

In this issue

Elkhorn Coral Incubator Study Gets Underwater

Galathea III Expedition: Danish Researchers Visit UVI

EPSCoR Workshops

Calendar of Events

Highlights

Coming soon . . .

November 1-2—
Science in the Park conference at VI National Park on St. John

November 3—VI National Park 40th anniversary celebration to be held at VIERS on St. John

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Elkhorn Coral Incubator Study Gets Underwater

As part of the *Acropora palmata* (elkhorn coral) disease and connectivity EPSCoR incubator study an array of ADCPs (Acoustic Doppler Current Profilers) were deployed at the bay mouth of Hawksnest Bay and off Turtle Point, at the western end of St. John.

The instruments were deployed on Friday, August 4, 2006, four days prior to the full moon. The total deployment duration will be 18 days. Two 600 kHz ADCPs were deployed at 20 m depth at the east and west end of Hawksnest Bay and one 2MHz ADCP was deployed in a sandy strip straddled by two stands of *A. palmata*. It is expected that *A. palmata* will spawn approximately 3-4 days after the full moon.

The purpose of this part of the study is to attempt to determine whether *A. palmata* time their spawning with shifts in coastal currents associated with the embayments where the coral are found, we will also attempt to project where currents will take larval coral after the spawn event. Backscatter signals from the ADCPs should allow us to pinpoint the timing of spawning and density of the spawn.

Hawksnest Bay is known to be one of the best sites to look for spawning because it has one of the highest densities of elkhorn coral of anywhere around St. John.

As *Montastraea* (mound - shaped coral) spawns a few days later than *Acropora*, some determination about the best nights to observe this spawning event remains to be made.



Above: Shaun Kadison sets up ADCP.

"HAWKSNEST BAY IS KNOWN TO BE ONE OF THE BEST SITES TO LOOK FOR SPAWNING . . ."
C. Rogers

Researchers collaborating on this project include, Nasseer Idrisi, Tyler Smith, Sandra Romano, and Caroline Rogers.



Above: Jeremiah Blondeau prepares to deploy ADCP.

Galathea III Expedition: Danish Researchers Visit UVI

Danish Research Councils and the Danish Government are sending an expedition vessel around the Globe to provide a platform for scientific research and science communication to students at all levels. In March 2007, the vessel will visit the US Virgin Islands. During this trip, several research projects will be conducted. The ship will remain in St. Thomas March 15-16, as well as March 26-27 and will be in St. Croix the 25th. The ship will cruise

Continued on page 2



Danish Research, Cont. from page 1

north of St. Croix for geological studies between these time periods.

The research team is a group of six Danish and two U.S. scientists (seagrass ecology/biogeochemistry /eutrophication). In addition, a Danish student will join this part of the cruise to work on a seagrass research project. The project will be carried out both onboard the ship and from the shore. Samples will be drawn from the shore and brought onboard for analyses. Some experiments will also be conducted onboard.

The main purpose for the proposed project is to examine the extent to which sulphide oxidation in the sediment results in carbonate dissolution that adds to the P-nutrition of seagrasses. While it is known that sulphate reduction rates can be high in seagrass beds and that seagrasses release oxygen from the roots, the size of the impact of sulphide oxidation in the root zone on carbonate dissolution is not known.

Prior to the research trip, there will be a preliminary visit to the Virgin Islands August 22-29. During these dates, much of the logistical planning for the March visit will take place. A presentation will be given on August 23 at 12pm on UVI's St. Thomas campus. The title of this presentation is "How can seagrasses get enough phosphorus to sustain growth in oligotrophic, carbonate environments? Does sulfur cycling play a role?". Henning S. Jensen and Marianne Holmer, both from the Institute of Biology, University of Odense, Denmark will be presenting, along with Birgit Olesen from the Institute of Biology, University of Aarhus, Denmark. This presentation will be videoconferenced to the St. Croix campus, as well.

The researchers hope that there will be opportunities for collaboration with UVI researchers and undergraduate students throughout their work on this project.

Visit www.galatea3.dk/uk for more information.

EPSCoR Workshops in Arlington and Chicago: What We Learned

Arlington:
The NSF workshop for Public Information Officers (PIOs) was held in Arlington, VA on July 20-21. UVI sent Patrice Johnson, representing the Public Relations office of the university, as well as Eoghan Joyce and Maria Dillard from the VI-EPSCoR staff. The workshop focused on the communication of scientific information to a broad audience through the media and other tools. PIOs from several EPSCoR states were in attendance. Collaboration between EPSCoR groups was very beneficial, as well as the opportunity to work within the VI-EPSCoR team. NSF is beginning to develop additional resources for those working on the communications and outreach aspects of research.

is being placed on making science matter in a very practical and applied way. Researchers are encouraged to write these sections of NSF grants together.

Chicago:
After the marathon OLPA Public Officer Workshop, Eoghan Joyce headed to Chicago to represent VI-EPSCoR at the annual NSF EPSCoR project administrators meeting. The meeting provided an opportunity for all EPSCoR jurisdictions to discuss program related issues with representatives from the NSF main office as well as discuss specific cross jurisdictional strengths and areas for potential improvement.

Furthermore, the meeting served as a catalyst for potential cross jurisdictional projects and research collaboration. Among the many topics discussed, methods and standardization as well as the impending changes in fastlane, NSF's online submission and reporting system, were favorites among the meeting participants.

Overall, good contacts were made, promising projects discussed, and new resources acquired. The coming year will be an exciting one for VI-EPSCoR.

"THE TAKE HOME MESSAGES FROM NSF WERE HIGHLY FOCUSED ON INCREASING THE RELEVANCE OF SCIENTIFIC RESEARCH."

M. Dillard

Within NSF, there is an evident thrust towards increasing the relevance of scientific research, as well as communicating the relevance to an audience outside the academic and research institutions where this work is being done. The "Broader Impacts" section of NSF grants is an example of the focus that

"POTENTIAL CROSS JURISDICTIONAL PROJECTS AND RESEARCH COLLABORATION WERE AMONG THE OUTCOMES OF THE MEETING."

E. Joyce

September 29—UVI's Research and Public Service Retreat at Botany Bay

October 23—Coral Reef Task Force Pre-meeting Workshop

October 24-28—Coral Reef Task Force Meeting in the US Virgin Islands

VI-EPSCoR Calendar of Events

August 23—Seagrass Research Seminar presented by Danish Research team; 12-12:50pm, B110

August 25—Marilyn Brandt of University of Miami gives a talk "Modeling Coral Disease and the Decline of a Caribbean Coral Reef"; 12:00pm, CMES

September 1—Seminar on macroalgae on coral reefs given by Linda Walters, Ph.D.; 12-1pm, B110

September 13—Seminar on commerce and dispersal of invasive species given by Linda Walters, Ph.D.; 12-1pm, B110

September 16-October 7—21st annual Coastweeks, see further details on page 3.

Highlights: News, Comings and Goings, and Other Happenings

Marilyn Henderson the much adored Administrative Assistant at the Center for Marine and Environmental Science said her good-byes in mid-August. She will be moving on to another position at UVI as the Project Manager for ITS and Library Services. Though we are sad to see her go, we wish Marilyn the best in her future endeavors. She will be greatly missed.

Maria K. Dillard (M.A., Sociology, East Carolina University) joined VI-EPSCoR in July 2006 as Communications Outreach Manager. She will be working to increase interaction between VI-EPSCoR and the broader USVI community and to ensure the advancement of goals for economic development of the territory.

Linda Walters, Ph.D. joins us as a visiting researcher from the University of Central Florida. Dr. Walters is collaborating with Dr. Teresa Turner on EPSCoR-funded research related to coral restoration on reefs dominated by macroalgae. She will be giving talks on her research throughout September. See page 2 for more information.

Matt Lucas joins us as a visiting research assistant from Southeast Missouri State University where he is pursuing his M.S. degree in Biology. He will be working with Dr. Sandra Romano on research which uses DNA sequences for analyses of higher level relationships among the hard corals. In addition, he will be conducting his own research towards his degree.

Recent Publications . . .

BCCR Researcher., Nasseer Idrisi published a research note entitled, "*Rates of Nitrogen Excretion and Oxygen Consumption in the California Sea Hare, *Aplysia Californica**" in collaboration with J.F. Barimo, A. Hudder, T.R. Capo, and P.J. Walsh.

Available Now . . .

UVI Marine Science T-shirts in Youth (\$10) and Adult (\$12) sizes. Please see Elizabeth Ban to purchase your t-shirt. All proceeds go towards a UVI Marine Science Scholarship fund.

The book *Remarkable Big Trees in the U.S. Virgin Islands: An Eco-Heritage Guide to Jumbie Trees and Other Trees of Cultural Interest* by Robert Nicholls, Ph.D. has arrived! The UVI Bookstore has copies for sale, along with Dockside Books.

The books can also be purchased directly from Dr. Nicholls. Please call 340-693-1184 to place an order or visit the EPSCoR website for more information.

21st Annual Coastweeks

Clean up the Virgin Islands' coastal areas! Please sign up to organize or join a cleanup crew. For more information call 774-3320 ext 5117 or 693-1392 on St. Thomas, 779-4940 on St. John, and 692-4046 on St. Croix.

MA Program Launch on St. Croix: A Time for Celebration

On Sunday, August 20, 2006, the Master of Arts in Mathematics for Secondary Teachers was officially launched at Carambola Beach Resort on St. Croix. There was a reception followed by a program, which included introductions and remarks from several guests. EPSCoR staff members Sylvia Vitazkova and Maria Dillard were in attendance. Members of the VI Department of Education, UVI, and the VI Legislature were also present for this important occasion. The program launch provided an opportunity to reflect upon the results of an effective partnership between the University of the Virgin Islands, VI-EPSCoR, and the Department of Education. By combining efforts and resources, the new degree program gained approval in the spring and is now off to a wonderful start.

The most important guests of the event were the teachers, now students in the M.A. program, and their families. Throughout the evening, these individuals gained special recognition for their willingness to take on the challenges associated with pursuing a graduate degree, while continuing to work as educators in the VI schools. The first cohort of teachers began classes in June. Dr. Vanere Goodwin was pleased to see the program in motion and expressed gratitude to all the partners who made its progress possible. Dillard conveyed EPSCoR's excitement in seeing the program come to fruition. She highlighted VISION 2012, the university's strategic plan, in which EPSCoR has been charged with the task of working to strengthen K-12 science and math education. Dillard says, "Improving K-12 education in the areas of math and science is a major goal of EPSCoR's work in the Virgin Islands - a goal that is well supported by academic programs like this one."

UVI Fall Research Symposium will take place on Sunday, September 24 from 1:30 to 4:00pm. UVI students, including those who have worked on EPSCoR-funded research, will be presenting their research posters to the community. Please take this opportunity to support the work of these ambitious researchers. See the UVI website for further details about this event.

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**Taking the Virgin
Islands into
*new frontiers.***

Please visit us on the web at
<http://epscor.uvi.edu>

What is VI-EPSCoR?

EPSCoR stands for Experimental Program to Stimulate Competitive Research (EPSCoR). EPSCoR, a program of the National Science Foundation, is designed to increase research and education capacity in science and engineering within a state or territory of the United States that has traditionally been under funded in these areas. The overarching idea is that individuals with training in the areas of science, math, and technology are better able to have a positive impact on a region's management and development. The Virgin Islands received its first EPSCoR grant in 2004 and is presently in its third year of funding. Virgin Islands-EPSCoR is hosted by the University of the Virgin Islands on behalf of the people of the Virgin Islands, and receives its guidance from a Governing Committee that includes representatives of both the public and the private sector.