the ride, Marcia asks, "If you take pictures, please share hard copy with me since my computer needs a new cartridge before I can print anything." Let Marcia know if you go.

The New York City Audubon Society's Naola Gersten-Woolf says that teachers, environmental educators, youth group leaders, and student teachers have a wonderful opportunity to receive free copies of the Society's nature newsletter for children entitled, *Look Around New York*. To receive ten issues of *Look Around*, please send a 6" X 9" self-addressed envelope with 60 cents postage to Naola Gersten-Woolf, Look Around-EE, New York City Audubon, 71 West 23 Street, suite 1529, New York, NY 10010, no later than November 15.

Each issue contains one article written at a 4th through 6th grade reading level, and one for adults. You will also receive an order form to request up to 500 additional free copies. If you have received *Look Around* in the past you are probably already on the mailing list and will be sent your copies in one regular October mailing. Publication of *Look Around New York* and free distribution to students and educators is made possible by a donation from the KeySpan Foundation to the New York City Audubon Society.

Cathy Drew, the Executive Director of **The River Project** located at Pier 26 on the Hudson River, is once again accepting applications from high school and college students who would like to be part of the Marine Biology Internship Program. Students can begin any time as there is no deadline. There is a fee. Phone: (212) 431-5797; Fax: (212) 941-5524; email: river\_project@mindspring.com; Web site: www.riverproject.org.

The New York City Department of Environmental Protection (DEP) has **free Metro Card holders for student bus passes** featuring a message to help keep streets... and ultimately our beaches, clean. The Metro Card holders are part of DEP's public education campaign to remind students that litter on the streets can wind up on our beaches. For Metro Card holders to distribute to students, please contact Kim Estes-Fradis, Director of Education, at (718) 595-3506 or kime@dep.nyc.gov.



# DR. EUGENE EZERSKY OUTSTANDING EDUCATOR AWARD

he Environmental Education Advisory Council and the Elementary School Science Association would like to recognize an outstanding environmental educator by presenting the Dr. Eugene Ezersky Memorial Award to a K - 12 teacher.

#### SELECTION CRITERIA

The Dr. Eugene Ezersky Memorial Award will be given to a New York City public or private school teacher who has demonstrated leadership in effecting positive change in environmental education and practice with students and/or personnel within the school or the community.

Examples may include, but are not limited to the following: \* Organizing a new environmental project with students and/or staff \* Taking initiative to infuse EE across the curriculum \* Creating a new EE curriculum unit \* Organizing a student environmental club \* Organizing a school environmental task force to effect and monitor change \* With students and staff, organizing a community environmental event \* Creating an environmental newsletter for educational outreach \* Helping students to identify and solve an environmental problem in the school or community

Individuals may nominate themselves or school personnel or students may nominate a teacher. The cover letter should include the name, address, phone, or e-mail of the individual, plus the school's address and phone. Indicate the subject and grade(s) taught by the nominee and the number of years the nominee has taught environmental education.

Attach a letter, not exceeding one typed page, with details of the nominee's achievements, including dates, goals, results, and who took part. Please include two letters of support, one from the nominee's principal/supervisor and another from someone who was affected by the nominee's work either in the school or community. Documentation in the form of photos and press clippings is welcome, but no tapes or videos should be sent. The EEAC/ESSA Selection Committee may request further information. Stamped self-addressed envelopes should accompany any materials you wish to have returned.

The successful candidate will receive a check for \$100, a Certificate of Recognition, and be featured in the EEAC and ESSA Newsletters.

All materials should be sent in one package to Kim Estes-Fradis, NYC Dept. of Environmental Protection, 59-17 Junction Blvd. Corona, NY 11373. Materials must be postmarked no later than January 24, 2003. Notification will be sent to the winner of the award by February 28, 2003.

# SAVE THE DATE!

EEAC's Annual Meeting will take place on Wednesday, November 20 from 4-6 p.m. The ballot to elect new officers will come soon in the mail.

Great opportunity for networking! Meet new environmental leaders and learn about future events. Details as to location and program will be sent to members. Invite your colleagues. Let's grow EEAC.

# PROSPECT PARK EDUCATION EXPO Add 526 acres to your school!

#### Sunday, November 17, 2002

11:00 a.m. - 3:00 p.m. Picnic House, Prospect Park, Brooklyn New Teacher Credit Available (enter at 3rd, 4th, and 5th Sts. & PPWest) To register call (718) 965-6929

Teachers, science coordinators, and administrators—come to the Expo and learn about environmental education resources in Prospect Park. Indoor and outdoor activities will include hands-on workshops, exhibits, tours, and demonstrations. Family members welcome. Also open to the public.

The Education Expo is a program of the Prospect Park Alliance's Community Committee and the Park's Education Collaboratives Group whose members include the Prospect Park Alliance, the Brooklyn Center for the Urban Environment, the City Parks Foundation, the Prospect Park Zoo, the Urban Forest & Education Program of City Parks Foundation, the City of New York/Parks & Recreation Urban Park Rangers, the Brooklyn Botanic Garden, and the Prospect Park Audubon Center. The Education Expo is funded by the Keyspan Foundation, the New York City Council, and Councilmember Kenneth Fisher, with professional support from the Environmental Education Advisory Council. We are again seeking volunteers from EEAC to help with hands-on activities, registration, and as guides for the event. If you can help, call Dr. Mary Leou at (212) 998-5474.

# - The 25th Saturday Science Program -*"The Blaustein Conference"*

#### Saturday, November 23, 2002,

9 AM - 2 PM Francis Lewis High School 58-20 Utopia Parkway, Flushing, NY

- · Staff Development Credit for New Teachers and Supervisors
- Hands-On Workshops for Elementary, Intermediate, and Junior High School levels
- · Preview the latest books and equipment
- Refreshments will be served

The Elementary School Science Association, the Board of Education of the City of New York, and the New York Academy of Sciences are joint sponsors of Saturday Science.

Fees arc \$10 for ESSA members, \$15 for non-members, \$20 for registration and annual membership. Advance Registration Only, no walk-in registration. Send checks made out to E.S.S.A. by November 10 and mail to Stan Mandel, 783 Heritage Hills, Unit A, Somers, NY 10589. For more information e-mail Gail David at: gidavid@aol.com

### WHAT IS THE EARTH CHARTER ?

Early in 1997, the Earth Charter Commission formed an international drafting committee which completed the final version of the Charter at UNESCO Headquarters in Paris in March 2000. One of the objectives is to seek endorsement of the Earth Charter by the United Nations General Assembly in 2002, the tenth anniversary of the Rio Earth Summit. For more information and to download a copy of the Earth Charter go to the Web site: http://www.earthcharter.org.

# PREAMBLE OF THE EARTH CHARTER

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.



# DOOK DULL

### by Regina McCarthy

These three books illustrated by John Locker are both an artistic and poetic blend whose message is conveyed in a magical mix of both the visual and printed word. In Home: A Journey Through America Locker's paintings of where the writers hail from reflect the authors' sense of place which influenced what was written. At the end of the book we are given a map showing the United States wh indicates each author's place of orgin. The selections by edite: Thomas Locker and Candace Christiansen convey the heart and soul of our written heritage.

In *Cloud Dance* Locker explores the world of clouds with both meaningful text and his illustrations. As in all these books the artist's illustrations will remind one of the painters of the Hudson River School. It is no surprise that he hails from New York close to that great river. After reading this book, children need only look to the sky to find the joy of clouds. I recall a day once when walking down Ninth Avenue in Chelsea that I was struck by clouds in a beautiful sky.

I was so struck that I had to make note of it to people passing by. One person commented, "Gee, you look up?" What an untapped source of learning and inspiration the author has revealed. The book is not, however, just a pretty book. It also contains an annotated and illustrated guide to the types of clouds in the sky.

Again in *Water Dance* Locker brings us on a poetical journey that not only feasts our eyes on wonderful illustrations and words, but also instructs us about the many forms that water can take on its journey through the water cycle. As in his other books, it is followed by detailed information on the water cycle and how it is shown in each poem and illustration.

Water Dance, Thomas Locker, Harcourt Brace and Company. Cloud Dance, Thomas Locker, Silver Whistle, Harcourt Inc. Home: A Journey Through America. Thomas Locker, Edited by Thomas Locker and Candace Christiansen



MEMBERSHIP APPLICATION 2002	□ New Member □ Renewal
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Please make checks payable to EEAC.	Thank you! EEAC is a 501-C-3 organization.
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Jay Holmes, EEAC Treasurer, c/o Education	n and mail it, with your payment, to: Department. American Museum of Natural History, h Street, New York, NY 10024

### ENVIRONMENTAL EDUCATION ADVISORY COUNCIL

Jay Holmes c/o Education Department American Museum of Natural History Central Park West at 79th Street, New York, NY 10024 EEAC Web site: www.eeac-nyc.org



**DON'T MISS THE EEAC ANNUAL MEETING, NOVEMBER 20**