On Friday, April 29, 2010, about 35 4-H students between the ages of 3 and 13 took to the streets in celebration of their 19th year participating in the Carnival Parade and danced away with the prize for winning troupe entry under 50. This year’s carnival theme was “Bacchanal Again for 2010” and the UVI Cooperative Extension Service brought out its 4-H youth to shine as they danced in time to the rhythm of Carnival while also advertising the general 4-H program, clubs, and upcoming summer camp.

This year, their brilliant red and shimmering gold costumes portrayed the steel pan. The girls’ costumes were adorned with off-the-shoulder tops worn with white flared skirts representing the steel pan. The pan notes were in red braided with gold. Around the feet were additional red and gold frills, with red and gold beaded necklaces. For the boys, the steel pan was arrayed on one side, dangling from the neck. The boys wore long red pants and red shirts. Both boys and girls wore matching headpieces which were steel pans in colors of glittering red and iridescent gold; the girls’ pieces were enhanced with red plume chiffon frills.

Many thanks are extended to our main sponsor of the past 19 years, Coca-Cola Bottling Company. Also, a special thank you and congratulations are in order for Yvonne Phillips, troupe coordinator; our director, Kwame Garcia; and the entire UVI Cooperative

(Continued on page 3)
From The Ground Up is a quarterly publication of the University of the Virgin Islands Cooperative Extension Service. It is available to Virgin Islands residents upon request and is also available on the web at http://ces.uvi.edu

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UPCOMING ACTIVITIES
4-H Summer Academy       June 28-August 6
School Gardening for Teachers August 24-25 (STT)
Livestock Training for Farmers August (STX)
World Food Day              October 17 (STX)

Message from the State Director

Featured in this issue of From the Ground Up are some of the highlights of the educational activities conducted by the Cooperative Extension Service (CES) and the impact that these programs have on the lives of the people in our community.

This issue of the newsletter clearly portrays the multifaceted components of the CES. We are involved in educating the community in all aspects of the agricultural experience, but we sponsor and promote programs that involve the youth and the adults of the community. Our goal-oriented approach has guided us in presenting articles on students’ award winning entries in plants and produce during the Carnival Cultural Fair, which is an excellent blend of the cultural and the educational. We also include baking for the adults, as well as wastewater treatment plan for the community. The Mango Melee, conservation and recycling, and chicken farming focus attention on activities in the community.

Finally, other articles present the connections between CES and the world, as is seen in Kofi Boateng’s ambassadorial workshop sessions in Jordan Badia Region, and the Southern Association of State Departments of Agriculture Conference on St. Croix.

As you will observe from the articles included, the Cooperative Extension Service caters to the complete individual as we attempt to meet the needs of the community. We hope you will enjoy this issue.

Sincerely,

Kwame Garcia, Sr.
State Director, CES
Cooperative Extension Service expressed appreciation to eight student employees and associates, commending them for their professionalism, their efficient work, and their cheerfulness. Each student received congratulations for excellent work and a gift package. The eight students graduated from UVI on May 15 and 16.

Steel pan music has been a main component of Virgin Islands’ culture since its beginning. Invented right here in the Caribbean, the steel pan is the only instrument invented in the 20th century. Our costumes were designed and made by Ms. Lisa Mollineau.

Gladys Abraham Elementary School Winners in Carnival Cultural Fair

For the 2nd consecutive year since they started their club, the Gladys Abraham Elementary School Garden Club has walked away with the first and second place prizes in plants and produce during the Carnival Cultural Fair. With the assistance of Albion “Chico” George and Dr. Caryl Johnson, both of the Cooperative Extension Service and their teacher, Mr. Vincent Henley, the students and school were led to victory.

Ces Student Workers

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Office of the Associate Director
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Carmie Thompson
4-H/Family & Consumer Sciences
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Amanda Weber
Agriculture & Natural Resources
Aces Henry - STT/STJ District
Aquellah Cantois-STT/STJ
Two Crucian culture bearers, Ms. Louise Samuel and Ms. Arlene Abraham, demonstrated the art of making tarts and the pastry known as "Horse Shoe." Attendees to the presentation were fascinated with the techniques and skills utilized to create these unique and delicious treats. Approximately twelve persons were able to participate and sample creations such as pineapple, guava, and coconut tarts as well as the crunchy, yummy cookie.

By reviving this old cultural tradition, the Cooperative Extension Service Family and Consumer Sciences Program ensured that future generations of Crucians will continue to preserve this important cultural culinary art.
The University of the Virgin Islands Cooperative Extension Service (CES) has initiated a planned four-year Onsite Wastewater Treatment and Dispersal Training and Licensing Program for Virgin Islanders. The CES collaborated in the effort with the Virgin Islands Department of Planning and Natural Resources Division of Environmental Protection, and the Virgin Islands Waste Management Authority.

The actual training began on March 16, with 36 local participants. It was conducted by an organization known as the Water Quality Consortium, which includes EPA Region I & II universities, the University of Rhode Island, Rutgers University, Cornell University, the University of Maine, the University of Massachusetts, the University of New Hampshire, the University of the Virgin Islands, and the University of Puerto Rico.

Training began with a two-day Septic Inspector Training Class conducted by George Loomis and David Kalen, both from the University of Rhode Island’s Onsite Wastewater Treatment Demonstration Center. Loomis is the center’s director and Kalen, the program manager. The center is one of eight such regional centers offering classroom and field training experience for wastewater professionals, regulators, municipal and state officials, watershed groups, and homeowners.

The class was designed to prepare attendees for an exam conducted on March 19. Successful attendees with a minimum grade of 70 were qualified as registered inspectors for conventional onsite wastewater treatment systems that handle less than 2,000 gallons per day. Prior to taking the exam, some attendees also participated in a train-the-trainer program, in which they received specialized training designed to prepare them to conduct future inspection training classes in the Virgin Islands.
Loomis and Kalen brought a wealth of knowledge and experience to this training session, according to CES Associate Director, Kofi Boateng. Their major concern relates to surface and ground waters in the Virgin Islands, which are critical to the health and welfare of our inhabitants, as well as the sustainability of the coral reefs. Through the sessions, they initiated a four-year plan, which will enable them to develop standards and licensing for onsite wastewater professionals serving individual dwelling units. Additionally, Loomis and Kalen hope to establish a knowledge base to enhance communication among professionals.

The four-year Virgin Islands plan has the following schedule:

- **Year I: March 2010 – Septic Inspection Training Class with follow-up train-the-trainer event.** Attendees were taught basic septic system facts, which raised their knowledge levels in system inspection skills.

- **Year II: 2011 – Designer Training Class with follow-up train-the-trainer event.** This session will establish basic knowledge level, and skills set needed for onsite wastewater system designers.

- **Year III: 2012 – Onsite Wastewater System Installers Training with follow-up train-the-trainer event.** This session will establish basic knowledge level, and skills set needed for onsite wastewater system installers.

- **Year IV: 2013 – Operation and Maintenance Service Provider Training with follow-up train-the-trainer event.** The training in this final phase is specifically geared toward those individuals who do system operation and routine maintenance, system adjustments and troubleshooting, performance evaluation and maximization, and monitor treatment performance of systems with flows less than 2,000 gallons per day.

For more information, please contact Kofi Boateng at UVI Cooperative Extension Service: kboaten@uvi.edu or (340) 692-4066, or Anita Nibbs at the V.I. Department of Planning and Natural Resources: anita.nibbs@dprn.gov.vi or (340) 772-1082.
Kofi Boateng, University of the Virgin Islands Cooperative Extension Services Associate Director, received a “Flower of Jordan” award, as well as a book on the Badia region of Jordan, which he treasures, but his greatest award is reflected in the instant results that the sheep farmers have recorded. Additionally, he has been invited to conduct workshops in Lebanon and Egypt. Boateng conducted health and nutrition workshops for 300 sheep farmers and 35 extension agents in the Jordan Badia Region. Attending those sessions was the Regional Director for ACDI/VOCA US Agency for International Development (USAID) Ms. Nubia Gribi from Lebanon, who has invited Boateng to conduct similar sessions.

Boateng reports that his objectives have been met, in that he developed a feeding routine to be used by sheep producers. These include two balanced feed ration formulations to improve the productivity of the flock.

Boateng’s major concern relates to the lack of knowledge transfer to farmers by extension service and the need to develop the system to assist farmers with research based information. In his workshops, Boateng modeled interactivity, which seemed to have helped convey the message to all attendees.

Continued communication between Boateng and scientists, as well as specialists, updates him on the effectiveness of his training. The host, Mr. Shabas, President of the Jordan Badia Research and Development Center in Amman, is so very impressed that he is encouraging his scientists to maintain the relationship by visiting the annual Agriculture and Food Fair of the Virgin Islands.

Boateng claims that the newly established relationship is a good match where information is transferred. He states that in addition to training the sheep farmers, he learned...
much from the people in the Middle East, especially the farmers in their methods of raising sheep in arid conditions.

Leaders of the Jordan’s Livestock Farmers Cooperative posing for a group photo with Kofi Boateng, CES Associate Director.

Like children, the lambs in the UVI Agricultural Experiment Station sheep research flock receive their routine vaccinations from Sue Lakos, CES’ Extension Agent (right) and Keturah McCrae, AES’ student employee (left).

It Only Hurts for a Minute!
Guts reduce stream bank erosion, minimize property damage and flooding, improve recreational uses, and create habitats for wildlife. These are just some of the tremendous benefits for restoring guts. The V.I. Resource Conservation and Development Council and its partners held a field tour and erosion control demonstration at the Estate Adventure Nature Trail in Estate Lower Love, St. Croix. This hands-on demonstration showed how natural channel guts can be restored.

Olasee Davis, CES Natural Resources Specialist, took a group of residents on a spirited hike through the Adventure Nature Trail, giving a brief history of the gut, and the flora and fauna that can be found along the trail. He also pointed out that erosion takes place when the island experiences heavy rains, but restoring native plants to stream banks is critical to preventing large-scale erosion problems and ultimately it will help the public and private water users, including farmers, better manage valuable water resources. This, he said, is the primary reason for the workshop—to demonstrate methods on how to repair stream banks erosion and restore the natural/native vegetation along the Estate Adventure Gut.

The guts in the Virgin Islands have been severely damaged by either human activities such as removal of vegetation, altering the natural flow of water paths, or by filling and paving of guts. The impacts of guts on destabilization and loss of native habitat can drastically increase flooding, landslides, beach erosion, smothering corals and seagrasses, as well as roadway erosion. Typically, large contractors do the major grading and clearing work needed to clean up stream banks. The contractors will go in and restore some slope to the stream bank to help prevent soil erosion and improve stream flow. In this case, the V.I. Resource Conservation and Development Council contracted Dr. Greg Jennings, Professor, Biological and Agricultural Engineer, North Carolina State University’s Stream Restoration Institute to conduct the workshop. To learn more about gut restoration,
Protecting the Environment for Future Generations

The Cooperative Extension Service (CES) and the Agricultural Experiment Station (AES) joined several non-profit and government agencies as they observed the 40th anniversary of Earth Day. CES’ Natural Resources Specialist, Olasee Davis, was one of three tour guides who took over 2,000 students from both private and public schools on guided tours of the St. George Village Botanical Garden. The students learned how plants and historical ruins on the grounds of the Garden are connected to the celebration of Earth Day.

Don Bailey, Research Specialist with the AES’ Aquaculture Program, participated at the St. Croix Earth Day Fair with the display of a small aquaponic system. The system, a 260-gallon circular tank, a 4’ x 8’ x 8” plastic lined box, a styrofoam raft and aeration, would be suitable for home use. Tilapia fish are stocked in the tank and hydroponic plants are grown on the raft. Students visiting the display were encouraged to interact with the fish and the various plants through sight, touch, scent, and taste. Plants were identified by seeing, smelling, and tasting. The selection of herbs included chives, lemon grass, basil (Italian, Thai, lemon, and purple), lettuce (romaine, bibb, green leaf, and red leaf), mint (spearmint and peppermint), spinach, and tarragon. Each of these crops has distinctive essences, except for spinach which students described as “plain.” Careful observation is an important skill for scientists. The students’ use of this skill at the Earth Day Fair could be a step on the path to future careers.
Can growing vegetables in tires be a creative way for Virgin Islanders? Albion “Chico” George, CES’ Extension Assistant, seems to think so. Chico is a staff member in the Agriculture and Natural Resources Program and is teaching students and community groups how to build these vegetable gardens in schools and in their neighborhoods.

Chico has created quite a stir in the community with tire gardening. Planting vegetables in tires was the talk on one early morning radio talk show. This provocative move has sparked or revived an interest in home gardens—and Chico is enjoying it all.

Now, through the use of recycling tires, CES has provided home gardeners, schools, community centers and others with limited space the opportunity to grow fresh vegetables that can be taken from the garden to their family table. For more information on tire gardening, call Albion “Chico” George at 693-1077.
Poultry and poultry products comprise a substantial part of the food consumed in the Virgin Islands. Wendell Cox, a livestock farmer, is making sure that he contributes to the economy by providing fresh, local chickens and soon, eggs, for the residents of St. Croix. Cox, who operates his poultry farm in the Community Gardens at Estate Lower Love, has a small, but extensive operation. He has approximately 57 turkeys, 500 layers, 80 broilers and is expanding his operation by building a new facility that can house 1,000 layers. Cox’s new venture is to provide fresh eggs to residents.

Funding for this project was through a grant from the Virgin Islands Department of Human Services, office of Vocational Rehabilitation and he was assisted in the planning, design of the facility and grant application by staff members of the Cooperative Extension Service. Cox plans to be in full operation, providing locally produced meat and eggs to St. Croix consumers in the near future.
Thirteen years ago staff from the Cooperative Extension Service, the St. George Village Botanical Garden and the V.I. Department of Agriculture got together and planned the first summer fruit festival. They called it Mango Melee. Farmers and agriculture buffs celebrated the most popular summer fruit—Mango—and invited the residents of the Virgin Islands to join in a day filled with educational activities, vendors that featured mango treats, music and local arts and crafts. The festival was held as a fund-raiser for the Garden on Sunday, July 27, 1997, at the St. George Village Botanical Garden, and according to July 28, 1997 issue of The Daily News the attendance was in the hundreds.

Just like today’s festival, the first Mango Melee featured displays and lectures on varietal selection, cultural practices, propagation, drying and preserving of mangos. Over 80 varieties of mangos grown on St. Croix were on display. Attendees were given advice on how to grow, preserve, graft, and produce the juicy fruit. The festival also featured other locally grown fruits, plants, music, food by the 4-H Club, and a taster’s choice section with mango samplings.

The 2010 summer festival featured 70 varieties of mangos and a wide selection of tropical fruits. It featured food and craft vendors, food competition, mango products, children’s activities, silent auction of mangos and tropical fruits, entertainment by the St. Croix Heritage Dancers, and the Superior Court Rising Stars Steel Orchestra.

When one thinks of summer in the Virgin Islands, particularly on St. Croix, several activities come to mind. One is picking fruits such as kenip, mango, guava, and tamarind. During the months of June and July, however, everyone looks forward to two other major activities—the Emancipation celebrations and the only summer fruit festival in the territory—the Mango Melee and Tropical Fruit Festival. In 2009, the festival, which has become part of the Emancipation celebration, drew a record crowd of 3,500. Over sixty varieties of mango and tropical fruits were on display. This year, the attendance was a little over 3,500.

Each year a tropical fruit is featured. The featured fruit for 2010 summer festival was the Sapotaceae family. Fruits included in this family are mamey apple, sapodilla, star apple, mamey sapote, and mesple. The fruit festival also featured workshops on Mangos of Florida and the Caribbean, Nutritional Benefits of Selected Tropical Fruits and the mango and tropical fruit tasting. The Mango Dis, Mango Dat competition had two divisions—Mango Maestro Pro (for professional chefs), and Mango Maestro (for amateurs). Both divisions had four categories—
Sips (drinks), Salsas (salsas and sauces), Sweets (desserts and treats) and Stuff (main dishes, and anything that doesn’t fit into the other categories).

The highlight of the festival was the mango eating contest. CES staff who contributed to the tremendous success of this summer activity included Clarice Clarke, who was in charge of promotions; CES’ Assistant Director Stafford Crossman, coordinated the workshops and mango eating competition; Sue Laks, Extension Agent, assisted in coordinating the Mango Dis Mango Dat competitions; Marthis Clavier, Extension Specialist, assisted with the educational workshops and mango eating competition; and 4-H Agent Sarah Smith assisted with the youth activities.

The reason given by organizers for the creation of the fruit festival was to: promote the production of mangos; draw attention to the many uses of mangos; and create an export product. This still remains the cornerstone of today’s summertime fruit festival.

Communications, Technology & Distance Learning

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State agriculture commissioners from the southern United States, Puerto Rico, and the territory listened and asked questions about salt and heat-resistant Senepol cattle, the potential of water catchment systems for agriculture and other territorial farming initiatives on St. Croix.

They were on St. Croix for a week (from June 22-25) for the annual business meeting of the Southern Association of State Departments of Agriculture (SASDA), an organization comprised of chief executives of state departments of agriculture throughout the southern United States.

V.I. Agriculture Commissioner, Louis Petersen was serving as president of the organization, and this was the first time the annual event had taken place in the territory.

Kofi Boateng, Associate Director of the Cooperative Extension Service, gave a talk on the history of farming in the territory, from pre-Columbian Taino practices to the present day. Ears perked up when Boateng spoke about the hardiness and growing popularity of Senepol cattle, a breed first developed on St. Croix over 90 years ago.

Louisiana Commissioner of Agriculture and Forestry Mike Strain asked about the breed's ability to tolerate salt. Boateng related that he used to have a poultry farm on St. Croix and when he dug a well, the salt content was so high, his chicken could not consume the water. “But the neighbor’s Senepol kept coming over and were happily drinking it,” Boateng said. “You will see them grazing right on the beach.” A more salt-resistant breed could be very valuable in Louisiana, Strain said afterwards. “Salt intrusion is a major problem for us,” he said. “The hurricanes of the last five years … have left us with salt-water infiltration up to 20 miles inland.” In some cases, salt reaches concentrations of up to 5.5 parts per million, “right at the boundary for sustaining life,” he said. “Cattle will forage and eat the bushes but won't touch the grass, which has a higher salt content.”

The commissioners visited Annaly Farms and were able to meet and get more information on the Senepol from Mr. Hans Lawaetz, owner of Annaly Farms and Sue Lakos, Extension Livestock Agent.

The association’s mission is to represent the southern region state departments of agriculture by developing and implementing sound public policies and programs to support and promote the regional agricultural industry.

Article by Bill Kossler from the St. Croix Source – June 23, 2010