Straight from the Vine

Volume 1 Issue 3

Autumn 2005

The Environmental & Cultural Education Newsletter for the Virgin Islands Community

How much greenhouse gases come from our cars and trucks?

Read this month's "Straight from the Vine" to find

VINE

SEA Rolls Out Learning Lab On Wheels

This year, The St. Croix Environmental Association, (SEA) is launching its Environmental Mobile Learning Lab. The mission will be to visit schools and beaches and engage students as possible in environmental learning activities.

Dan Odell has been recruited by SEA to act as the Educational Director and head up this program. Mr. Odell has been busy of late, outfitting the Lab while preparing curriculua and other activities related to helping the teachers in the public and private schools on St. Croix bring interesting environmental activities to their students.

For the first year, Mr. Odell will focus the students' attention towards the marine environment. The thrust of these activities will be the "ridge to

reef" concept. In other words, the activities will center around the idea that what we do to the land, for example, not only affects the air we breathe and the water we drink, but also impacts the waters surrounding St. Croix. As a result, water quality there as well as the health of our coral reefs is weakened.

To date, the following units of study have been developed, each with multiple activities: Characteristics of water, The water cycle on St. Croix, Water density, Our watershed on St. Croix, Soil and the effects of soil erosion, Coral reefs and marine plants, marine invertebrates, how to use and interpret topographic maps of St. Croix, and how to read and use scientific graphs and scales.

Additional units of study are in the planning stages, and will be developed with input from the students and teachers and what local needs should be addressed.

The Mobile Learning Lab is funded in part by HOVENSA and the National Oceanographic and Atmospheric Administration. Other funding was made possible by: American Pest Control, Plaza Extra, Ferdi's Forest, Seven Seas Water, Flagship Bank, Sustainable Systems & Design International, Marshall & Sterling Insurance, Toyota of St. Croix, and Mt. Victory Camp.

The goal of the program is to have a vibrant, outgoing, and interesting children's learning experience.

For more information, please contact:

Dan Odell St. Croix Environmental Association (340) 773-1989

- Anti-Litter & Beautification St. Croix
- Coral World
- Island Resources
 Foundation
- The National Park Service Virgin Islands NP
- ♦ The Nature Conservancy
- USDA Natural Resources
 Conservation Service
- St. Croix Environmental Association
- St. Croix Landmarks Society
- University of the Virgin Islands Cooperative Extension Service
- University of the Virgin Islands Globe Program
- US Fish & Wildlife
- VI Department of Agriculture
- VI Department of Planning
 & Natural Resources
- VI Environmental Resource Station
- ♦ VI EpSCOR
- ♦ VI Marine Advisory Service
- VI Resource Conservation & Development, Inc.
- West Indies Marine Animal Research & Conservation Service, Inc.

Keeping Science Fun, Island-Style

The Department of Planning and Natural Resources, Divisions of Coastal Zone Management, Energy and Environmental Protection partnered with the University of the Virgin Islands to host Camp KEEP (Kids in Energy and Environmental Protection). The 5week summer camp was held in St. Thomas and St. Croix for middle school students' ages 11 - 14. The camp hosted up to seventeen students on each island and campers were exposed to topics ranging from

renewable and efficient energy, pollution, methods of environmental protection and marine resource conservation. Hands-on activities, crafts, laboratory and scientific experiments served as a venue to teach kids that science can be fun. Following the close of each topic area, the kids went on field trips to reinforce concepts learned in class about energy, environmental and conservation concerns throughout the Virgin Islands.



Students take to kayaks as part of their activities at Camp KEEP—St. Thomas.

<u>Upcoming Events</u> October 14: QUEST Teacher Workshops

October 2005: Energy Education & Awareness Month Page 2 Straight from the Vine

VI Energy Office Prepares for Energy Education & Awareness Month

The Virgin Islands Energy Office (VIEO) is preparing for the upcoming Energy Education and Awareness Month, which will run during the entire month of October. Ms. Leila Muller of VIEO is hoping to use recent rises in the cost of gasoline and diesel fuels to help drive the point of energy conservation home to Virgin Islands residents. "High energy costs have been a way of life in the territory for some time now, owing to our power plants using gasoline as the energy source. What we hope to do is ride the recent attention to tell Virgin Islanders that they are not powerless to combating high power bills. Every little energy conserving habit

During the month of October, VIEO will visit schools and community events with solar and wind power demonstrations as well as helpful hints to reduce power bills. Additionally, their website, being revamped since the start of summer, will be back online to provide energy consumers more information and advice on becoming what Ms. Muller calls, "energywise consumers."

For more information on Energy Education and Awareness Month and other VIEO programs, please contact:

Ms. Leila Muller Virgin Islands Energy Office (340) 772-2616

Or visit their new website at:

http://www.vienergy.org

<u>Ouick Facts on Gasoline</u> <u>Consumption</u>

Americans use automobiles for more than 90% of their daily trips. On average, they will travel 4000 miles more each year by car than they did in 1960.

Drivers, on average, spend 443 hours behind the wheel each year, or 19 days.

One-quarter of all car journeys are less than 2 miles. To walk that far would require the energy converted from a half a bar of chocolate. The cost of gasoline is seven times that of the chocolate bar.

The average American car pollutes its own weight in carbon in just one year.

In the United States, there is 2 cars for every 1 household. Globally, there is 1 car per 10 households. In China, there is 1 car per 74,000 households, although as their country continues to become industrialized, the demand for cars and gasoline is expected to dramatically increase.

Americans use four times as much gasoline as Europeans and nearly twice as much as Canadians.

The average price of gasoline in the U.S. Virgin Islands has risen by nearly \$0.50 since the start of 2005. Over the course of the year, drivers will pay an average of \$350 more than they did in 2004.



Simple adjustments to daily routines can help lower energy and gasoline costs by hundreds of dollars each year. Carpooling to work can save over \$100 for both drivers each year.

Share Your Stories With VINE!

Have a great story from a beach cleanup? Or maybe a poem about sea turtles? What about a great photo of one of our incomparable sunsets? Maybe you would like to publicize an upcoming event? If so, why not share it for all to read right here in *Straight from the Vine?* If so, please send it along to:

Liam Carr University of the Virgin Islands RR1 Box 10,000 Kingshill, VI 00850-9781 (340) 692-4144 (340) 692-4047 (fax) Icarr@uvi.edu

Every effort to return original writings and artwork will be made.

Dolphins Learn to Snorkel on St. Croix

On August 24, The Division of Coastal Zone Management, partnered by The Nature Conservancy, took to the pool to teach 12 lucky dolphins how to swim, Not the marine mammal so familiar to our Virgin Islands waters, but kids at the Dolphins Summer Swim Camp. The one-day clinic was sponsored by the Division of Coastal Zone Management and was held at the Dolphin Swim Club swimming pool.

The clinic was designed to teach kids snorkel safety and expose them to basic marine ecology. Large photos of marine life found in and around coral reefs were placed at the bottom of the swimming pool. The kids were then asked to snorkel to the various photos, practicing their technique, and learning about marine ecology at each stop. Agatha Sector and Rebecca Weatherall from The Nature Conservancy provided instruction in snorkel techniques and safety to the novice snorkelers. The kids with advanced skills received more in-depth instruction in coral reef ecology from marine ecologist Paige Rothenberger.

For information on the snorkel clinic or to schedule your own "Learn to Snorkel" program at your local pool, call or email:



Paige Rothenberger watches as the new snorkelers practice their new techniques.

Susan Curtis 340-773-1082 susan.curtis@viczmp.com Volume 1 Page 3

DPNR—Division of Environmental Protection Offers Seed Monies

DPNR's Division of Environmental Protection (DEP), through a federal grant aimed at improving schoolchildren's awareness of the impacts of nonpoint source pollution in the Virgin Islands, has set aside monies for the upcoming school year for special programs, field trips, and volunteer clubs and groups that increase students' interactions with their environment and encourage a sense of lifelong stewardship of their island and its natural resources.

Ms. Diane Capehart of DEP said that her division would try to aid ten public schools on St. Croix, St. Thomas, and St. John. "This program is offering critical start-up funds for environmental clubs. There are so many places and things our students can discover, if only they had the means. This will help the schools afford those trips and experiences."

Individuals wishing to apply for one of the awards must represent a territorial public school. The money may be used for any environmental program that meets DEP's mission to improve resource stewardship.

For more information or to request an application packet, please contact: Diane Capehart, DPNR-DEP (340) 773-1082



Students from St. Croix;s Ricardo Richards Elementary School listen to UVI's Liam Carr at the Earth Day Fair held at the St. George Botanical Garden this past spring. Awards from DPNR-DEP would help more classes and students attend fun field trips such as these.

Students Turn Out In Force To Keep St. Croix Beautiful

Through the Virgin Islands Waste Management Authority's Youth Environmental Summer Program, more than 150 students upcoming year, please contact: and staff members worked tirelessly throughout the month of July, providing much needed landscaping and painting to schools around St. Croix.

Headquartered at the After School Greenhouse, the program led 125 high schoolaged students outdoors for an equal dose of hard work and appreciation for their efforts by members of the community. Among other efforts, the students are responsible for the landscaping at the St. Croix Educational Complex, and the fresh coat of paint at Central High School.

Each Friday, the students were given a reprieve from the usual work, instead going on field trips to different parts of the island to learn about some of the natural beauty of the island that is so abundant. Students visited Jack's and Isaac's Bay with The Nature Conservancy, Ha'Penny Beach, Blue Mountain, and Columbus Landing with The University of the Virgin Islands, and enjoyed tours of the water treatment plant.

Liam Carr, research analyst at UVI, took a group each Friday to some of the best spots on island for enjoying the sights and sounds of the ocean. "I had students chest-deep in water at Ha'Penny, helping to draw a map of the different marine habitats there. They worked really hard for me and seemed to enjoy doing it. I always got a kick out of telling them each afternoon they had earned some television time, since they had walked almost a mile through the water."

For More Information on the After School Greenhouse Program and activities for the

Ms. Emmeline Simmonds, The After School Greenhouse, (340) 778-7657

Helpful Energy-Saving Hints

Buy a timer to automatically turn on and off your lights and air conditioner when you are out of the house. An average sized room needs less than 30 minutes to become cool from an air conditioner.

Water your plants and yard in the early evening. Waiting for the heat and bright sun to disappear reduces water loss from rapid evaporation by over 30%.

Washing your laundry in cold water can save hundreds of dollars in power bills. Most laundry items clean as well in cold water as in warm or hot water.

Group your errands together. This habit is not only gas-saving but time-saving. Rather than make five trips each week to the same shopping center and grocery store, combining trips will give you more time to pursue more leisurely activities when you'd otherwise be sitting in traffic

Carpooling to and from work with a friend or neighbor is a great way to save gas and stay involved in your community.



Students from the After School Greenhouse test their mapping skills at Ha'Penny Beach. Using a transect and a series of quadrats, the students mapped nearly 1 mile of near-shore marine habitats.

Recycle to Support our Libraries

"Save your inkjet cartridges and old cell phones. Instead of discarding them put them in our postage prepaid bags and drop them in the mail. That's all there is to it" says Kathleen Plaskett, Environmental Protections Educational Specialist. All Proceeds from this program will be donated to help support our public libraries. The postage prepaid bags are available at the office of Environmental Protection and other locations around the Territory.

For more information about this new program contact:

Kathleen Plaskett, Education Specialist, (340) 773-1082 x2390

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Help Keep VI Beaches Clean! Support CoastWeeks 2005

CoastWeeks 2005, in conjunction with the 20th Anniversary of the International Coastal Cleanup (ICC), descend upon the beaches and shorelines of the Virgin Islands to pick up litter and marine debris this coming September and October.

Since 1985, The Ocean Conservancy has sponsored the ICC, held each September. Last year, the ICC attracted 300,000 people from 88 different countries. They removed 8 million pounds of garbage, while leaving 11,000 miles of shoreline cleaner. The local ICC effort, CoastWeeks, will last from September 18 through October 8. Last year on St. Croix alone, nearly 500 volunteers cleaned up over 7000 pounds of garbage from their neighborhood beaches. UVI's Marcia Taylor said the sense of a strong community helped make CoastWeeks a success. "We had elementary schools calling to ask if they could clean the beach across the street from them. We had grandfathers calling to see if any group could use help. HOVENSA sponsored a fatherson cleanup. It was a tremendous feeling to see the island community pull itself together for something I think is vitally important to every Virgin Islander. And that is a love and respect for their island and to try to make it a little more beautiful for everyone."

CoastWeeks 2005 is being locally coordinated by UVI's Virgin Islands Marine Advisory Service. They provide logistical support and supplies, including garbage bags, for volunteer groups throughout the event. For more information, to plan a cleanup, or to sign up for a cleanup near you, please contact:

Marcia Taylor VIMAS (340) 692-4046

Fish & Wildlife Complete Annual Fish Count on St. Croix

For the past several summers, DPNR biologists from the Division of Fish and Wildlife have been taking to the waters off of St. Croix to count and record the numbers fishes that arrive to feed and mate. This summer, like the ones before it, was similar by what the divers didn't see rather than what they did.

"There's lots of little fish down there," remarked Dr. Wes Toller after a recent dive in the reefs that make up the famous Wall dive site at Cane Bay. "We would love if we saw more of the bigger ones too."

Although not the only reason for a drop in numbers, years of indiscriminate fishing activity on reefs have taken their toll not only in the Virgin Islands but throughout the Caribbean. Marine photographer Paul Humann, the internationallyrecognized photographer whose Reef Fish Identification books are the bible for marine biologists during the summer counts, sums it up best about several species, including the famous Nassau grouper, in his brief descriptions of each fish. He notes, "Once common in many locations, but numbers have been greatly reduced by spearfishing."

Liam Carr, a research analyst at UVI who assisted with the fish counting

this year, says the absence of large fish is as frustrating as it is exciting when one is spotted. "We know that the top predators on these reefs are vital to the long-term health of all the reef inhabitants. And just as importantly, these groupers and snappers are valuable catches for the fishermen. Nobody wants to see them disappear. So when I see a dog snapper or grouper swimming along, I feel privileged to have gotten the opportunity. At the same time, I can't help but wonder if it's the last time I'll see one or they are the first of many more."

For more information on Virgin Islands fishes and fisheries, please contact:

Dr. William Coles DPNR—Division of Fish & Wildlife (340) 773-1082

Pid you know that the emissions from cars and trucks account for 20% of the greenhouse gases emitted by the United States each year? Reducing air pollution is everyone's responsibility. With the rising prices in gasoline, carpooling is an easy way to reduce greenhouse gases while saving money. Carpooling can save nearly 33 million barrels of oil each day. That's 8.2 billion barrels each year.

VIMAS Offers Module On-line

In response to a growing need for ageappropriate environmental education manuals throughout the Virgin Islands, UVI's Virgin Islands Marine Advisory Service is pleased to announce that their popular teacher's module, "Nonpoint Source Pollution: An Educational Module" will be available on-line at their website for this upcoming school year.

The module provides teachers and parents with fun activities and stimulating background information for a host of topics concerning nonpoint source pollution from a Virgin Islands perspective.

To access the module, please go to: http://rps.uvi.edu/VIMAS/npsmodulehome.htm

VINE to Attend QUEST Workshop for 2nd Year

By the end of the 2004 QUEST Teachers Workshop, DFW Chief Dr. William Coles knew he had finally found his audience. While QUEST continued to offer the usual fare for the hundreds of teachers in attendance, it was the Virgin Islands Network of Environmental Educators (VINE) that was the mustsee seminar. Both sessions, focused on the multitude of environmental and cultural resources available to teachers, were held in standing room only classrooms. "Teachers were excited to see that there were all these people just dying to come and give presentations to their students. We can't always assume that the busy teacher will come to you. That's why VINE comes to them."

This year's QUEST workshop, scheduled for October 14, will give yet another chance for VINE to showcase all they have to offer to the teachers. Says Dr. Coles, "last year, we weren't sure what kind of reception we'd receive. This year, we're going to bring out all the stops. VINE is more than quest presenters and field trips. We have a wealth of materials that they can use on their own. We want to encourage sound environmental education in the Virgin islands by promoting responsible resource use. VINE is helping move that forward, one teacher at a time."