



RESEARCH AND PUBLIC SERVICE NEWSLETTER

UNIVERSITY OF THE VIRGIN ISLANDS

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News from the UVI Research and Public Service Component

February 2005

AES BRINGS GREENWATER TILAPIA FARMING TO ST. JOHN



The completed tank will be filled with well water for the production of 5,000 tilapia

A greenwater tank for tilapia production was constructed this fall at the Coral Bay Organic Garden Center on St. John. The Garden Center is working in conjunction with the UVI-AES Aquaculture Program in the development of aquaculture as part of an integrated farming system.

Greenwater tank culture is a technology developed at the UVI St. Croix campus over the past 10 years. The fish rearing tank in the commercial-scale system is 52 ½ ft. in diameter and 4 ft. deep. It holds approximately 55,000 gallons of water and is stocked with up to 5,000 fish. The system also consists of a circulating pump, a cone-bottom clarifier, a base addition tank and four aerators.

One advantage of greenwater tank culture is that it can produce nearly 30 times more tilapia than the production from typical pond culture. This

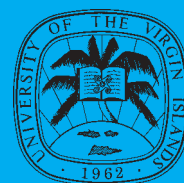
increase in production helps conserve the limited farmland in the Virgin Islands. Farmers can diversify their farms into fish culture without using large plots of their land, which can be kept in vegetable or livestock production. Tilapia can be produced in these tanks at a high production rate because the aerators provide oxygen, solid waste is removed by the clarifier and metabolic waste is removed by actively growing populations of algae and nitrifying bacteria.

A second advantage of this system is that water from the culture tank can be used to irrigate vegetable crops. The water contains sufficient amounts of nitrogen and phosphorous that can substitute for the use of other fertilizers that a farmer may use on his crops. Approximately 500

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NEW RESEARCH & PUBLIC SERVICE BOOKS PUBLISHED

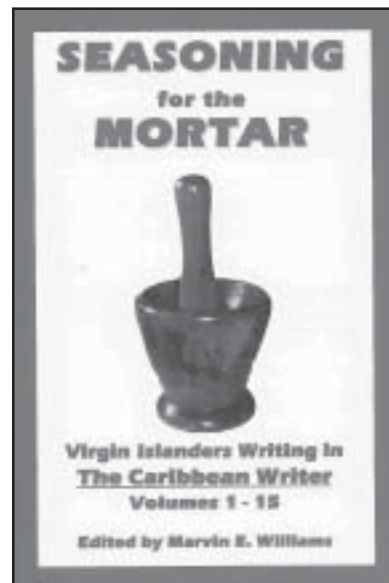
RPU PUBLISHES LITERARY ANTHOLOGY

The Research Publication Unit recently published an anthology of Virgin Islands authors entitled *Seasoning for the Mortar: Virgin Islanders Writing in The Caribbean Writer Volumes 1-15*.

The text consists of poetry, fiction, drama, and personal essays which treat a wide variety of themes that recur in the literature of the territory and our region.

Among several dozen writers are Arnold Highfield, Althea Romeo-Mark, S.B. Jones-Hendrickson, Patricia Harkins-Pierre and Winston Nugent.

Seasoning for the Mortar is designed to showcase the writers in the territory and, like its parent text, continue to encourage quality writing in the region. The anthology will soon be available at our usual outlets: Education Central, Memories of St. Croix, Undercover Books, Dockside Bookshop, and both University of the Virgin Islands bookstores. Copies can also be ordered directly from The Caribbean Writer's office by calling (340) 692-4152, e-mailing qmars@uvi.edu or orders@thecaribbeanwriter.com or from our secure server website at www.TheCaribbeanWriter.com.

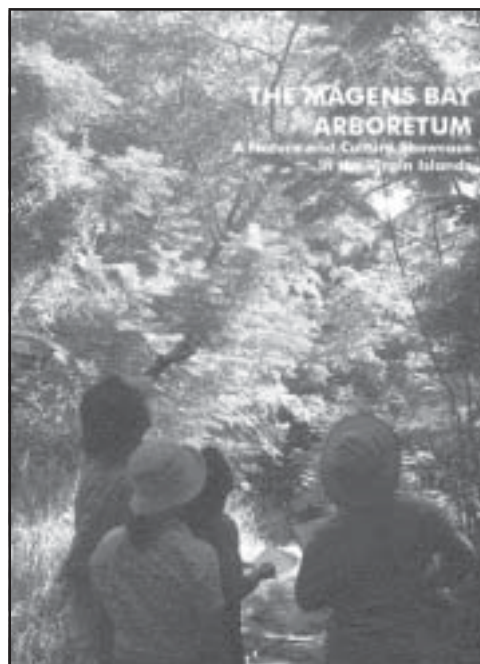


CES PARTNERS IN THE DEVELOPMENT OF THE MAGENS BAY ARBORETUM MASTER PLAN, BOOKLET

The Cooperative Extension Services CES staff has been working closely with Magens Bay Authority (MBA) as project consultant to develop a master plan for the maintenance and restoration of the Magens Bay Arboretum. This project, funded by a gift from an anonymous donor, was initiated when MBA followed the recommendations of CES staff to seek the assistance of professional landscape architects and planners, Paradigm Design Inc., to help develop the master plan.

CES worked closely with Paradigm Design Inc. to develop a booklet, *The Magens Bay Arboretum, A Nature and Culture Showcase*, that outlines a comprehensive master plan for managing the five-acre arboretum behind Magens Bay. The master plan reinterprets the spirit and original purpose of the arboretum by promoting programmatic strategies that deal with current conditions and demands, and this plan could also serve as a model for managing natural areas incorporated into the V.I. Territorial Park System. The booklet is colorfully designed to appeal to potential private donors and funding agencies that could sponsor efforts to restore and develop the arboretum.

Past sporadic interventions and capital investment have proved to be unsuccessful without a master plan and a management strategy to guide and regulate long-term resource use, maintenance, and funds allocation. As an outcome of this project, MBA has endorsed the master plan and booklet. After reviewing the booklet, MBA also recognized the need to develop a broader master plan for Magens Bay including the



57 acres managed by MBA, as well as adjacent properties owned by the V.I. government and the Nature Conservancy. In November, MBA began implementing one of the recommendations outlined in the master plan by clearing debris and weedy plant species from the coconut grove adjacent to the Arboretum. Based on Paradigm Design's research, the coconut grove served as the original entrance to the Arboretum, and efforts are now being made to re-establish the coconut grove as the Arboretum entrance and as an area for gatherings and public events.

HAITIAN STUDENT SPENDS TIME WITH ANIMAL SCIENCE PROGRAM



Raynald Sime (right) and A.J. Weis, UVI Research Analyst, weigh sheep at the AES sheep research facility on St. Croix

"RAYNALD SIME, A THIRD-YEAR STUDENT AT THE AMERICAN UNIVERSITY OF THE CARIBBEAN IN HAITI, SPENT THREE WEEKS ON ST. THOMAS AND TWO WEEKS ON ST. CROIX, TAKING IN ALL THE INFORMATION HE COULD TO SHARE IT WITH OTHERS BACK IN HIS COUNTRY. RAYNALD SPENT TIME WITH THE ANIMAL SCIENCE PROGRAM AT AES TO OBSERVE THE ANIMAL MANAGEMENT PRACTICES USED WITH THE HAIR SHEEP FLOCK AS WELL AS OTHER RESEARCH PROJECTS THAT WERE BEING CONDUCTED. RAYNALD WAS HERE FOR WEANING OF LAMBS, DEWORMING AND VACCINATING."

Raynald Sime, a third-year student at the American University of the Caribbean in Haiti, spent three weeks on St. Thomas and two weeks on St. Croix, taking in all the information he could to share it with others back in his country. While on St. Croix, Raynald was hosted by Dr. Robert Godfrey, Associate Professor and Assistant Director of the Agricultural Experiment Station (AES) on the University of the Virgin Islands' St. Croix campus.

Raynald spent time with the Animal Science program at AES to observe the animal management practices used with the hair sheep flock as well as other research projects that were being conducted. Raynald was here for weaning of lambs, deworming and vaccinating.

Raynald also spent time on St. Thomas where he assisted Dr. Bethany Bradford, veterinarian for the V.I. Dept. Of Agriculture St. Thomas-St. John district. He helped her tag animals and deworm goats and assisted in surgeries. He also did plant grafting and nursery work at the V.I. Agriculture Station, worked with small animals at the Imperial Animal Hospital, learned about flowering and landscaping plants at Bryan's Plants, visited local farms and spent time at the abattoir learning about meat inspection.

Lack of trees is a big problem in Haiti and Raynald was very impressed with how green St. Thomas is and how many trees there are. He wanted to take back ideas on fighting soil erosion and growing, planting and saving trees.

Raynald also went back to Haiti with publications on tropical agriculture available in UVI's collection. This experience benefited Raynald because he got to see livestock production practices that would have direct application to Haiti due to similar climate and conditions. The information he took back will be applicable with very little modification.

Raynald's visit was a joint effort among the V.I. Dept. Of Agriculture, University of the Virgin Islands and the American University of the Caribbean, where Dr. Paul Rudenberg is Dean and also coordinator for the local Heifer Project International (HPI). The visit grew out of a project in November 2003 donating local sheep and goats to Haiti's HPI program. Dr. Bradford conceived that project, pitched it to HPI and worked with Dr. Godfrey to make it happen.

While Raynald's career goal is to teach college agriculture courses, he is also interested in young people. He started the Children's Relief and Care Service in Haiti, which offers education, health care and clothing to orphaned and poverty-stricken children.

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SBDC AND NEW IMAGE FOUNDATION'S WNET ROUNDTABLE SPONSOR ARTS AND CRAFTS EXTRAVAGANZA



Inset, top: Attendees listen attentively to SBDC instruction regarding "Turning Passion into Profits"

Above: Evette Turnbull displays her vanity sets and bathroom accessories during the St. Thomas Roundtable Session

The Small Business Development Center (SBDC) and collaborator, New Image Foundation, sponsors of the Women's Network for Entrepreneurial Training (WNET) Roundtable Program, presented an Arts and Crafts Extravaganza in Fall 2004. This program was promoted to recruit, encourage, support, and reinforce the many talented and skilled local artists, craft makers, culinary specialists, farmers and hobbyists here in the territory.

The first phase of this promotion was centered on inviting all such artisans to the SBDC's Nisky Center/Sunshine Mall facilities to have the opportunity to formally present their products/produce to other craft makers in a roundtable session. Many of the vendors brought samples of their products/produce as part of a showcase that was centered in the facility. All participants were also afforded helpful tips and instruction on the topic of "Turning Hobbies/Pas-

sions Into Profits."

Approximately 25 local hobbyists participated in the roundtable session and provided impressive displays that covered the gamut from custom-made hats, place mats, jewel boxes, candles, baskets, ornaments, interior home accessories, to bridal accessories and more.

To further augment the success of this initial phase, WNET and SBDC scheduled a broader Arts and Crafts Fair that was held at Tutu Park Mall's Center Court. This fair was presented with an even greater emphasis on U.S. Veterans who are aspiring hobbyists/artists/entrepreneurs. SBDC and the WNET Program are very supportive of the veterans of this territory who have entrepreneurial aspirations. This fair was also a tremendous success. SBDC and WNET intend to offer future programs and expositions that will continue to highlight and promote these highly skilled craft makers.

GET THE SEA SCOOP!

UVI's Virgin Islands marine advisory service has started a regular column, "Sea Scoop!" in the *Virgin Islands Source* online newspaper. The column answers people's questions about the marine environment in an accessible, easy-to-understand manner. The column also includes a section called "Today's Tip" and links to related online resources.

So far "Sea Scoop!" has included three "Scoops" on topics ranging from the deepest part of the ocean to dolphin behavior. An excerpt from the first column follows (reprinted from the *V.I. Source* with permission):

Dear Sea Scoop,

Do dolphins sleep?

- Clayt Lauter, Erie, Pa.

Dear Clayt,

Dolphins are part of the group of animals called Cetaceans (se-TAY-shuns), and yes, they do sleep, but they do it in a remarkable way. Dolphins are capable of "unihemispheric slow-wave sleep," which means they can sleep with one eye open and one hemisphere of the brain awake. Several times throughout the day and night, a pod of dolphins (dolphins that live and travel together) will sleep with half of their brains and swim in a circle together. The entire group rests the same half of their brains and swims in the same direction. They swim with one eye open and one eye closed.



Photos.com image

(To read the rest of this column or the other recent "Sea Scoop!" articles, please go to the *V.I. Source* (www.visource.com), click on the island of your choice (St. Thomas, St. Croix or St. John) and look for the "Sea Scoop!" box near the top left to click on).

The column continues to get a strong response and is receiving questions from all over the country. One of the benefits of an online column is that it is not limited to people who get the newspaper

delivered. Anyone with an Internet connection around the world can access it. Most recently, several elementary schools – one in St. Thomas, one in Georgia and one in Illinois – have tapped into "Sea Scoop!" to supplement their marine curriculum.

If you, or someone you know has a question about the marine world, go to "Sea Scoop!" online or e-mail Ms. Elizabeth Ban directly at eban@uvi.edu.

SBDC GIVES WASTEWATER TREATMENT TRAINING

Decentralized Waste Water Treatment Training was held Dec. 6-7, 2004, at the Small Business Development Center (SBDC). The training was attended by representatives of private companies and government agencies. The first day there were 45 participants, with 32 from government departments and agencies. The second day there were 33 persons with 14 representing the private sector.

The workshop was conducted by seven members of the consortium of on-site waste management, a group of 15 universities which do research and extension education in relation to on-site waste water disposal. There was local input from Rudy O'Reilly and Bill Rohring. It was conducted primarily by Dr. George Loomis from the University of Rhode Island.

Topics included decentralized waste water initiatives, local regulatory updates, soils of the Virgin Islands, conventional septic sys-



SBDC's Decentralized Waste Water Treatment Training was attended by representatives of private companies and government agencies

tem overview, waste water treatment in soils, introduction to alternative and innovative technology which featured pumps and controls, media filters, extended aeration, structured wetlands, final treatment dispersal, and introduction to waste water management.

This workshop was part of the regional water quality grant among Cornell University, Rutgers University, University of Puerto Rico, and the University of the Virgin Islands Co-

operative Extension Service. Attending the conference besides the seven members of the consortium were Debra Grantham of Cornell University Extension Service and Katie Buckley from Rutgers University.

The participants and presenters all rated the conference very highly. All participants received certificate of completion signed by Dr. George Loomis on behalf of the on-site consortium.

AES ST. JOHN AQUACULTURE WILL HELP FARMERS CONSERVE,

Continued from p. 1

“ONE ADVANTAGE OF GREENWATER TANK CULTURE IS THAT IT CAN PRODUCE NEARLY 30 TIMES MORE TILAPIA THAN THE PRODUCTION FROM TYPICAL POND CULTURE. THIS INCREASE IN PRODUCTION HELPS CONSERVE THE LIMITED FARMLAND IN THE VIRGIN ISLANDS. FARMERS CAN DIVERSIFY THEIR FARMS INTO FISH CULTURE WITHOUT USING LARGE PLOTS OF THEIR LAND, WHICH CAN BE KEPT IN VEGETABLE OR LIVESTOCK PRODUCTION.”



Above: The greenwater tanks site is adjacent to the existing vegetable gardens. The land was cleared and leveled before the block walls were constructed

Below: The tiers of block were stacked to form the circular tank walls



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PROJECT DIVERSIFY

gallons can be removed each day and used for irrigation. The solid waste removed by the clarifier also contains nutrients that can be recovered by incorporating the dried sludge as an amendment to the farm soil.

The greenwater tank at the Garden Center was constructed by first removing the topsoil and leveling the tank site. Then, concrete cistern blocks were laid in a level circle around the perimeter. Six tiers of blocks make up the tank wall. Steel reinforcing bars were tied horizontally in each tier and vertically in each block. The block was then core filled with concrete to make a wall. A liner of high density polyethylene (HDPE) was installed to hold the water in the tank. This was placed in the tank bottom and up the sides and then attached to the top of the walls. The circulating pump, clarifier and base addition tank were placed adjacent to the culture tank. Plumbing was fitted to draw water from the tank by the circulating pump and diverted to the base addition tank and the clarifier, each of which have separate water return pipes. Water can also be diverted at this point to the vegetable crops for irrigation.

The Coral Bay Organic Garden has been an ongoing farming operation for over 10 years. The owners and managers, Hugo and Josephine Roller, produce microgreens, cucumbers, tomatoes and several other vegetable and fruit crops. The UVI Aquaculture Program will assist the Rollers with stocking and management of the tilapia through their first crop.

Tilapia fry will be shipped to the farm and stocked in the tank for growout. The fish are fed twice each day. Solid waste is removed from the clarifier and the pH is adjusted with base once each day. It will take approximately 10 months for the fish to reach market size. During the production period, water from the rearing tank will be used to irrigate vegetable crops.

The Rollers hope to reduce the need for other organic fertilizers on their farm by incorporating nutrients from the fish waste and culture water on their vegetable crops. The greenwater tank will also diversify their farm income with the addition of marketable tilapia.

Funding for this project was provided through a USDA Sustainable Agriculture Research and Education (SARE) grant.



Top: The HDPE liner holds the water in the tank

Above: The water intake for the pump supplies water to the base addition tank (light-colored barrel) and the clarifier (black cylinder)

Inset, left: The base addition and clarifier tanks greatly improve water quality and are critical components of the greenwater tank culture system

RISE STUDENTS DO PROJECTS IN AES ANIMAL SCIENCE LAB

"FIVE-MONTH-OLD LAMBS WERE EVALUATED FOR THEIR TEMPERAMENT WHILE STANDING IN THE CHUTE USING A NUMERIC SCALE (1 = CALM TO 5 = BERSERK).

UPON BEING RELEASED FROM THE CHUTE THEIR EXIT VELOCITY WAS MEASURED USING ELECTRONIC EYES AND A TIMER. BASED ON HER RESULTS, MS. MCSWEEN FOUND THAT LAMBS WITH HIGHER CHUTE SCORES HAD HIGHER EXIT VELOCITIES AND THAT LAMB WEANING WEIGHT AND AVERAGE DAILY GAIN WERE RELATED TO CHUTE SCORE, WITH THE CALMER ANIMALS HAVING HIGHER WEIGHTS AND RATE OF GAIN."

Two undergraduate students, Shana Augustin and Verleen McSween, conducted research projects in the lab of Dr. Bob Godfrey, Animal Science Program Leader at the Agricultural Experiment Station, during the summer of 2004. The students were supported by the Minority Biomedical Research Support - Research Initiative for Scientific Enhancement (MBRS-RISE) grant from the National Institutes of Health (NIH).

Ms. Augustin's project involved measuring scrotal surface temperatures of hair sheep rams using digital infrared thermal imaging (DITI). The equipment was on loan to Dr. Godfrey from Dr. Scott Willard of Mississippi State University as part of a cooperative project they are conducting on dairy cattle heat stress.

Ms. Augustin measured scrotal temperatures of rams with dark- or light-colored scrotums using the DITI infrared camera and captured the images on a laptop. By using software specific to the camera she was able to determine the temperature of regions of the scrotum as well as an overall mean temperature.

Her results showed that rams with dark-colored scrotums had lower scrotal surface temperatures than rams with light-colored scrotums. She also found that the dark-colored scrotums did not have as large a temperature gradient from the top to the bottom as the light-colored scrotums. Even though the results are counter intuitive, they agree with previous studies conducted in our lab by other RISE students over the past three years.

Ms. McSween's project was an offshoot of a project that is being conducted in cattle as part of a multi-state research project. She measured temperament and chute exit velocity of hair sheep and evaluated their relationship with each other and with growth rates. Five-month-old lambs were evaluated for their temperament while standing



Black and white thermal image showing a light-colored scrotum (left) and a dark-colored scrotum (right). The light-colored scrotum has a temperature gradient, indicated by the different shades of gray with the darker areas being cooler, but the dark-colored scrotum has no gradient, as seen by the uniform shade of gray

in the chute using a numeric scale (1 = calm to 5 = berserk).

Upon being released from the chute their exit velocity was measured using electronic eyes and a timer. Based on her results, Ms. McSween found that lambs with higher chute scores had higher exit velocities and that lamb weaning weight and average daily gain were related to chute score, with the calmer animals having higher weights and rate of gain. She also evaluated mature ewes within two weeks prior to and two weeks after giving lambing, but found no relationship between temperament and exit velocity in these animals at either point in time.

Both students analyzed their data and presented posters of their results at the Fall Student Research Symposium on St. Thomas in September 2004 and at the Annual Biomedical Research Conference for Minority Students in Dallas, Texas, in November 2004.

They have also submitted abstracts of their results for oral presentation at the Southern Section of the American Society of Animal Science meeting in Little Rock, Arkansas, in February 2005.

CES FINANCIAL RECORD KEEPING COURSE 'A BIG HIT' WITH FARMERS

Can 12 weeks make a difference in people's lives? It certainly can if it is the Cooperative Extension Services' Computer Skills and Record Keeping Training Course. During the training, 10 farmers, their spouses and one child learned basic computer maintenance and repair as well as record keeping.

At the closing program in November 2004, CES personnel congratulated the participants and encouraged them to use their newly-acquired skills to improve their effectiveness as farmers. In feedback, the farmers thanked and praised the trainer, Mr. Marthious Clavier, Extension Agent I, who taught them the valued skills.

Mr. Anderson Williams, who accompanied his wife to the program, said the training helped to improve his skills. Before the program, he would "turn the computer on or off and play games." Since he started the class, he learned to "go on the 'net, to

make bills and write receipts." He also learned to "type a little faster."

Another satisfied attendee was Mr. Renaldo Vasquez who said the program "opened a window" for him, because it "will help with" his billing.

The youngest member of the class was Tashima Tuit, 8 years old, who accompanied her mother, Ms. Violet Drew, to the training. Ms. Drew said she had used the computer for word processing and surfing the Internet, but during the training, she learned the parts of the computer, and "how to maintain it." She was pleased with the training which, she said, will help her as she collects receipts and puts them on the computer. Tashima learned the farm family course and excelled, said her mother. She does input receipts, and successfully applies all the skills that were taught. Congratulations to those who have acquired new skills and have certificates to document that fact.

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WORLD FOOD DAY ACTIVITIES 2004

ENSURING THAT VIRGIN ISLANDERS HAVE ACCESS TO HIGH QUALITY FOOD WAS FOCUS



World Food Day participants packed the classrooms of the UVI Research and Extension Center to participate in the food demonstration workshops

October 16, 2004, marked the 24th worldwide observance of World Food Day. Established at the Biennial Conference of the Food and Agricultural Organization of the United Nations in 1979, World Food Day aims to increase awareness of the problems of hunger, malnutrition, and poverty. Here in the territory, the University of the Virgin Islands' Cooperative Extension Service in partnership with the V.I. Department of Agriculture and the University's Agricultural Experiment Station sponsored a fun-filled day on October 17, with educational workshops and guided tours of the research facilities.

The activity, which was attended by approximately 1,500 people, focused on the theme "Biodiversity for Food Security." The organizers used produce such as eggplant, passion fruit, and beef to stress that a variety of crops grown locally will help to ensure that there is enough high quality food that will lead to a healthier lifestyle for the residents of the territory.

At the opening ceremony, Dr. Henry Smith, Vice Provost of Research and Public Service, said that staff had worked hard to ensure that the observation of World Food Day was a success and that people who attended the workshops and demonstrations left with

a renewed interest to make a difference in the lives of those who do not have enough to eat.

Perhaps no one brought the message closer to home than the Commissioner of Agriculture, Dr. Lawrence Lewis, when he said that "everyone in the Virgin Islands when eating their next meal should recognize how fortunate they are to have enough to eat." He continued by pointing out that "the recent hurricanes that struck the region, particularly Grenada and Haiti, brought the issue of food shortages to the forefront."

This year's event featured for the first time a petting zoo, where children got an opportunity to feed and interact with ducks, calves, puppies, and donkeys. Also featured was the distribution of 2,000 tomato, basil, pepper, and passionfruit seedlings; there were also ice cream demonstrations, food demonstrations, food vendors' courts, and farmers' markets.

Additionally, several local elementary schools collected 2,500 pounds of canned, non-perishable food items which were donated to various local charities and to the Haitian Relief effort. Music provided by the Central High School Jazz Band and Trey's Production entertained the crowd throughout the day.



"THE ACTIVITY, WHICH WAS ATTENDED BY APPROXIMATELY 1,500 PEOPLE, FOCUSED ON THE THEME 'BIODIVERSITY FOR FOOD SECURITY.' THE ORGANIZERS USED PRODUCE SUCH AS EGGPLANT, PASSION FRUIT, AND BEEF TO STRESS THAT A VARIETY OF CROPS GROWN LOCALLY WILL HELP TO ENSURE THAT THERE IS ENOUGH HIGH QUALITY FOOD THAT WILL LEAD TO A HEALTHIER LIFESTYLE FOR THE RESIDENTS OF THE TERRITORY."

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ST. CROIX SMALL LIVESTOCK FARMERS COMPLETE SIX-WEEK PRODUCTION COURSE

R&PS UNITS INCLUDING THE COOPERATIVE EXTENSION SERVICE, AGRICULTURAL EXPERIMENT STATION AND SMALL BUSINESS DEVELOPMENT CENTER COLLABORATED WITH THE V.I. DEPARTMENT OF AGRICULTURE AND ST. CROIX FARMERS IN ACTION TO CONDUCT EXTENSIVE PROGRAM

Small livestock farmers in the territory are facing a number of problems that continue to reduce the productivity and profitability of their farms. Some of these problems include overgrazing of pastures, improper sanitation and handling, poor nutrition of their animals, high cost of supplemental feed, and poor record keeping.

In an effort to address these problems, the Cooperative Extension Service, in collaboration with the Agricultural Experiment Station, V.I. Department of Agriculture and St. Croix Farmers in Action, Inc., conducted a six-week small livestock short course to provide these producers with scientific and applicable information which could bring about changes in attitudes and behavior pertaining to the adoption of recommended production management practices to enhance the efficiency and profitability of their farms.

Several professional staff, primarily from our sponsoring agencies, provided vital information on such topics as the business of small livestock management; small animals for small farms; identify-

ing small livestock through tagging; the production and management of sheep, goats, poultry and swine; forage establishment and management; abattoir procedures, rules and regulations; health, sanitation and handling; financial management; and marketing of small livestock.

The sessions were very interactive as farmers asked many thought provoking questions pertaining to their particular problem or situation. The short course also provided an opportunity for producers to network and share information among themselves as well as with the presenters and Extension personnel.

In helping to provide small business management skill to local farmers in the territory, the Small Business Development Center was asked to make a presentation to a group of 15-20 farmers on "Financial Management of Small Livestock." The SBDC workshop provided an overview on the understanding and preparation of financial statements, costs reduction, and managing the risks associated with a farm or



Josette Lopez (center) proudly displays her certificate of completion from CES Director Kwame Garcia, Sr. (left), and V.I. Department of Agriculture Commissioner Dr. Lawrence Lewis (right)

livestock operation.

The highlight of this short course was the closing program where 19 of the 25 farmers attending the course were awarded certificates of completion. Before receiving their certificates, the participants shared their experiences and expressed their gratitude for being able to participate in this intensive program.

According to the short course evaluation results, the overwhelming majority (95%) of the participating farmers significantly increased their level of knowledge. Also, the vast majority (90%) of farmers plan to adopt and add at least one new technique/practice learned to their existing farm operation.

SBDC STAFF RECEIVE KEY AWARD RECOGNITIONS

Association of Small Business Development Centers (ASBDC) President Donald Wilson announced that Karen C. Jones has been selected as the 2004 State Star of the University of the Virgin Islands Small Business Development Center (SBDC) network.

The recognition ceremony occurred at the recent ASBDC Fall Conference held at the Sheraton Hotel in New Orleans, Louisiana.

"I am pleased to make this announcement, and to recognize Karen C. Jones for extraordinary contributions to the work of the SBDC network and small business in the U.S. Virgin Islands," said Wilson.

Ms. Jones was recently named the Regional Director at the UVI-SBDC's St. Croix office.

She was chosen by the SBDC network for being an exemplary performer, making a significant contribution to the

UVI-SBDC program, and showing a strong commitment to small business in the Virgin Islands.

America's Small Business Development Center Network is a partnership uniting private enterprise, government, higher education and local nonprofit economic development organizations. It is the Small Business Administration's largest partnership program, providing management and technical assistance to help Americans start, run and grow their own businesses.

With more than 1,000 centers across the nation, the SBDC network assists about 600,000 small businesses every year in face-to-face counseling and training, in addition to assisting hundreds of thousands more small businesses through fax-on-demand and e-mail.

SBDC's Mr. Daryl U. Edwards was

one of three recipients of the University's 2004 RPS Employee Recognition Awards in a presentation made at the RPS Annual Fall Retreat. Mr. Edwards currently serves as a Business Counselor II out of the SBDC's St. Thomas office.

Mr. Edwards has made invaluable contributions to the SBDC and is to be commended for successfully taking a lead in the various counseling, training, and outreach initiatives that have originated out of the St. Thomas office.

SBDC is particularly pleased to have had its employees recognized for a fifth consecutive year.

State Director Warren T. Bush, and Associate Director Linroy E. Freeman led the staff in offering their congratulations to Ms. Jones and Mr. Edwards. SBDC's management is looking forward to even greater things from them in the future.

SBDC BRIEFS

SBDC IN COLLABORATION WITH GOVERNMENT AGENCIES PRESENT 'CHECKLIST FOR 'STARTING A BUSINESS' SEMINARS

The Small Business Development Center (SBDC) started FY 2005 with a number of seminars focused on providing training and education on how to effectively start a business in the USVI. These St. Thomas-based programs, offered in succession in an attempt to provide symmetry between the subject matters, were presented with collaborative participation of many of the government agencies which effectively help authorize and legalize business entities in the territory.

The collaborative seminars were:

- Forms of Business Ownership: w/collaborative instruction by The Office of the Lieutenant Governor: Corporation and Trademarks Division;
- Business Registrations: w/collaborative instruction by The Office of the Lieutenant Governor: Corporation and Trademarks Division;
- Business License and Zoning: w/collaboration by The Department of Licensing and Consumer Affairs and Department of Planning and Natural Resources; and
- Tax Compliance & Record Keeping: w/collaboration by The Bureau of Internal Revenue. Other checklist programming offered exclusively by SBDC personnel were:
- Choosing a Business;
- Writing a Business Plan: Narrative Section; and
- Writing a Business Plan: Financial Section.

SBDC extends appreciation to all the partners and collaborators who provide immeasurable instruction, participation, and leadership to the SBDC with in-kind services.

SBDC - REACHING OUT TO V.I. YOUTH AND THE COMMUNITY

The SBDC is continuing its mission of educating and promoting entrepreneurship through our territory's schools and community organizations. During the first quarter of fiscal 2005, SBDC presented to more than 100 young men and women in both the academic and vocational areas of high school on such topics as "Starting a Business" and "Marketing Your Skills" in St. Croix.

Special interest groups like AmeriCorps and Lutheran Social Services of the Virgin Islands also solicited the assistance of the SBDC to speak on entrepreneurship to their

volunteers on who were interested in starting their own business. Volunteers received information on the business start-up process (i.e. licensing, capital needs, etc), and successful business practices/strategies.

SBDC also gained some mileage from its work with Addelita Cancryn Jr. High School and Bertha C. Boschulte Middle School for having participated in customized training sessions and Career Fairs, respectively.

In 2005, SBDC intends to promote some very exciting projects for the youth to participate in. For more information on the SBDC's Youth Outreach program initiatives, please contact the SBDC offices at 692-5270 (STX) and 776-3206 (STT).

SBDC SET TO WORK WITH THE VIRGIN ISLANDS RESOURCE CONSERVATION & DEVELOPMENT COUNCIL, INC. ON ITS PLOT SIGN PROJECT

The SBDC has been asked by Ms. May Cornwall, President of V.I. Resource Conservation & Development Council, Inc. (VI RC&D), for assistance in providing counseling, training, and technical assistance on an after-school program design to educate students about economic development, entrepreneurship, and community service.

The program would afford woodworking and business students the opportunity to acquire knowledge, skills, and abilities to become successful entrepreneurs while providing the residents of St. Croix with plot number signs for easy and rapid location by emergency service providers as required by federal law.

Through a \$25,000 grant from the USDA Forest Service, the project proposes to have local students in both the junior high and high schools work together in producing 300 plot signs using forest-based materials.

VI RC&D, with the help of the SBDC, will assist woodworking students from the John H. Woodson Junior High School and FBLA students from the St. Croix Central High School in developing a business plan for the Plot Sign Project. The plan will enable students to determine the production costs, sale price of the signs, and conduct market surveys of customers, and provide an opportunity for them to showcase their skills. The goals of this project are to: 1) develop a sustainable program, which would rotate students through the manufacturing, planning, and management of a business; and 2) serve as an after-school program model to provide other production and services that will fulfill a community need. SBDC looks forward to playing a significant role in the development of this initiative.

SBDC PROVIDED SMALL BUSINESS COUNSELING AND TRAINING TO OVER 2,000 USVI RESIDENTS IN FY 2004

Annually, the Small Business Development Center establishes performance milestones under the guidelines of its cooperative agreement, established between the University of the Virgin Islands and the U.S. Small Business Administration. SBDC is pleased to announce that in combining the goals and objectives for its small business counseling, training, and outreach programs, the Center provided services to 2,198 residents across the territory.

Of this total, 768 received business counseling assistance in a myriad of areas including, but not limited to, business law, marketing, finance, cash flow management, inventory control, starting a business, expanding a business, writing and implementing a viable business plan, personnel issues and procurement opportunities. Among the results of the SBDC's business counseling efforts is the over \$1 million being awarded in small business funding to V.I. entrepreneurs who received technical assistance by the SBDC.

SBDC's business counseling also contributed immensely to the ability of dozens of businesses to engage in significant small business job creation and retention. Similarly, 1,422 USVI residents participated in the Center's 64 fiscal training/outreach programs. These programs, all tailored around various small business principles, professional and personal enrichment topics, and financial empowerment, were met with tremendous reviews on the basis of measured program evaluation feedback.

SBDC exceeded its overall program milestones by 11%, representing one of the wider margins in the SBDC network. Over 90% of all business counseling evaluations revealed an "excellent" overall rating for the confidential and professional services rendered.

Similarly, during FY 2004, the SBDC's training programs received over 90% combined ratings of "good to excellent." SBDC hopes to advance the program's mandates, business counseling, and outreach offerings to even higher and broader levels in an effort to further assist with the territory's economic development improvement initiatives.



[HTTP://RPS.UVI.EDU/](http://RPS.UVI.EDU/)



RESEARCH & PUBLIC SERVICE UPCOMING EVENTS FEBRUARY - APRIL 2005

FEBRUARY

2 PERSONNEL HANDBOOK/SBDC*
2 YOUTH OUTREACH PROGRAM/SBDC
3 SUPERVISION OF PERSONNEL/SBDC
3 SMALL BUSINESS OBLIGATIONS/SBDC
7 PERSONNEL EVALUATIONS & APPRAISALS/SBDC
8 - APRIL 26 SCIENCE SEMINAR SERIES/VI-EPSCOR & CMES
9 EMPLOYMENT LAWS/SBDC
10 TERMINATION OF EMPLOYEES/SBDC
10 FARMERS AND FISHERMEN SEMINAR WITH SBDA/SBDC
15 WNET ROUNDTABLE - BANKING/SBDC
24 WATER RESOURCES CONFERENCE/WRRI

MARCH

2 WOMEN IN BUSINESS/SBDC
2 YOUTH OUTREACH: FBIA-BUSINESS PLAN/SBDC
3 IF YOU WANT A SUPERIOR WORKFORCE/SBDC
9 FILING YOUR 2004 BUSINESS TAXES/SBDC
16 SBA'S COMMUNITY EXPRESS LOAN PROGRAM
ORIENTATION/SBDC
17 SBA'S EXPRESS MICRO LOAN PROGRAM ORIENTATION
29 WNET ROUNDTABLE/SBDC
31 IT'S NOT WHAT YOU SAY/SBDC

APRIL

3-9 NATIONAL SMALL BUSINESS WEEK ACTIVITIES/SBDC
4 EDC'S ELIGIBLE SUPPLIERS FORUM/SBDC

5&6
6
7
20&21

FIRSTBANK OPEN HOUSE/SBDC
YOUTH OUTREACH: FBIA-BUSINESS PLAN/SBDC
THE BUSINESS PLAN/SBDC
VETERAN'S OUTREACH PROGRAM/SBDC

MAY

4
5
13
17
18&19
18-20

GRANT WRITING/SBDC
WORKING WITH THE CUSTOMER
YOUTH OUTREACH: BASIC BUSINESS
EXPOSURE/SBDC
WNET ROUNDTABLE: TAXES/SBDC
SBA'S 8A PROGRAM ORIENTATION/SBDC
9TH VIRGIN ISLANDS NONPOINT SOURCE
POLLUTION CONFERENCE/CMES
WNET TRAINING

JUNE

5-11
7-9
14
17
23

AQUAPONICS AND TILAPIA AQUACULTURE
SHORT COURSE/AES
PROCUREMENT/PRONET SBA PRODUCTS &
SERVICES/SBDC
WNET ROUNDTABLE-UNEMPLOYMENT
INSURANCE & GOVERNMENT INSURANCE
FUND/SBDC
WNET TRAINING/SBDC
USING QUICKBOOKS/SBDC

**For more information on these events, contact the sponsoring department.*



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