Have you ever wanted to be a citizen scientist? This summer of 2015 brought the first Citizen Scientists to Roosevelt Vanderbilt National Historic Sites to participate in the Dragonfly Citizen Scientist Project. The program is a partnership between the National Park Service, Maine University, US Geological Survey and Dartmouth College.

The project first began in 2012 and included 40 national parks and over 800 citizen scientists. This year Roosevelt-Vanderbilt National Historic Sites engaged eight citizen scientist volunteers to collect dragonfly larvae from specific sampling sites in the park.

The samples were sent to our participating partners to be analyzed for mercury. The results will help to reveal the mercury risk across the national parks system.

Mercury is a toxic pollutant that can harm the health of humans and wildlife that we are charged with protecting.

The main source of human caused mercury in remote national park environments is atmospheric deposition from coal burning power plants.

The Dragonfly Citizen Scientist study connects people to parks and provides baseline data to better understand the spatial distribution of mercury contamination in national parks.

Thank you to our Citizen Scientist; Elizabet Wallace, Roger Persell, the Da Silva Family, Evan Woods, and park Student Conservation Association volunteer Natilie Cheung.

For more information visit: http://www.nature.nps.gov/air/studies/air_toxics/dragonfly/index.cfm

NETN Bird Study

The Northeast Temperate Network (NETN), part of the National Park Service’s national inventory and monitoring program, monitors a variety of natural resource indicators, called vital signs, for 12 parks in the northeast and the Appalachian National Scenic Trail. Breeding birds are one of these vital signs because they are a reliable indicator of ecological integrity and a high profile taxonomic group. 2015 was the ninth year of continual landbird monitoring in the forests of Roosevelt-Vanderbilt NHS and many other network parks. NETN and the Vermont Center for Ecostudies accomplished this only with the invaluable help of volunteer birders who crawled out of bed at ungodly early hours, endured hordes of biting mosquitoes and black flies, and contributed their time, efforts, and expert birding skills. At Eleanor Roosevelt and Top Cottage, volunteers Barbara Mansell and Liz Martens have been conducting this survey for the past 4 years.

For more details visit the NETN website: http://science.nature.nps.gov/im/units/NETN/index.cfm
Over the spring and summer months the park began a survey of reptiles and amphibians in cooperation with SUNY College of Environmental Science and Forestry. The survey is coordinated by Dr. James Gibbs, who literally wrote the book on New York State reptile & amphibian species. Conducting the field work are graduate student Samantha Dean assisted by technician Gwyn Daunton. The survey is targeted in areas where there has been little information collected, primarily the Farm Lane and Top Cottage areas. This study will help determine the composition and distribution of reptiles and amphibians in the area and how they might be impacted by mountain bike and other trail use.

A Nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people. ~ FDR

NETN—Forest Health Monitoring

During the month of June NETN scientists came to ROVA to monitor several forest plots already implemented throughout the park.

Forest monitoring is not new to this land. FDR himself began forestry experimentations and monitoring of his forest plantations that he implemented on his estate in the 1920’s. Along with Nelson Brown, a forester and professor at the NYS School of Forestry, FDR planted over 1,000 acres in tree plantations. Their efforts were to find ways to manage lands in a responsible and economically sustainable manner.

NPS continues this endeavor in contemporary forestry monitoring measures. NETN forest health monitoring is currently conducted to obtain broad-based, and scientifically sound information through long term natural resource monitoring.

These studies will provide multiple applications for park management decision-making, research, education, and early detection of invasive plants, animals and diseases. Knowing the condition of forest resources is fundamental to the NPS’s ability to manage the resources. The challenge of protecting and managing the natural resources requires a partnership-based ecosystem approach.

The monitoring program provides site-specific information needed to understand and identify change in complex, variable, and imperfectly understood natural systems. It aids in determining whether observed changes are within natural levels of variability.

Preliminary Monitoring Objectives

1. Assess status and trends of ecological health for forested communities and other key communities of concern.
2. Detect new outbreaks of established invasive exotic plant species and newly arrived invasive exotic plant species.
3. Detect new outbreaks of established forest pest species and newly arrived forest pest species.

FDR and Forester Nelson Brown

Photo courtesy of FDR Presidential Library

Photos by S. Norris

H A N D S  O N  T H E  L A N D
American Eel Migration

American Eel “catadromous” Migration Research:

Each spring students and community volunteers have been working with the New York State Department of Environmental Conservation staff and scientists to monitor glass eel populations in the Hudson River tributaries. This spring the NYDEC partnered with Roosevelt-Vanderbilt to conduct the citizen scientist monitoring at a specific tributary site at Vanderbilt Mansion NHS. Citizen scientists were Evan Woods, David Lindemann, Katie Friedmann, Michele Humbert, James Herrington, and Johann Kravic.

The study is spearheaded by the Hudson River Research Reserve and the Hudson River Estuary Program. Education Coordinator Chris Bowser of NYDEC at Norrie Point Environmental Center in Staatsburgh, NY oversees the field study.

Bowser met with NPS natural resource education specialist, Susanne Norris, DEC interns and citizen scientist volunteers to kick off the study at Vanderbilt. Bowser instructed all in the construction of an eel ladder at the site. Monitoring continued throughout the spring and summer months.

This baseline study is being conducted to determine why the historically-abundant American eel migrations in the Hudson River tributaries is declining.

The American eels are born in the Atlantic Ocean and migrate into the fresh waters of North America. The eels return to the Sargasso Sea to spawn after living for decades in the freshwater river, streams, and ponds.

For more details visit: http://www.dec.ny.gov/lands/39663.html

Photos by S. Norris

NYSDEC Photo
In 2012 the National Park Service issued a “Call to Action” to prepare for a Second Century of Stewardship and Engagement of advancing the NPS Education Mission. We knew the Shaker Junior and Senior High School in Latham, NY would be our “Adopted 2016 Class.” Teachers and students readily signed up for the four year experience. Each year the students visited the park learning about the NPS, park service careers, and about the life of Eleanor and Franklin Roosevelt, and the Vanderbilts.

In 2015 the students elected to focus on Eleanor Roosevelt and her home at Val-Kill. The park horticulturist, Anna de Cordova, introduced the students to the idea of a “Cultural Landscape” and the story that a historic landscape can communicate to visitors. They learned how the NPS researches and creates Cultural Landscape Reports and uses them to devise Treatment Plans that preserve or re-establish the significant features of the landscape.

Back at school, they challenged themselves to research the Roosevelt history in relation to the landscape, creating a 3 dimensional time line that includes both significant dates and events in the Val-Kill landscape and the lives of Eleanor and Franklin. Using this timeline, it is possible to think about what was happening in Eleanor and Franklin Roosevelt’s backyard at the same time that one considers how their lives were playing out on the world stage. But, the students did not stop at research. They also took to heart Eleanor Roosevelt’s credo to create positive change by beginning in your own small corner of the world. They determined that they would demonstrate her message of sustainability in their own school. The group collaborated with their school Librarian, Technology teacher and Social Studies teacher to build a hydroponic growing system in the library. They planted it with heirloom vegetables that Eleanor Roosevelt grew at Val-Kill, including peas, radishes, lettuce, tomatoes, beans and strawberries.

Their finished product produced plenty of delicious, fresh food for everyone involved in the project to enjoy, and the whole school benefited from being able to sit, study, or read by the garden area’s display while they watched the vertical crops grow up the library wall.

This coming year students will be learning about resource protection and natural resources. At the conclusion of the school year we will be Celebrating their accomplishments as our “Adopted 2016 Class” and celebrating the Centennial 100th birthday of the National Park with a birthday party.
Mather High School Studies NPS Skills in Craftsmanship

As part of the National Park Services’ partnership with Stephen T. Mather Building Arts & Craftsman ship High School, Roosevelt-Vanderbilt NHS participated in a field work day experience with approximately thirty of the school’s students and three teachers.

The High School is named for Stephen T. Mather who was the first director of the National Park Service. The school is a new Career and Technical Education high school for hands-on skills training in the specialized building arts and landscape trades, focused on high-quality craftsmanship and historic preservation, and is located in NYC. The National Park Service has a unique partnership with the school and works directly with the students in the trades of carpentry, decorative finishes, landscape management, masonry, and plastering.

In May park employees created four different work stations throughout the park sites for students to learn hands-on skills in historic preservation. The stations included masonry, cultural land-scaping, mansion rehabilitation, decorative finishes, carpentry restoration, brick wall repointing, building assessment and garden rehabilitation.

These hands-on experiences, coupled with school academics and work-based opportunities, advances the students potential for a successful career in these fields.

For more details visit: http://schools.nyc.gov/SchoolPortals/02/M139/default.htm

Teaching the Hudson Valley Institute & Citizen Scientists

At the Teaching the Hudson Valley’s Institute “Explore a Place. Discover Your World” this summer ROVA and the DEC teamed up to present a teachers workshop on Citizen Scientists in our parks. The workshop conducted was on the Hudson River American eel and Dragonfly research projects being conducted in the park. Nearly 25 educators participated in the workshop.

There were no slouches here! Everyone willingly waded into the water and got their hands dirty collecting the data. While this is serious scientific work there were plenty of smiles and laughs that added to the experience.

Comments on the workshop were:

“Outstanding!! Excited presenters and it was fun to get involved. I don’t live close by, but when I retire this looks like something I will want to participate in. I wish my classroom was closer as well.”

“Thanks Bowser and Susanne for a great afternoon along the river.”

“Thanks for including Matt in the workshop involving eels. He talked about it the entire way home and then repeated himself to his father over dinner. It truly made an impression on him!”

Teachers participate in “Citizen Scientist” projects on eels, and dragonfly larva.

We cannot always build the future for our youth, but we can build our youth for the future.

~ FDR
Resource Management and Facilities Division Interns & Volunteers

Hands-on the Land Interns

There were many “hands on the land” this spring and summer to help us meet our goals in the Resource Management and Facilities Division. From a single afternoon to weeks in residence, a combination of interns, students and volunteers made a big impact in the park. We are grateful for all the people who stepped up, “Found Our Park”, and made a difference.

The Interns:
Pharoah Graham and Atiya Harvey participated in the National Park Academy Summer Internship program, living here, helping us with gardens and grounds work while learning about career opportunities in the National Park Service.

John Darms and Jack Masury came to the park as Student Conservation Association Interns. Jack supported the Gardens and Greenhouse operation at the Home of Franklin Roosevelt in the spring, while John was based at Vanderbilt Coach House and supported summer landscape work throughout the park.

Alex Goddard a student at the University of St. Andrews, in Scotland, volunteered to research the papers of William Plog, a property manager for Sara Roosevelt, to support the Home Garden project. In addition he supported the education programming by assisting in the various education programs offered at the park.

The Branching Out Intern Program from the Olmsted Center in Boston spent a week at Val Kill, the Home of Eleanor Roosevelt. Fifteen interns re-laid the patio by the pool, improved the plantings and entrance to the Val Kill Cottage and accomplished several maintenance projects throughout the gardens and grounds. This group was joined by three additional interns from NPS Partner, Mather High School in New York City.

Hands-on the Land Volunteers

Students and faculty from local colleges contributed in their areas of expertise. Archeologist Dr. April Beisaw of Vassar College and her volunteers contributed over 180 hours of work to study areas with proposed construction in the historic core of the Roosevelt Home and Bellfield properties. Maureen Costura, a professor at the Culinary Institute of America and her students in the Bachelors of Applied Food Science Program, conducted research related to the Roosevelt Home Garden and held a fundraiser picnic to support the home garden project.

Marist College students volunteered to help with cleanup of the garage at the Home of Eleanor Roosevelt. The Poughkeepsie Day School connected with the Park for a day of service for their Middle Schoolers who worked on both the Beatrix Farrand Garden and the Val-Kill Landscape.

Boy Scout Troop #42 rebuilt a deteriorated trail at Vanderbilt Mansion from the White Bridge up to the great lawn.

Our Park Partners, the Beatrix Farrand Garden Association and the Frederick W. Vanderbilt Garden Association continued their marvelous support of these two beautiful gardens which simply would not exist without their steady and inspired efforts. And they, in turn, were supported by volunteers from Pathways to Employment and the Oakwood School.

The Home of Eleanor Roosevelt, Val-Kill, was kept in great shape by community volunteers who come on Wednesday mornings to plant and maintain the gardens and care for the landscape in the historic core.
Da Silva Family, Evan Woods, and Natilie Cheung find their park!

National Park Service
Roosevelt-Vanderbilt NHS
4097 Albany Post Rd.
Hyde Park, NY 12538

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Visit our Websites:
http://www.nps.gov/hofr/index.htm
http://www.nps.gov/elro/index.htm
http://www.nps.gov/vama/index.htm

The National Park Service turns 100 on August 25, 2016, and everyone can take part in the celebration!

The centennial will kick off a second century of stewardship of America's national parks and engaging communities through recreation, conservation, and historic preservation programs.

We invite you to find your park and discover the national parks and programs in your own backyard!
http://www.nps.gov/subjects/centennial/index.htm