

2017 REGISTRATION FORM ATTACHED

PUD MAGNOLIA TREE EARTH CENTER OF BEDFORD-STUYVESANT, INC. NEW YORK RELEAF, TREES NEW YORK, ENVIRONMENTAL EDUCATION ADVISORY COUNCIL, $\frac{1}{2}$

Presented by

Mew York City's Free Conference on Careers in Matural Resources and the Environment for Middle Schools



Green Horizons

Magnolia Tree Earth Center of Bedford-Stuyvesant, Inc. 677 Lafayette Avenue Brooklyn, NY 11216



New York City's Free Conference on Careers in Natural Resources and the Environment for Middle Schools

THURSDAY, OCTOBER 19, 2017

9 a.m. — 2 p.m.

(Please arrive no later than 10 a.m.)

VAN CORTLANDT PARK, BRONX

Guidance Counselors and Science Teachers

A select group from your school can spend an exciting day at Van Cortlandt Park and work directly with noted professionals, as the students learn more about career opportunities in a wide variety of natural resources and environmental fields.

Each student will be able to attend two different stations led by experts. Instead of sitting and listening to someone talk about jobs and careers, the students will participate in hands-on activities that will allow them to experience what it is like to be part of important environmental work.

The stations — 19 in all — and their leaders are described on the accompanying page. Please share this information with your students and assist them as they make their choices. Each student should make 4 different selections. We will make every effort to see that they are able to participate in 2 stations of their choice. Please do not register all your students for the same stations.

The registration form is attached below.

Each school is entitled to send up to 15 students with one guidance counselor or science teacher. Space is limited, so please register early!

In addition to the professionals leading the activities, each station will be staffed by an experienced environmental educator.

A guidance counselor or teacher will be assigned to each station, guaranteeing that all students will have a certified professional with them at all times.

A career guidance booklet will be available for participants to take home.

Attendance at Green Horizons will give your students a special entry into the world of environmental sciences,

land-use planning, and care of natural resources.

Snacks will be provided mid-morning. Please plan to bring your own lunches and celebrate the event with us!

Be sure to have the students wear comfortable outdoor clothes and sturdy shoes!

Green Horizons is co-convened by New York ReLeaf, Trees New York, the Brooklyn Botanic Garden and the Environmental Education Advisory Council, in partnership with the NYC Department of Education, the NYC Department of Parks & Recreation, the NYC Department of Environmental Protection, the NYS Department of Environmental Conservation and the USDA Forest Service.











Green Horizons 2017 is hosted by Van Cortlandt Park Conservancy, Friends of Van Cortlandt Park and Urban Park Rangers.







The conference is facilitated by Magnolia Tree Earth Center as part of its Urban and Community Forestry Program. For more information, call Nancy Wolf at 1-718-834-4589.

Funding for Green Horizons has been supplied by Con Edison, with additional support from Bartlett Tree Expert Company and Davey Resource Group.







Directions to Van Cortlandt Park

Van Cortlandt Park is located at Broadway and 246th Street in the Bronx. Pedestrians should enter the Park at 246th Street and proceed to the white tent for registration and plenary session.

By school bus or car: Take the Major Deegan (I-87) to Van Cortlandt Park South/ Exit 14. Make a right at the end of the ramp; at the first light, make a right onto Broadway. Proceed north for drop-off at 246th Street and Broadway. No vehicles allowed within the Park.

GPS: 6035 Broadway, Bronx, NY 10471. Buses and cars should then proceed south on Broadway, turning left onto Van Cortlandt Park South. Make a left into the Park at the second light. Bear left, following signs to Van Cortlandt Park Golf House for free parking in first lot to the left.

Pick-up at Broadway and 246th at the end of the event.

By mass transit: Take the 7th Avenue IRT local#1 to 242nd Street-Van Cortlandt Park.

Walk north along Broadway to 246th Street entrance and proceed to white tent. The Bx9 bus also stops at the #1 train station.

Registration Form

Guidance counselors or science teachers: please complete this registration form. Make a copy of this form if you are sending more than six students (up to a maximum of 15). Please print clearly. Place in a stamped envelope and mail no later than October 12, 2017, to:

Nancy Wolf

Magnolia Tree Earth Center of Bedford-Stuyvesant, Inc.
677 Lafayette Avenue, Brooklyn, NY 11216
1-718-387-2116 or 1-718-834-4589

You may also FAX the form to Nancy Wolf at 1-718-387-6133. Please make sure each student chooses 4 different stations.

Guidance Counselor or Science Teacher

Name	School name		E-mail			
School address	City	ZIP	Telephone ()			
Station choices (indicate by number): 1st	2nd	3rd	4th			

Station choices (indicate by number): 1st				2nd		3rd				4th						
							Stu	ıdents								
Name								Name								_
School name							School name									
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Name								Name								
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1st ()	2nd ()	3rd ()	4th ()	1st ()	2nd ()	3rd ()	4th ()	
Name								Name								_
School	name							School r	name							
Station	choices	(indicate nui	mber)					Station of	choices	(indicate nur	mber)					

1st () 2nd () 3rd () 4th () 1st () 2nd () 3rd () 4th ()



Students

We hope you will join us on October 19, in Van Cortlandt Park to learn more about careers in nature and the environment. Whether you like the city or the country — or both — there are many fascinating jobs that will be available to you in the future. Learning about them can be fun! You don't have to choose a career now, but you can find out what it's all about by registering for Green Horizons, the New York City green careers conference for middle school students.

Many others who learned about the environment and made career choices at just your age will be at Van Cortlandt Park to work with you and to share their ideas and experiences.

The 19 stations planned for you are described below. **All of the activities take place outdoors.** Read the information carefully and ask your guidance counselors, teachers, parents, or guardians to help you make your **personal choices**.

We'll see you at Van Cortlandt Park on October 19!

Snacks will be provided mid-morning.

Please plan to bring your own lunches and celebrate the event with us!

Stations

1) Exploring the Secrets of Healthy Forest Soil (Soil Science)

NYC Parks Department Natural Resources group and Lori Klamner, Environmental Educator.

What we call "dirt" is a whole world of minerals, nutrients and critters that a healthy forest soil depends on. You'll take samples of soil layers and conduct tests and experiments to learn what's in the samples and if it's the right stuff to make for a happy, healthy forest.

2) Finding Insects of the Forest (Entomology)

Dr. Vicente Sánchez, U.S.D.A. Forest Service and Sam Bishop, Trees New York

Insects and plants, like trees in forests, have a long history together. You will catch different insects in the woods using a variety of collection methods. Then you will determine how these insects and plants depend on each other, while discussing what makes for a helpful or harmful insect. You'll take home materials to show your friends.

3) Growing "Baby" Plants (Plant Propagation)

Joe Gobin, New York City Department of Parks and Recreation, Wayne Morris, Certified Arborists, and EEAC Environmental Educator

Learn how to tend tiny seeds and cuttings carefully so they grow to become the beautiful plants we love to see.

Learn layering, grafting, rooting and other ways in which plants can begin their lives. Under careful guidance, you will begin this process yourself and take home samples of your work.

4) Arbor Rx: CSI (Arboriculture)

Certified Arborists, Bartlett Tree Expert Company and Sally Kellogg, NYS Department of Environmental Conservation

Learn how the above ground and below ground parts of a tree function. Use the latest instruments to discover how and why trees get "sick" and die. Try the latest tools and techniques used to help trees fight off insects or diseases. Learn how you can help a tree.

5) Lifting "Impossible" Weights by Using the Laws of Physics (Arboriculture/Engineering)

Nancy Nieland, Ramon Santana, Barrington Rogers, and Mike Mauro and Candyce Johnson, Brooklyn Botanic Garden

Arborists and foresters use their knowledge of physics and their skill with ropes, pulleys and levers to lift heavy tree trunks and limbs.

With their help, you can learn to use these important tools and lift big logs that are many times heavier than you are!

6) Climbing and Pruning Trees (Arboriculture)

Alec Baxt, Travis Wolf, and Lauren Bell, Brooklyn Botanic Garden

Climbing, swinging, jumping and walking on limbs with a rope and harness will be demonstrated. By watching expert arborists, you'll understand how, when and why to prune a tree. Try out climbing techniques and equipment while safely on the ground.

7) Creating a New Forest (Woodlands Restoration)

NYC Parks Department Natural Resources Group and Chrissy Word, City Parks Foundation

At a site where the original woodland has disappeared, help plant trees and shrubs to create a new forested landscape. You'll understand how some "exotic" plants that have been brought to this country are now problems because they are pushing other "native" plants out of the forest.

8) Teaching about Environmental Science (Environmental Education)

Environmental Educators, Queens Botanical Garden

Create your own "mini-world" in a terrarium; take it home and watch it grow! Learn and practice exciting ways to teach others about water, air and nature's cycle.

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9) Working with Weather (Meteorology)

Nancy Furbush and Michael Cox, National Weather Service and EEAC Environmental Educator.

Learn how the experts use sophisticated meteorological instruments to make accurate weather forecasts. Take readings with a cloud meter, rain gauge and a weather balloon to report on current conditions and make your own weather predictions.

10) Designing with Flowers (Floriculture)

Maren Morsch and Beth Nicholls, Green Belt Education Center, High Rock Park, Staten Island

Choose colorful flowers for creating designs. With expert help, learn how to design and construct your own flower arrangement, which you can take home.

11) Save the World by Planting a Tree! (Urban Forestry)

Greg Owens, New York State Department of Environmental Conservation and Andrew Hillman, Davey Resource Group

Learn how to start off a tree's life just right by preparing the site-and planting it correctly. Then participate in an electronic inventory to count and learn the names of nearby trees and measure them with diameter tapes and Biltmore sticks.

12) Creating a Plan for the Land (Landscape Architecture)

Landscape Architect TBA and EEAC Environmental Educator

Explore how a piece of land, such as Van Cortlandt Park, is designed. Learn to interpret a site by observation and create your own planting design.

13) Exploring Deep Time (Geology)

Jay Holmes, American Museum of Natural History and Karen Roos, Green Belt Education Center, High Rock Park, Staten Island

Geologists use the tools of many sciences to explore Planet Earth's 4.5 billion year history through a study of its rocks. Explore the rocks of, Vault Hill searching for clues about the history of the Bronx, what physical changes might have occurred – and how.

14) America's Least Wanted! (Entomology)

USDA APHIS staff and EEAC Environmental Educator

Learn why the Asian Longhorned Beetle (ALB) and Emerald Ash Borer are harmful to the environment and how to identify these tree-killing beetles. Watch as USDA tree professionals inspect trees for ALB damage. Be a detective and help look for ALB at Van Cortlandt Park. We will supply the binoculars!

15) Examining a Body of Water (Fresh Water Ecology)

Alex Byrne, Friends of Van Cortlandt Park and NYC Department of Environmental Protection Educator

At the Van Cortlandt Lake take your own water samples. Become a water scientist and test for pH nutrients and turbidity. Discover what lives in this thriving aquatic ecosystem and why oversight of the Lake is important.

16) Help the Hikers of Van Cortlandt Park! (Trail Design and Maintenance)

John Butler and Sara Kempton, Friends of Van Cortlandt Park

Many New Yorkers hike over 20 miles of trails in Van Cortlandt Park, designed and built by experts. But it takes lots of maintenance to keep them open and safe. You'll help by clearning and brushing an overgrown trail-removing downed branches and pushing back plant growth to open it for use.

17) Looking for Birds in Their Habitat (Ornithology)

TBA and EEAC Educator

Learn the basics of bird identification and conduct a survey of birds in the Park.

You'll be able to use these skills to search for birds on your own. Observe the surroundings that help the birds and other wildlife survive.

18) Planting "Historic" Flowers (Horticulture)

Laura Carpenter Myers and Staff, VCP House Museum

Van Cortlandt Park is named for early Dutch settlers who brought the tradition of planting tulips and other flowering bulbs to New York. Enjoy the demonstration of some of the hundreds of types of flowering bulbs. Then plant tulips, daffodils and scilla in the garden and take home bulbs to "force" blooms of your own.

19) A Solar Future with Con Edison (Electrical Engineering)

Con Edison of New York Engineers and Staff of Solar1

Con Edison uses solar power created by customers to support the grid that delivers electricity to your homes and businesses.

With Solar1, learn how a solar panel works while building circuits with panels and motors. Play the solar PV system design game and test your electricity knowledge with the watt matching game.