

May 2005

Volume 3, Issue 2

Biocomplexity of Caribbean Coral
Reefs (BCCR) Research



In this issue

- Conservation of Priority Bird Habitats
- VI-EPSCoR Annual Conference Sep. 23/24
- VI-EPSCoR Welcomes Dr. Meri Whitaker to UVI
- Outreach Update
- Program Coordinator's Update
- Biocomplexity of Caribbean Coral Reefs (BCCR) Update

Highlights

- VI-EPSCoR Strategic Plan submitted to NSF EPSCoR
- VI-EPSCoR Semi-Annual Report submitted to NSF EPSCoR
- VI-EPSCoR 2nd yr funding approved by NSF EPSCoR
- VI-EPSCoR Web site to be launched in August
- VI-EPSCoR BCCR research faculty update

Conservation of Priority Bird Habitats by Dr. Jim Corven

What's happening to the birds in the Virgin Islands? VI-EPSCoR researcher Dr. Jim Corven has begun a long-term project of monitoring birds on the St. Thomas campus of UVI.

One of the best ways to determine the health of our environment is to monitor the living species over time to see if they are doing well or having trouble. This project has begun the development of a system for tracking the species and numbers of birds found in the Virgin Islands as good "indicators" of environmental conditions. The project is looking at endemic species (found here and only here), resident species, and migratory species that over-winter or just pass through on their annual migrations between South and North America.

Since birds breathe the same air, drink the same water, and eat from the same food chain as people do, they are often considered a useful indicator of environmental health for humans.

Scientists have found a disturbing tendency in bird populations

throughout the region indicating that there are environmental factors threatening the biodiversity and human welfare. With funding from VI-EPSCoR and additional support from Birdlife International and Birders' Exchange, this project has established 24 fixed bird monitoring stations around the UVI campus and will soon begin installing similar stations across St. Thomas. Called "point count sites," these stations are already providing new data about what species of birds are found in which sites and their habitat requirements. Once data has been collected over time, often for several years, we can also get a good idea of any population trends that might be happening. This information will be essential for making decisions about where further development can safely occur and which areas are vital to the survival of our wildlife species.

During the spring semester this year, Dr. Corven worked with undergraduate students in the Ecology

course at UVI locating the point count sites to cover all the habitat types found in the area. Sites are precisely identified with a satellite-based Geographical Positioning System (GPS) and marked on a map. Using these sites, the students and Dr. Corven took regular counts of all birds seen and heard at every site, noting their species, numbers, and habitat associations. The field work will continue on a regular basis so that any changes occurring in the bird populations from human disturbances, habitat destruction, or other factors can be determined.

Another important product of this research will be to help scientists studying the same birds throughout the Caribbean and the Western Hemisphere to understand their biology and conservation needs better. Preliminary results will be shared during the Annual Meeting of the Caribbean Society for the Study and Conservation of Birds scheduled for early August 2005 in Guadeloupe.

Program Coordinator's Update by Meri Whitaker

The last few months have seen some important milestones in the first year of the VI-EPSCoR grant. We finalized our four-year strategic plan and submitted it to the National Science Foundation. We also submitted the first VI-EPSCoR Annual Report. We completed our first year of NSF funding and submitted a request for the second year. Happily, we just received notification that our second year of funding has been approved.

We look forward to holding our first annual conference on September 23 and 24; and we expect to launch the VI-EPSCoR website by the end of summer.

Outreach Update by Eugene Gottlieb Jr.

The VI-EPSCoR program sponsored an NSF Outreach Day for UVI research and teaching faculty with Mr. John Cruickshank of the NSF Education and Human Resources (EHR) directorate. Mr. Cruickshank is the senior program and grant analyst working directly under the Assistant Director for the Directorate of Education and Human Resources (EHR). The EHR Directorate is very supportive of Mr. Cruickshank's outreach efforts to broaden participation, particularly to HBCU and minority-serving institutions such as UVI. He provided information about the Education and Biological Sciences Directorates in addition to other NSF-wide funding opportunities, emerging areas, proposal processing, grant administration and post-award grant management.

Mr. Cruickshank met with faculty one-on-one and in small groups to discuss their research interests and possible NSF connections. He also met with our sponsored research office to discuss NSF post-award grant management and current issues in audit/grant administration.

John Cruickshank has been at NSF for over 18 years and has served as a grant officer for every directorate in the Foundation. Over the years he has also been intimately involved in outreach efforts on behalf of the Foundation and its many offices. He was happy to share information not only about the Education and Human Resources Directorate, but also the names of contact people, research initiatives, and directorates with related-activities at NSF.



Staff Highlight:**Dr. Meri Whitaker**

Joining VI-EPSCoR as Program Coordinator is Meri Whitaker, Ph.D. Dr. Whitaker received her Ph.D. and M.A. from Stanford University in agricultural economics and her B.S. degree from the Massachusetts Institute of Technology. She has been involved in research and research management in Syria, India, Egypt, and the U.S. Dr. Whitaker hopes to continue the superb work of Dr. Camille McKayle, her predecessor, who will return to teaching mathematics while continuing to support VI-EPSCoR's work.

VI-EPSCoR Governing Committee:

- * Frank Schulerbrandt, Esq.,
Chair of the Governing Committee
- * LaVerne Ragster, PhD,
Vice-chair of the Governing Committee
- * Hon. Donna Christensen, MD,
Member of Congress
- * Hon. Lorraine Berry,
President V.I. Legislature
- * Anna Hector, President,
St. Croix Chamber of Commerce
- * Hon. Noreen Michael, PhD,
Commissioner, Department of Education
- * Richard Nemeth, PhD,
Director, Center for Marine & Environmental Studies
- * Hon. Dean Plaskett, Esq.,
Commissioner, Department of Planning & Natural Resources
- * David Sharp, President & CEO, Innovative Telephone
- * Henry H. Smith, PhD,
UVI Interim-Provost and VI-EPSCoR Project Director
- * Robert Stolz, PhD,
UVI Faculty Representative, St. Thomas
- * Thomas N. Taylor, PhD,
Kansas EPSCoR
President, St. Thomas/St. John Chamber of Commerce
- * T.H. Lee Williams, PhD,
Oklahoma EPSCoR
- * Richard Moore, PhD,
Economist

Contact VI-EPSCoR at
(340) 693-1478 or by
e-mail: viepscoR@uvi.edu

BCCR Update by Dr. Richard Nemeth**Renovations:****MacLean Marine Science Center**

The laboratory lab benches have arrived for the three research labs and teaching classroom. We are scheduling their installation this month. Improved lighting and flooring have also been completed in the research and teaching space. Three new offices and an upgraded conference room are slated for completion by the end of May 2005. This will make room for the new research faculty.

VIERS

The CZM permit for the VIERS renovation has been accepted and a public hearing was held on May 4, 2005. The CZM issued its final decision on May 20, and the permit was granted. The construction crew is scheduled to begin work the first week of June.

Faculty:

Dr. Nasseer Idrisi has been very active in his first few months here at UVI. He gave two seminars on his research, one at the VI-EPSCoR science seminar series (Feb. 22, 2005) and a second for the Water Resources Conference (Feb. 24, 2005). He also taught two lectures and two field/lab exercises for the Oceanography course on April 8 and 15, 2005. He coauthored and submitted a Sea Grant pre-proposal, entitled "Integration of spatial and temporal patterns of coral reef resources in the Virgin Islands," with **Dr. Marc Bomedine** of the Division of Science and Math and **Stevie Henry** of the Eastern Caribbean Center's Conservation Data Center. Dr. Idrisi also participated in an NSF-CAREER workshop in Las Vegas, NV, on March 11–12, 2005. Finally, on Feb. 26, 2005, he led a whale watch and snorkeling excursion and a beach clean-up and snorkeling excursion on St. Thomas.

Both of these excursions were sponsored by the Environmental Association of St. Thomas. Currently, Dr. Idrisi is at the University of Miami collaborating with RSMAS scientists on a major grant proposal dealing with ocean modeling.

Dr. Sandra Romano submitted an NSF proposal entitled "Collaborative research: Assembling the tree of life—An integrative approach to investigating cnidarians phylogeny." The goal of the proposal, which was submitted in March 2005, is to conduct a systematic revision of the phylum of animals, including jellyfish, anemones, and corals, based on comprehensive molecular data. Dr. Romano will investigate the group that includes reef corals. The proposal is in collaboration with a number of colleagues at various institutions, including University of Kansas, University of Ohio, and Duke University.

Prof. Roy Watlington received word that two proposals fielded during the fall semester have borne fruit. The first is a small grant from the National Institute of Water Resources to support the development of modules for training researchers, students, and others in the use of key hydrographic/hydrologic instruments. As a part of this grant, the high-precision salinometer used in the Anegada Climate Tracers Study (ACTS) will be repaired, recalibrated, and returned to use as both a research and training tool. Funding is also included for a nephelometer attachment for the ACTS CTD probe.

Notification was also received of a pending award from the NOAA/Coastal Services Center through a direct grant to the University of Puerto Rico, Mayagüez. This award will support the University of Puerto

Rico, Mayagüez, and the University of the Virgin Islands in organizing the nascent Caribbean Regional Association (CaRA) for an ocean-observing system for the US-Caribbean exclusive economic zone, and in building its base of active stakeholders and developing its strategic plan. Watlington is a member of the National Federation of Regional Associations, which, as an organ managed by the federal consortium OceanUS, is intended to coordinate the regional associations.

Dr. Stuart Ketcham presented a seminar on his research, entitled "Investigation of genetic differentiation among populations of the long-spined black sea urchin in marine habitats surrounding St. Croix," as part of the VI-EPSCoR Seminar Series on April 12, 2005.

Dr. Tamara Romanuk was selected by the search committee for the VI-EPSCoR invertebrate biologist research assistant faculty position. She comes with strong credentials in food web dynamics and energy flows of marine systems. Dr. Romanuk currently holds a NSERC (Natural Sciences and Engineering Research Council of Canada) post-doctoral fellowship at the University of Quebec and is working at the Pacific Ecoinformatics and Computational Ecology Lab. Our HR department is in the process of filing visa application forms for her to work in the USVI.

Equipment:

The new research vessel will be going through a sea trial at the end of May 2005 and is slated for delivery in June 2005. The ADCP current meters have been deployed for three months on a multi-species spawning aggregation site and will be retrieved and data downloaded in early June 2005, following the completion of the spawning season.