for Middle Schools

Presented by

AND MAGNOLIA TREE EARTH CENTER OF BEDFORD-STUYVESANT, INC. NEW YORK RELEAF, TREES NEW YORK, ENVIRONMENTAL EDUCATION ADVISORY COUNCIL,

COLONICATION FORMATION FORMATION CONTRACTION



New York, New York 10038 100 Gold Street. #3100



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







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

THURSDAY, OCTOBER 17, 2019

9 a.m. — 2 p.m.

(Please arrive no later than 10 a.m.) SNUG HARBOR CULTURAL CENTER AND BOTANICAL GARDEN

Guidance Counselors and Science Teachers

A select group from your school can spend an exciting day at Snug Harbor 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 — 20 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 and the NYS Department of Environmental Conservation.













The conference is facilitated by Magnolia Tree Earth Center and Trees New York. For more information, call Ashleigh Pettus at 1-212-227-1887 x 7.

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







Directions to Snug Harbor Cultural Center

By bus or car: Take the lower roadway of the Verrazzano Bridge and exit right along Bay Street to the Staten Island Ferry, where it becomes Richmond Terrace. Proceed about one mile to Tysen Street. Turn left onto Tysen Street and right onto Fillmore Street.

Continue ahead on Chapel Road to disembark at Cottage Row. Participants should walk left toward a row of small brick houses and a large white tent. Buses and cars should exit to the right and travel to the parking lot via Richmond Terrace, Tysen and Fillmore.

By mass transit: Take #4 or #5 to Bowling Green, #1 to South Ferry or R to Whitehall. Take the Staten Island Ferry, leaving at 8:15, 8:30 or 8:45, a 20-minute ride. Transfer to Bus S40 along Richmond Terrace to Snug Harbor, a 10-minute ride. Walk to the right around the buildings to Chapel Road and turn right toward small brick buildings and large white tent on Cottage Row.

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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 9, 2019, to:

Trees New York 100 Gold Street, #3100, New York, New York 10038 1-212-227-1887 (t)

You may also FAX the form to Trees New York at 1-212-732-5325 (f) or email info@treesny.org 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	4	th	
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Students

We hope you will join us on October 17, at Snug Harbor Cultural Center and Botanical Garden 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 Snug Harbor to work with you and to share their ideas and experiences.

The 20 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 Snug Harbor on October 17!

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) Snakes, Turtles and Frogs: Oh, My! (Herpetology)

Staten Island Zoo Staff and Ellen Wolf, Environmental Educator

Learn all about what it takes to be a herpetologist. Meet some "herps" that make their home on Staten Island and see what you can do to help conserve their habitats.

3) Growing "Baby" Plants (Plant Propagation)

Joe Gobin, New York City Department of Parks and Recreation, Wayne Morris, Certified Arborist, and Staffer, NYS Department of Environmental Conservation

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)

Arborist, Bartlett Tree Expert Company and Sam Bishop, Trees New York

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) Healthy Habitats for Birds and Other Wildlife (Ornithology)

Megan Orens, Snug Harbor and Chrissy Word, City Parks Foundation

Learn the basics of bird identification and conduct a survey of birds in the Garden. Observe birds through binoculars and note the surroundings that help them and other wildlife survive.

6) Climbing and Pruning Trees (Arboriculture)

Brooklyn Botanic Garden Arborists and Christopher Ricker, NYC Parks Staten Island Greenbelt

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 (Natural Resource Restoration)

NYC Parks Natural Resources Group and Karen Roos, NYC Parks Staten Island Greenbelt

Plant native seedlings with the naturalists from the Parks Department as they help to create and preserve an urban forest that will provide refuge for wildlife.

8) Teaching about Environmental Science (Environmental Education)

Puiyan Taglianetti, Snug Harbor and Snug Harbor Staffer

Terrariums and wetlands create exciting opportunities to explore our environment and keep our connection with plants and animals. Create your own terrarium and learn how Environmental Educators connect science to the real world.

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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) Compost More, Waste Less! (Composting and Urban Recycling)

Olivia Gold, Compost Project at Snug Harbor and Snug Harbor Staffer

What is compost and why does it matter? Understand how composting can have a positive impact on your garden, your community and the world around us. Roll up your sleeves, learn how compost is made and what to do with it when it's done.

11) **Designing with Flowers** (Floriculture)

Flynn Ferguson, Floral Designer and Nancy Zawada, NYC Parks Staten Island Greenbelt

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

12) All About Trees (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.

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

Rashid Poulson, Brooklyn Bridge Park and Karen Lurker, Snug Harbor

Explore how a piece of land, such as Brooklyn Bridge Park, is designed. Learn to interpret a site and create your own planting design.

14) Beekeeping and Healthy Ecosystems (Apiculture)

Lenny Librizzi, Local Beekeeper and Pearl Coles, Snug Harbor

SAFELY explore the daily worker of a beekeeper. Heneybees are among the world's most important insects, working to pollinate one-third of the food we eat. They are threatened by climate change, loss of habitat and pesticide use. Learn the importance of beekeepers and how they work to help honeybees survive.

15) **Examining a Body of Water** (Fresh and Salt Water Ecology)

Charles Olson and Lakeisha Bradshaw, NYC Department of Environmental Protection

Explore Snug Harbor's tidal pond and wetlands that contain both fresh and salt water Collect samples in containers of different sizes and analyze them for pH, temperature, turbidity and how much electricity the water conducts.

16) Help Prepare the Garden for Winter and Plant for Next Spring (Horticulture)

Martin McCormack and Christina Zazula, Snug Harbor

Autumn is the time to plan your garden for next year and think about changes and improvements. It's the time to clean up beds and plant the daffodils and other bulbs whose colorful flowers will herald spring. Learn how bulbs store food and how they grow. You'll be helping to make the Garden that much more beautiful!

17) Urban Farming (Urban Agriculture)

Jonathan Wilson, Snug Harbor Heritage Farm and Jessica Abalos, Snug Harbor

We can grow our own food, even in the city! Help Farmer Jon weed and take care of his vegetable rows. You'll harvest some of the ripe produce and take it home to your family.

18) Building Green (Green Architecture)

Alexandra Patrone and Lydia Chille, Snug Harbor

Engineers design and change buildings to conserve them and decrease our energy use. Learn how Snug Harbor staff works underground to get hot and cold air to all the buildings and design your own heating system.

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 solar energy works by using hand-held collectors. Play the solar PV system design game and test your electricity knowledge with the watt matching game.

20) Learning About Bats-SAFELY (Scientific Research)

Danielle Fibikar, Snug Harbor Educator and Snug Harbor Staffer

Would you like to learn how animals live? Biologists research their favorite species. Check out the tools that a bat biologist uses and learn how you can get involved.

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