

NRCS Trains Cadre of Future Conservationists

Each year, the NRCS Caribbean Area hosts Earth Team student volunteers. Three students are working this summer with the NRCS Caribbean Area Soil Survey Program to complete their bachelor's degree requirements. Each volunteer was asked to describe their experience. Here are their stories:

José Rodríguez Valentín

is a native of Cabo Rojo and studies Biology, covering agro-ecology, at the Inter-American University of Puerto Rico San Germán Campus. José is working with the Soil Survey staff at the State Office. He was selected to participate in the program by the Florida-Caribbean Consortium for Agriculture Education & Hispanic Workforce Development (FCCAgE), through a grant funded by the **USDA Hispanic Serving Institution Grant Program**. The program recruits and trains Hispanic students in agriculture sciences and natural resources management to prepare them to confront future agro-ecological problems. Although José wants to become a nutritionist, the NCRS internship has exposed him to the agricultural field and to using GIS to develop soil interpretation maps. José applied for the internship to gain experience and redirect his academic and professional interests to conclude his formal studies. José said, "My participation in this internship has been really valuable and necessary for my professional development because there is so much more to understand beyond the theory."



play all kinds of conservation techniques. Beverly is very pleased with her experience, she says, "My future is totally focused on environmental protection and conservation. My experience during this summer has changed my life completely. Thanks to this great opportunity, I have acquired skills and developed abilities that will be beneficial for my future. I learned many things which have given me the knowledge and certainty about my future career. Definitely, this is a unique opportunity that all must utilize to our advantage, seizing every minute and learning as much as possible. Without a doubt, the volunteer program is a resounding success, since it has provided me with an unforgettable and useful experience for life!"

Keila Ortiz is an undergraduate student from Guánica. She attends the University of Puerto Rico at Mayagüez and is working towards a bachelor's degree in Soil Science. She currently participates in the Earth Team volunteer program assisting the Mayagüez MRLA Soil Survey office and Field Office. Keila wrote, "The experience as an Earth Team Volunteer is an extraordinary opportunity; it has enriched me professionally and personally. This experience helps you to acquire and develop the skills needed for the soil science field. This program allows you to have a better vision of the Soil Science profession and helps you to understand all the professional concepts."



For details on the NRCS Earth Team volunteer program, please contact Earth Team Volunteer Coordinator, Hilton Miró, at 787-766-5206 x126 or Hilton.miro@pr.usda.gov.

The St. Croix Service Center is Moving!

The USDA St. Croix Service Center announces that our offices are moving the week of August 6 10, 2012. We will be moving from our current location in Gallows Bay to our new offices in the Castle Coakley Professional Building, located at 4401 Estate Sion Farm. Please visit us at our new location after August 13, 2012.



Director's Corner

Greetings Caribbean Area NRCS!

Welcome to the first year anniversary edition of our newsletter, "The Caribbean." If you haven't already, I encourage you to visit the other editions (available on our website at: www.pr.nrcs.usda.gov/news/). In them you will find amazing stories of our employees and partners, as well as our conservation efforts in the Caribbean. We are so grateful for our accomplishments and extend many thanks to everyone involved in our success stories. Please enjoy this newsletter and the many more to come.

Yours in Conservation,

Edwin Almodóvar, Director
USDA-NRCS Caribbean Area

USDA at 150 Factoid

Of the 3.3 million U.S. farm operators counted in the 2007 Census, 30.2% or more than 1 million were women.

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St. Croix's Coral Conservation Corps Installs Reef Relief Sculpture



Manor School student (left) describes the themes of the Relief sculpture to local reporter, Susan Ellis.

In conjunction with World Ocean's Day, the St. Croix Environmental Association (SEA) and Manor School's Coral Conservation Corps held an installation ceremony on June 8, 2012 to unveil a new relief sculpture installed at Cramer's Park on St. Croix's East End. The sculpture consists of five, 30" x 16" concrete panels that depict scenes and messages about preserving St. Croix's fragile marine and coastal ecosystems.

"We are hopeful that the art and messages will have a lasting effect on residents and tourists. Artist Kate Miller and sponsor The Buccaneer Hotel were instrumental to the success of this project," said Lynnea Roberts, SEA Education Coordinator.

The Coral Conservation Corps is an after-school program for high school students interested in learning how to protect marine and coastal habitats. The program's objective is to help students feel a greater connection to the land and sea, to help students develop their own personal environmental ethics, and to prepare them to share their knowledge with others.

Emphasized throughout the program is the health of St. Croix's coral reef system and the balance between the needs of an environment and its people. The students met weekly throughout the spring semester and began working on the relief sculpture in March. For details on the Coral Conservation Corps, please contact SEA at 340-773-1989.



The last panel in a series of five, the Relief sculpture above reads, "The sea connects generations—enjoy, respect, preserve."

Boy Scouts of America Learn About Conservation

As part of the NRCS Ecological Sciences Office's (ECS) Outreach and Conservation Education efforts, Conservation Agronomist Carlos E. Morganti delivered a presentation to the Boys Scouts of America Camp Guajataca in San Sebastián, PR on June 25, 2012.

Fifteen Nature Patrol scouts learned about the basic principles of natural resources conservation and how NRCS Programs and activities help people help the land in the Caribbean Area. The requirements of the Boys Scouts Soil and Water Conservation Merit Badge were also discussed with the Youth.



EPA Awards Major Environmental Education Grants in the Caribbean Area

The U. S. Environmental Protection Agency has awarded two grants to support important environmental education projects in Puerto Rico & the U.S. Virgin Islands. EPA awarded \$70,000 to enable the Universidad del Turabo in Gurabo, PR, to work with junior high school students and teachers to develop web pages focused on their local environment. EPA also awarded a \$50,000 grant to support Beyond Visions, Inc. of Christiansted, VI, in working with a group of local organizations to implement stewardship projects in marine ecosystems.

"EPA is happy to provide \$70,000 to support the work of 30 science teachers in Puerto Rico to sharpen their video imaging and web training and develop websites to teach young people and adults how their everyday actions can improve the environment," said Judith A. Enck, EPA Region 2 Administrator.

The university's **"Teachers and Community Harboring Environmental Vigilance of the Island Stewardship"** program will

engage thirty junior high science teachers in field trips, hands-on experiences, workshops and symposia focusing on critical local environmental issues. The program will then provide the educators with professional development of video imaging skills needed to produce web pages on local environmental issues. The web pages will correlate with the Puerto Rico Department of Education's Environmental Science Curriculum.

Beyond Visions will support the **"Nature Explorers' Club Environmental Alliance"** efforts to carry out projects that benefit local marine ecosystems. The goal of the projects will be to increase the public's understanding of how their actions impact the marine environment. Alliance members will participate in classes and work with community leaders to conduct beach clean ups, promote use of reusable shopping bags and monitor sea turtle nests. Each Alliance member will produce a marine or sea turtle conservation public service announcement to be showcased at an Environmental Stewardship Conference.

"EPA is proud to provide \$50,000 to Beyond

Visions, Inc. to support the education projects about the importance of the marine environment that local community organizations will conduct in the U.S. Virgin Islands," said Judith A. Enck, EPA Region 2 Administrator.

EPA's local and nationwide educational programs promote environmental stewardship and support excellence in environmental education. Since 1992, EPA has funded over \$55 million in environmental education grants to support more than three thousand projects across the country. Agency partnerships, including with the National Environmental Education Foundation and the Environmental Education Training Partnership, have given thousands of formal and non-formal educators the skills and knowledge needed to teach students of all ages about safeguarding the environment. More information about EPA's environmental education programs and a link to sign up for future environmental education grant announcements can be found at www.epa.gov/education/.

Meet the Mayagüez Field Office



Mayagüez Field Office staff (standing left to right): Harry Maldonado, students Beverly Alvarez Torres & Yasmin Figueroa, Raquel Robledo, Rolando Collazo, and Mario Rodríguez. Inset, clockwise from top right: Esperanza Avilés, Zulma García, student Keila Ortiz, janitor Lisbel and Yadira Feliciano.

The NRCS Mayagüez Field Office (FO) serves the people of Añasco, Cabo Rojo, Guánica, Hormigueros, Lajas, Las Marías, Maricao, Mayagüez, Sabana Grande, San Germán, and Yauco, Puerto Rico. They are located at the USDA Tropical Agricultural Research Service (TARS) center adjacent to the University of Puerto Rico-Mayagüez (UPR-RUM) campus.

The team of Zulma García (District Conservationist), Raquel Robledo (Resource Conservationist), Esperanza Avilés (Soil Conservationist), Yadira Feliciano (Soil Conservation Technician), Rolando Collazo (Civil Engineer), Mario Rodríguez (Resource Conservationist) and

Harry Maldonado (Soil Conservation Technician) provide conservation assistance to the Oeste and Suroeste Soil and Water Conservation Districts. They bring a wealth of experience in the specialized areas of soil science, soil microbiology, agricultural waste management, natural resource management, biology, botany, water and energy conservation and conservation education. The Mayagüez FO is co-located with the NRCS Soil Survey (MLRA) and Ecological Services offices.

This summer the Mayagüez FO hosted student interns Beverly Alvarez Torres from Inter-American University (in collaboration with Florida Caribbean Consortium for Agriculture Education and Hispanic Workforce Development); Keila Ortiz Ortiz—an Earth Team volunteer from UPR-RUM working in the MLRA office; summer-practice student Misha L. Vargas from UPR-RUM; and Yazmin Figueroa from the UPR-RUM STEP program.

Currently, the NRCS Mayagüez FO is working on the Guánica / Río Loco Watershed Project and the National Water Quality Initiative (NWQI) in Añasco, assisting with area-wide soil erosion, sediment control and runoff management. Call us at 787-831-3454/ 3464 or visit our office for information or assistance in conserving our natural resources!

NRCS Surveyor Luis Soto Martínez Recognized



NRCS congratulates Surveyor Luis A. Soto Martínez for his selection as the “2011 Distinguished College Member” of the College of Engineers and

Surveyors of Puerto Rico, Arecibo Chapter. The chapter recognizes one member per year for their service and dedication to the College and their contributions to the development and growth of engineering and surveying professions. We are proud to have Luis as an outstanding member of our Engineering team!

Luis began his over 30-year career with NRCS in the Caribbean Area in 1978. He has been a PR College of Engineers and Surveyors member for over 20 years, occupying several positions on the board of directors. Luis enjoys jeep exhibitions, hunting and cooking (ask him for his Greek Rice recipe). He likes to share his extensive knowledge in AWMS (manure management) with his co-workers. He and his wife, Elsie, have three daughters and two grand-children.

Organic 101: The Lifecycle of Organic Food Production

Organic agriculture promotes ecological balance, fosters natural resource cycles, and conserves biodiversity by using specific farming practices. What does that mean when it comes to the label on your food? Let’s take a closer look at the lifecycle of organic cheddar cheese, for example.

To make organic cheese, you first need organic milk from a certified organic cow. An organic cow cannot be given growth hormones or antibiotics, and her feed must be 100 percent organic. Organic feed comes from land not treated with any prohibited substances (e.g., synthetic fertilizers and most synthetic pesticides) for at least 3 years before harvest. The land must be managed to maintain soil fertility, minimize erosion, and have defined boundaries to prevent prohibited substances from coming into contact with organic fields. The organic cow must graze on organic pastures for the entire grazing season (at least 120 days a year) to get at least 30 percent of her nutrition from grazing.

Throughout her life, the organic cow must be raised in living conditions that support her natural behaviors, health and welfare. If

she gets sick and needs treatment with antibiotics or other drugs, organic standards require that she receive treatment, but then she must be removed from organic production. In other words, products from treated animals cannot be sold, labeled, or represented as organic. However, operators are forbidden to withhold medical treatment from a sick animal in order to preserve its organic status.

If the farmer has followed organic regulations so far, the organic cow is milked and her milk transported to a certified organic processing plant. The organic milk then goes through the “cheddaring” process—the enzyme “rennet” is added to separate the curd (semi-solid chunks) and whey (liquid). (Rennet is a non-agricultural product allowed in organic foods.)

The certified organic dairy farm and the cheese processing plant are inspected by a National Organic Program-accredited certifying agent at least once a year. These thorough inspections make sure that producers:

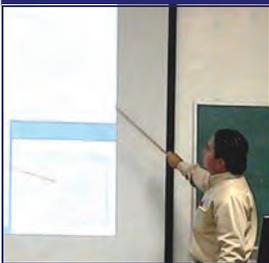
1. meet or exceed all USDA organic regulations,
2. maintain important records, and
3. follow their written organic plans.



For example, the dairy’s Organic Farm plan outlines how they manage pastures, keep the cows healthy and maintain the land’s soil and water quality. The cheese plant’s Organic Handling plan details how organic ingredients are sourced and how equipment is cleaned between batches, especially if the plant makes both organic and non-organic cheeses. Records allow certifying agents to verify organic integrity, from raising the cow to processing the milk to transporting the cheese to market. So next time you see an organic product in the store, you know how it got the label and that the National Organic Program is working to ensure organic integrity from farm to table.

Reprinted from the USDA Organic 101 blog series that explores USDA’s organic regulations. For details about USDA Organic, visit: www.ams.usda.gov/AMSv1.0/nop.

Mayaguez Staff Host Web Soil Survey Workshop Series



NRCS Soil Scientist, Manuel Matos, demonstrates how to use the Web Soil Survey.

The Mayaguez Field Office and Soil Survey Office jointly sponsored a Web Soil Survey workshop on June 14, 2012 at

the Tropical Agriculture Research Station (TARS), in Mayagüez, PR.

The workshop began with a brief description of Soil Surveys and how they are made, followed by an online demonstration of how to access the Web Soil Survey (WSS). NRCS staff then led participants through the WSS—defining their Area of Interest (AOI), then showing the basic steps for making soils maps and obtaining soils reports using the Soil Map tab. An exercise using the Soil Data Explorer tab for resource planning was

conducted, showing how to view suitability and limitations, properties and qualities for identified soils. Details were provided on how to save and download the AOI and how to create a soils map if an AOI has been previously identified in a GIS. Most frequently used soil interpretations were also discussed and questions and comments were taken from the participants.

The workshop targeted personnel from agencies that provide services to land owners/ users. Participating agencies were: University of Puerto Rico at Mayaguez, Extension Service, PR Water Authority, PR Education Department, Farm Service Agency, Sea Grant, and the Agricultural Research Station. This event was the most recent of a series of four Web Soil Survey workshops held for over 90 participants in the Suroeste and Oeste Soil and Water Conservation Districts during May and June of this year.

St. Thomas Farmer Receives Nascent Small Business Award

St. Thomas farmer and writer, June Archibald, received the 2012 Nascent Small Business award from the University of the Virgin Islands (UVI) Small Business Development Center (SBDC).



(L to R) Carl Christensen, Small Business Administration Executive Director; Leonor Dottin, UVI-SBDC Executive Director, June Archibald, and Dr. David Hall, UVI President.

Said Ms. Archibald, "I didn't know what to expect and was pleasantly surprised at how moved I was by the program, all of the well wishers and the beautiful award." The award's base is made of local mahogany and is hand-crafted by local woodturner, William Johnson. The glass top is made from recycled glass bottles from Maho Bay Camps on St. John. Every year the efforts of SBDC clients who have achieved business milestones are recognized during SBDC's Small Business Week May 28-31, 2012.

2012 Feds Feed Families Food Drive Now Underway



Feds Feed Families is a national food drive led by the U.S. Office of Personnel Management and other federal agencies to raise food for

Americans struggling with hunger across the country. As the world-wide leader on issues of food and hunger, USDA has been one of the leading agencies in total contributions over the past three years.

During these tough economic times, needy families throughout the country are turning to emergency food assistance agencies, organizations and other charity that provide food to the hungry. We encourage employees, partners and the general public to donate non-perishable food—especially nutritious foods and sources of protein.

In Puerto Rico, we have collected 556 pounds of food for needy families, 37% of our goal to collect 1,500 pounds!

Please help us reach our goal by donating food at one of our collection centers before August 31, 2012. Bins are located at the Arecibo, Mayaguez, Juana Díaz and Caguas Service Centers. Please call Nilda González or Luis García, 787-766-5206 x116 and 132, respectively, for details. In the USVI, USDA-Rural Development is collecting food at the St. Croix Service Center, which will be donated to 10,000 Helpers, a local charity that serves the homeless in St. Croix and the mentally-ill across the territory.

We appreciate your efforts and generosity in helping those in need!

Activities & Events

- **ENTSC Webinar: Use of Geophysical Methods in Agriculture**, August 21, 2012, 2:00-3:00 p.m.
- **Integrated Pest Management (IPM) Training**, August 23, 2012, 9:00 a.m.-3:00 p.m., Tropical Agriculture Research Station (TARS) Conference Room, Mayagüez, PR.
- **State Technical Committee Meeting**, August 29, 2012, 9:00 a.m., NRCS State Office Conference Room, San Juan, PR.
- **ENTSC Design of Silage Leachate Collection and Treatment Systems Webinar**, August 29, 2012, 2:00-3:00 p.m.
- **Civil Rights Advisory Committee Meeting**, 10:00 a.m.-2:00 p.m., NRCS State Office Conference Room, San Juan, PR.
- **ENTSC Using the Leaching Index in RUSLE2 for Nutrient Management Webinar**, September 29, 2012, 2:00-3:00 p.m.
- **ENTSC Tools for In-Field Evaluations of the Nitrogen & Phosphorus Status of Corn Webinar**, October 2, 2012, 2:00-3:00 p.m.
- **ENTSC Community Supported Agriculture Webinar**, October 9, 2012, 3:00-4:00 p.m.
- **ENTSC Conservation Tree/Shrub Suitability Groups: A Tool for Matching Woody Plants to Soils Webinar**, October 31, 2012, 2:00-3:00 p.m.

Helping People Help the Land...

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