



Caribbean Marine Science

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Association News

From the Editors' desk

It has been a good year for the AMLC and the Association 50th Anniversary represent the resilience and will of the people who have kept it alive for so long. Our congratulations and respect to all the past Executive board members and the members who have supported the AMLC all these years. The upcoming meeting in St. Thomas is a clear example of the accomplishments of the AMLC. It has received more applications for presentations than we can fit in our usual four day schedule, so the field trip day has been used to accommodate all the oral presentations. This is a good indication that your organization is becoming an important driver in the region and your support is appreciated. This however, will put pressure in our future meetings in terms of the organization and our wish to keep it as simple (no concurrent sessions) as possible.

33rd Scientific Meeting of the AMLC

2007 - Scientific Meeting – Hosted by Rick Nemeth and the University of the Virgin Island in St. Thomas. The scientific meeting will be held from June 4 – 8, 2007. Dr. Rita Colwell, former director of the U.S. National Science Foundation is scheduled to be our Keynote Speaker. Her address is scheduled for Monday, June 4th at 9:30 a.m. Dr. Colwell served NSF for several years, having been appointed by President Bill Clinton, and she is certain to provide us with new and interesting insights into the future of science in our region.



Also, Dr. Craig Venter has accepted our invitation as a featured speaker and his talk is scheduled for Tuesday, June 4th at 8:30 a.m. Dr. Venter led the effort to decode the human genome, and is regarded as one of the leading scientists of the 21st century. .



He is recognized for his invaluable contributions in genomic research and is one of the country's most frequently cited scientists.

Final announcements for the Meeting

Posters

The maximum poster size for the poster session is 4 ft x 4 ft or 120 cm x 120 cm.

Meeting program

The program schedule can be found at the end of this newsletter, and it is also posted on our webpage.

Field day

As mentioned above, because of the number of oral presentations submitted, there is no official field day this time. However, there will be opportunities almost everyday to catch a dive trip, or an island tour if you wish.

Meeting proceedings

We wish to request that authors submitting manuscripts for publication in the Proceedings of the AMLC meeting in St. Thomas provide your manuscript at the meeting. When writing the MS it is critical for you to follow format requirements of the journal: *Revista de Biologia Tropical*. Lack of attention to this requirement in past years has required a great deal of editorial effort and time, delaying publication of Proceedings significantly. Because of problems with a minority of papers, publication of all has been unfairly and unreasonably delayed, to the

detriment of authors submitting properly formatted manuscripts. Therefore, please be aware that AMLC policy is that manuscripts submitted for consideration MUST conform to format requirements. Those that do not will be returned for re-formatting before being reviewed for content and acceptability. Delays in receiving a properly formatted manuscript may eliminate the manuscript from consideration if the process endangers the publication schedule of the Proceedings as a whole. Decisions of the editorial board in this regard shall be final.

Future Meetings of the AMLC

2008 - The Executive Board Meeting will be concurrent with the 11th International Coral Reef Symposium, hosted by NOVA University in Ft. Lauderdale, USA.

AMLC List Server and Web Site

The purpose of these list servers is to facilitate communication and foster collaboration between and among our members. We recently found it advantageous to transfer our list server operation from the FIU server to the AMLC service provider. You should have received a notice by e-mail. We hope all AMLC members will take advantage of this capability – if you have any news, requests, or questions to distribute to the membership, just send a message to the email address below. On-line discussions among members concerning Caribbean marine issues are encouraged. Don't be shy! The NEW list server address is:

members@lists.amlc-carib.org

Only AMLC members in good standing can post to the list. Messages from other than subscribed members will not be posted. Current AMLC members are automatically subscribed, and new members are added as they join AMLC. The newsletter will be circulated electronically through our list server, which ensures delivery and that only paid members are in our mailing list.

The Executive Board is grateful and thanks our Treasurer, Laurie Richardson, for getting the AMLC list server service implemented. We also wish to express our appreciation to staff of the USGS in St. Petersburg, Florida, including Laurinda Travers,

Amar Nayegandhi, and John Brock, for transferring the service to the AMLC server and updating our web site. This is a valuable resource for all of us if we make use of it.

We have a new web site located at www.amlc-carib.org. If you forget the URL, just do a Google search on "AMLC" and it will magically appear!

As always, we request contributions for the Newsletter from our members and readers. We have a very diverse membership involved in many different areas of research. Your Newsletter is an efficient way of sharing information about your projects, or even better, finding help or cooperation from other members of the Association.

Profile

The University of the Virgin Islands, St Thomas

Location

The St Thomas campus of the University of the Virgin Islands (UVI) is located on 175 acres of land three miles west of Charlotte Amalie, the capital of the US. Virgin Islands.

The St. Thomas campus is the bigger of the two campuses of the University of the Virgin Islands, the smaller being on St. Croix. UVI also operate the Virgin Islands Environmental Resource Station (VIERS) on St. John

St. Thomas Campus

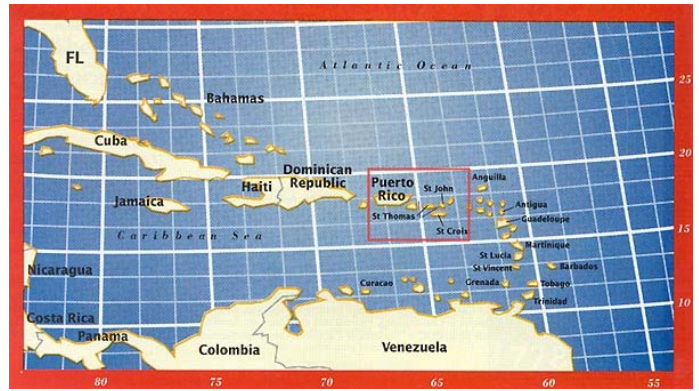
2 John Brewers Bay, St. Thomas, U.S. Virgin Islands 00802, **Phone:** (340) 776-9200

St. Croix Campus

RR 1, Box 10,000, Kingshill, St. Croix, U.S. Virgin Islands 00851, **Phone:** (340) 778-1620

St. John VIERS Field Station

P.O. Box 250, St. John, U.S. Virgin Islands 00831. **Phone:** (340) 776-6721



Student Body

Currently, UVI has a combined enrollment of approximately 2,500 full-time, part-time and graduate students on its two campuses.

Academic Program

The university offers various undergraduate degrees in the area of Business Administration, Education, Humanities and Social Sciences, Nursing, and Science and Mathematics. For more information see <http://www.uvi.edu/pub-relations/AcademicsHome.html>.

Graduate (Masters) degrees are offered in Education, Business Administration, School Psychology, Public Administration, and Mathematics. A Masters in Marine Sciences should begin in fall 2007 (<http://mmes.uvi.edu/>).

Research Programs

The Research and Public Service (<http://rps.uvi.edu/>) component of UVI includes:

Agricultural Experiment Station (http://rps.uvi.edu/AES/aes_home.html),

Caribbean Writer
(<http://www.thecaribbeanwriter.com/>),
Center for Marine and Environmental Studies
(<http://marsci.uvi.edu/>).
Cooperative Extension Service
(<http://rps.uvi.edu/CES/index.html>),
Eastern Caribbean Center
(<http://www.uvi.edu/ECC/ecc.htm>),
Small Business Development Center
(<http://rps.uvi.edu/CES/index.html>),
VI EPSCoR program (<http://epscor.uvi.edu/>),
Water resources Research Institute
(<http://rps.uvi.edu/WRRI/wrri.htm>)

Facilities

In addition to classroom buildings and residence halls, UVI St. Thomas has a library, student center, playing field, nine-hole golf course, performing arts center, tennis courts and John Brewers Beach. A new \$10 million Sports and Fitness Center was completed in the summer of 2000. The building seats up to 4,000 persons. There is a portable wood floor for the main court and two other tartan full courts running sideways for practice. In addition, this building houses three classrooms, a university book store and a VIP sky box/public relations area.

Quick Profile:

Chair, Board of Trustees - Auguste E. Rimpel, Ph.D.
President - LaVerne E. Ragster, Ph.D.
Faculty/Instructors - 107
Full-time staff - 450
Tuition/annual - \$3,300 residents; \$9,900 non-residents
Room-Board/annual - \$7,550
Degrees awarded (May 2006) - 353
Alumni - 5,600
Enrollment, Fall 2005 - 2,392
Consortium Member - National Student Exchange

General Interest

Development of New Federal Regulations on Ballast Water Discharge Standards

The Coast Guard will work with the Department of Agriculture's and Animal and Plant Health Inspection Service (APHIS) in the continued development of new federal regulations on ballast water discharge standards. APHIS joins a federal partnership that also includes the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the U.S. Fish and Wildlife Service, all of which are contributing technical expertise to the Coast Guard-led federal rulemaking. The rulemaking is intended to spur vessels to use a variety of ballast water treatment technologies to prevent the introduction and spread of aquatic nonindigenous species, such as viral hemorrhagic septicemia.

Ballast water is carried by vessels to ensure stability and structural integrity, and is essential to safe and efficient cargo operations. When discharged, ballast water can introduce nonindigenous species to U.S. waters. Current regulations primarily require vessels to exchange their ballast water with mid-ocean water. However, the effectiveness of this practice varies and not all vessels are able to conduct exchange. As part of the rulemaking process, the Coast Guard is evaluating the environmental impacts of setting a ballast water discharge standard. As the ballast water discharge rulemaking process moves forward, the public and interested stakeholders will have the opportunity to provide comments.

Information on the rulemaking can be found at: <http://dms.dot.gov>. Under "simple search" enter 10486 as the docket number.

For further information on this rulemaking, please contact Mr. Bivan R. Patnaik at (202) 372-1435, Bivan.R.Patnaik@uscg.mil.

For more information contact: External Affairs
U.S. Coast Guard externalaffairs@uscg.mil
1240 E. 9th Street, Suite 2073, Cleveland, OH 44199

Palau Takes the Lead in Ocean Conservation

Sitting on a bench in a thatched hut in this village on Palau's main island of Babeldaob, Islias Yano, 57, looked over the bay he has fished professionally since he was 15 and recalled the fishing practices of his boyhood. Noah Idechong, Palau's foremost environmentalist, said, "We realized that our no-fishing areas could not protect us from global warming and reef bleaching." "We fished certain fish in certain seasons," he recalled. "Each reef could only be fished by people from a certain village." Village elders would rotate fishing on reefs, he recounted, to husband their slow-growing main source of food.

Starting in the 1980s, population growth, new seafood markets in Asia and modern ways of thinking washed away the elders' authority and rules. "Outsiders started coming into our reefs, they used scuba gear and dynamite, and the fish got smaller and fewer," Mr. Yano said, shaking his head.

In the world's tropical seas, full-grown snappers and groupers became as rare as full-grown tuna or cod elsewhere. In Ngiwal, the reaction was not long in coming. Once again, the elders ruled.

In 1994, they banned fishing in a small area of reef that was partly accessible on foot. The village women, who traditionally gather shellfish at low tide, noticed how the fish became more plentiful there in a few years. The reef became locally famous, and other villages started to do the same.

Today, Palau, a tiny island state 600 miles east of the Philippines that is internationally known as a site for recreational diving, is at the forefront of a worldwide movement to ban fishing in key reefs to allow the return of prized species. It now protects a patchwork of reefs and lagoon waters amounting to 460 square miles.

At a November 2005 meeting of the United States Coral Reef Task force in Koror (the Republic of Palau, independent since 1994, still qualifies for certain domestic financing from the United States), President Tommy Remengesau Jr., probably the world's most conservation-minded head of state, caused a splash with his so-called Micronesia Challenge: a call to the rest of the region to set aside

for conservation 30 percent of coastal waters and 20 percent of the land area by 2020. Palau already has that amount, though not all of it is policed, but the rest of the region has far less.

"I realized you couldn't have development on one side and conservation on the other, and see which would outwit the other," he said in an interview in Koror, the commercial capital. "If you cared for the future of the country, you had to bring them together," so the nongovernmental organizations became "an integral part of our planning."

Palau's challenge has come at a time when reef-fishing communities around the world are discovering that setting aside no-fishing areas yields dividends in a few years because the resurgent fish populations spill over into areas where fishing is allowed.

Without as much support from their national government as Palauans enjoy, local authorities in Fiji have raised the number of no-take zones to 189 from 2 in 10 years.

Two years after Ratu Aisea Katonivere, a traditional chief, imposed a no-take zone, "The fish are closer and bigger," he said. "They are coming back; it's a miracle." Mr. Katonivere, who rules over 7,000 people in the Great Sea Reef, the world's third-largest barrier reef, spoke in an interview during a conservation conference in Honolulu.

Other participants said that in the Solomon Islands, the protected areas have gone to 30 from 2 in just five years, and in Vanuatu, they exceed 100.

"The old system of controlling fishing with the taboo system is being adapted and improved because people still respect their traditional chiefs," said Alifereti Tawake of the University of the South Pacific in Fiji. "They're used to fishing where they want, but when they see the decline of the fish and the results of the no-take areas, they see it's the way to go."

The Micronesia Challenge has resonated far beyond Micronesia. Five months after Mr. Remengesau issued it, President Susilo Bambang Yudhoyono of Indonesia pledged to increase marine protected areas to 24.7 million acres from 18 million acres by 2010. In the Antilles, the states of Grenada, the Bahamas, Belize and the Grenadines, which have already protected some reef areas, have committed

themselves to a Caribbean Challenge and are trying to persuade the other nations to make similar pledges, according to Bill Raynor, the [Nature Conservancy's](#) director for Micronesia.

But in the United States, marine protected areas are less than 1 percent of near-shore waters. In Hawaii, where the reefs are largely depleted of fish, a “right to fish” bill recently approved by the state house of representatives would make it almost impossible to create any protected areas by requiring unattainable scientific data.

That Palau has taken the lead in ocean conservation is no accident. Even among Pacific peoples, Palauans have been known for prizing fish and seafood over meat and farmed vegetables, and its fishermen have stood out for their keen understanding of the reefs. A Canadian marine biologist, Robert E. Johannes, was the first to tap the Palauans’ knowledge of marine biology by interviewing them and fishing with them in the 1970s.

Palauans, he wrote, showed him that in their archipelago, 55 species of edible fish followed the lunar calendar to gather in enormous groups called spawning aggregations and release sperm and eggs in the water — “more than twice as many species as biologists had described for the whole world.”

When diving became popular, in the 1990s, Palauan fishermen were able to take foreigners to sites with extraordinary numbers and varieties of fishes and corals, and the island became one of the world’s top diving destinations. This brought a measure of prosperity to the 14,000 Palauans (unemployment is 2.9 percent), and it reinforced the views of fishermen like Mr. Yano that plundering reefs is a bad idea. In 1997, 330 square miles in the Rock Islands lagoon favored by divers were closed to commercial fishing and the killing of sharks anywhere in Palau’s waters was banned.

Also protected are the Napoleon wrasses, fish that can reach five feet and are worth up to \$10,000 alive in Hong Kong. They have been decimated almost everywhere else, but Palau now boasts one of the world’s largest densities of them, a major attraction for divers.

In 1998, a so-called El Niño event involving major sea current changes sent unusually warm water to

several countries around the world, causing the corals there to turn white and die. In Palau, the bleaching event killed off a third of its corals on average, but the proportion was much larger in the outer reefs whose dense fish populations, clear water and dramatic drop-offs are the main attractions to divers.

At the time, Noah Idechong, the country’s leading environmentalist and founder of the Palau Conservation Society, had recently been elected to the lower house of Parliament.

“We realized that our no-fishing areas could not protect us from [global warming](#) and reef bleaching,” he said.

With the support of the Nature Conservancy, Mr. Idechong (pronounced idda-ONG) introduced legislation to integrate the patchwork of existing protected areas— some imposed by the government for tourism, others established by villages along the coast — and add another 30 percent from those that best resisted bleaching, or recovered fastest from it, he said.

Today, the network design is close to being completed, and by the end of the decade — 10 years before the president’s 2020 pledge — it should be fully in place, Mr. Idechong said.

Although Palau’s reefs are the envy of the region, poaching remains a problem. “There are boats on my reef every night; they are fishing illegally with scuba tanks and spear guns,” fumed Brownie Salvador, the governor of Ngarchelong State. “I have no money to hire rangers to stop them.”

To monitor the health of the reefs and curb poaching, Palau needs \$2.1 million a year, officials say. Foreign donors are expected to create a \$12 million trust fund, and the rest will come from an added tax on divers, said Mr. Raynor of the Nature Conservancy, in an interview in Pohnpei, in the Federated States of Micronesia.

Because Palau is far ahead of the others, “It’s really important we succeed, because the whole world is looking at us,” Mr. Raynor added.

At Dalhousie University in Nova Scotia, Boris Worm, author of a seminal paper predicting that there will be little wild fish left to eat by midcentury, is keeping a

close eye on the rapid spread of marine-protected areas in the Pacific. "Those bottom-up ones work a lot better than top-down ones; they have better compliance and work well long-term," Dr. Worm said. "Now that we are reaching a global limit, people are asking how can we fix the problem, and they are rediscovering that the old methods really work. It's very significant."

By: Christopher Pala

Source: The New York Times

April 17, 2007

BBC Documentary

BBC World presents "Blast," an Earth Report documentary that chronicles the ongoing battle between blast fishers in the Philippines and the brave individuals risking their lives to stop them.

Using homemade explosives to kill fish may provide an easy answer for poverty-stricken fishermen, but the rich biodiversity of the Visayan Sea, as well as future sources of food for the people of the Philippines, are quickly being depleted because of their use.

In 2004, after recognizing that declaring blast fishing illegal was not enough to deter fishermen, concerned conservationist and local government official Jo Jo de la Victoria teamed up with INECE member and fellow Filipino Tony Oposa to form the Visayan Sea Squadron. Their mission was to patrol the Visayan sea for blast fishermen and to educate Filipinos on the importance of sustainable fishing practices.

The success of the Visayan Sea Squadron in protecting the sea angered many in the fishing community. In April of 2006, involvement in the blast fishing project proved fatal for Jo Jo. He was shot and killed by a hired assassin.

"Jo Jo de la Victoria's murder shocked and saddened all of us," said Durwood Zaelke, Director of the INECE Secretariat. "But his heroism, and Tony Oposa's, as evident through this poignant film, continue to inspire those around the world fighting similar battles." Zaelke added, "This is the first film in the INECE Eco-Enforcers series. The series will

show the hidden heroes of environmental compliance and enforcement, and their courageous efforts to protect our environment and build the rule of law."

"Blast" was shot on location in the Visayan Sea, the Philippines, and follows the story of these two remarkable local environmental activists as they fight to rid their seas of the blast fishing scourge.

Earth Report is produced by the Television Trust for the Environment and is BBC World's premier environmental series viewed by millions worldwide. "Blast" was written and directed by filmmaker Douglas Varchol and sponsored in part by the International Network for Environmental Compliance and Enforcement and the Institute for Governance & Sustainable Development (IGSD).

The film will be broadcast on BBC World Saturday, 19 May at 9:30 am (5:30 PM, Philippine Time) and 16:30 GMT, and on Sunday, 20 May at 2:30, 13:30, and 20:30. Please check your BBC World station for local screenings.

Environmental compliance and enforcement are the foundation of the rule of law, good governance, and sustainable development.

<http://www.inece.org>

Earth Report "Blast" Airing on BBC World May 19-20, 2007 For your local time see:

<http://www.bbcworld.com/Pages/Schedules.aspx>

2008 is the International Year of the Reef (IYOR)

The International Coral Reef Initiative (ICRI), at its General Meeting in Cozumel (Mexico) designated 2008 as the International Year of the Reef (IYOR 2008). IYOR 2008 is an international effort to raise awareness and understanding about coral reefs and the threats they face, and to support related conservation, research, and management efforts.

ICRI is a partnership of nations and organizations seeking to implement the recommendations of the Rio Earth Summit (Agenda 21, Ch.17) and other international conventions and agreements for the benefit of coral reefs and associated ecosystems, such as mangroves and sea grasses. ICRI was established

in 1994 to halt and reverse the global degradation of these important ecosystems.

The first IYOR was declared and implemented in 1997 to help increase awareness about the increasing threat to and loss of coral reefs among the general public. IYOR 97 made great strides towards this mission. However, despite this success, ten years later we still face an urgent need to educate the public around the world about ongoing efforts to conserve and manage these critical ecosystems, about actions they can take to help with these efforts, and about how we can all better appreciate the value of coral reefs to humanity.

The ICRI partners are committed to ensuring that IYOR 2008 is a success, and activities are already underway in many countries. For more information, visit www.iyor.org or contact info@iyor.org.

ICRAN Newsletter

We are pleased to present the sixth ICRAN Newsletter, detailing ICRAN news from its network of projects, partners and events covering coral reef issues held over the last year. Click on the link below to view or download a copy (pdf, 13.3MB):

<http://www.icran.org/newsletter/6.pdf>

If anyone experiences any problems downloading or would prefer a hard copy, please forward your details and Terri Young will be happy to send it.

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Meetings & Conferences

33rd Scientific Meeting of the Association of Marine Laboratories of the Caribbean St. Thomas, June 4-8, 2007

Hosted by Rick Nemeth and the University of the Virgin Islands in St. Thomas. The meeting will take place between June 4 and June 8, 2007. Dr Rita Colwell, former director of the U.S. National Science Foundation is scheduled to be our Keynote Speaker.

5th International Conference on Marine Pollution and Ecotoxicology and 15th International Conference on Environmental Bioindicators

Hong Kong, June 4 – 9 2007

Organized by the City University of Hong Kong and the International Society of Environmental Bioindicators (ISEBI). It will follow the 5th International Conference on Marine Pollution and Ecotoxicology, being held from 4 to 6 June 2007. A package (reduced) rate will be available for those who register for both conferences. The ICMPE is expected to attract some 200 participants. Interested parties can contact: bhconf@cityu.edu.hk.

11th International Congress on Invertebrate Reproduction and Development (ICIRD) Smithsonian Tropical Research Institute, August 6-9 2007 Dr. R. Collin, Organizer

Symposium Topics – Organizers

Sexual Selection in Invertebrates – J. Leonard and J. Christy (jleonard@ucsc.edu)

Reproductive Toxicology of Invertebrates – G. Caldwell and M. Bentley (M.G.Bentley@newcastle.ac.uk)

Genetics and Reproduction of Invertebrates – Fabiola Arcos Ortega (farcos04@cibnor.mx)

Environmental Signals Controlling Invertebrate Reproduction – Gordon Watson (gordon.watson@port.ac.uk)

Parasitic Manipulation of Reproduction of and by
Invertebrates – Jack Werren
(werr@mail.rochester.edu) and Marie-Jeanne Perrot-
Minnot

For more information please contact:

<http://striweb.si.edu/icird>

New Books

Reef Restoration: Concepts and Guidelines

Simple advice on coral reef restoration for coastal managers, decision makers, technical advisors and others who may be involved in community-based reef restoration efforts. If you are involved in reef restoration it is important to be aware that there is still much uncertainty in the science underpinning restoration, not least due to the great complexity of reef ecosystems. Through the Coral Reef Targeted Research and Capacity Building for Management (CRTR) Program, much scientific research is currently underway world-wide to address these knowledge gaps, and improve our understanding of what reef restoration interventions can and cannot achieve. Despite these uncertainties, there are many useful lessons to be learned from previous work. *Reef Restoration: Concepts and Guidelines* seeks to summarize such lessons in a succinct form for practitioners to help identify what works, what doesn't and what new techniques are on the horizon to enable goals and expectations to be set accordingly.

For more information contact:

Dr. Alasdair Edwards, Chair, CRTR
Restoration and Remediation Working Group on
a.j.edwards@newcastle.ac.uk

Courses

The Bermuda Institute of Ocean Sciences (BIOS) offers a 3 week intensive summer coral reef ecology course July 2007

The Bermuda Institute of Ocean Sciences (BIOS- formerly the Bermuda Biological Station for Research) is pleased to announce a Coral Reef Ecology field course offering in Bermuda in July 2007. The official deadline has passed but places, scholarship and financial aid are still available. Applicants and scholarships are assessed from now until the end of April on a case-by-case basis once a completed application has been received so promptly visit our website (link below) for application details. More information is also available in the email below.

Course summary

The Coral Reef Ecology course at the Bermuda Institute of Ocean Sciences (BIOS) is comprised of lectures, required reading, laboratory exercises and field surveys. The lectures cover a broad range of relevant topics in coral reef ecology that are supplemented by readings from the primary literature with attention given to active areas of research. The course is divided into 20 lectures (1 to 1.25 hours long), 9 field trips (4 hours each), 6 lab sessions (4-5 hours each), 6 precepts (1 hour each), 3 or 4 seminars by BIOS scientists on current research, a take home written exam, and an afternoon of oral presentations. An additional 10-15 hours is taken to complete the working-group analyses and presentations.

The lab work is focused on training in practical techniques:

- separation of coral tissue from skeleton
- fractionation by centrifugation
- enumeration of zooxanthellae with a haemocytometer
- chlorophyll analysis
- determination of coral surface area
- coral growth determination using a buoyant weighing technique

Various field techniques and subsequent lab analyses are used repetitively at different sites so that each student has the opportunity to become familiar with the following methods:

• video-taping of reef transects to assess community structure • quantification of reef fish community structure using a visual census method • quadrat sampling of reef algae, sorting, identification and dry weight biomass estimation • quadrat sampling and measurement of juvenile corals to construct size/frequency curves • quantification of parrotfish and surgeonfish feeding rates and social interactions

The laboratory and field work are synthesized as final oral presentations that are based on a typical format for presenting scientific results to an audience and so are designed to provide experience in communicating science.

Course dates

8-28 July 2007

Course instructor

Dr. Samantha de Putron

Qualifications

Open to undergraduates and graduate students with strong academic credentials. The course is open only to SCUBA divers.

Course fee

\$3,850 (tuition, room and board)

Scholarship and financial aid available

Additional details and application procedure available at:

<http://www.bbsr.edu/Education/summercourses/cre/cre.html>

For further information please contact: Jo Duyzer, Education co-ordinator, at Jo.Duyzer@bbsr.edu

Diseases of Corals and Other Organisms

Mote Marine Laboratory's Tropical Research Laboratory, on Summerland Key, Florida has extended the deadline for receipts of application for the course "Diseases of Corals and other organisms" until May 1, 2007.

Questions about the courses should be directed to Dr. Dan Gallagher, Florida Keys Education director (dgallagher@mote.org) and about the diving program to Erich Bartels, Staff Scientist, Center for Coral Reef Research (ebartels@mote.org). Further information and an application form are at this Web site:

http://isurus.mote.org/Keys/disease_workshop.phtml

The Biology of Corals:

Developing a Fundamental Understanding of the Coral Stress Response

Each year at the Hawaii Institute of Marine Biology, a summer course in a specialized area of marine research is made possible through the generous support of the Edwin W. Pauley Foundation. The 2007 course will focus on developing a better understanding of the stress responses in reef corals and will be co-funded by the World Bank fund Coral Reef Targeted Research and Capacity Building Project. In conducting the course we hope to improve our basic understanding of coral biology by providing cross-disciplinary instruction to outstanding students through research, seminars and informal discussion with internationally recognized coral biologists. Specifically, we will examine the impacts of temperature disturbances and land-based pollutants on corals both in the field and through a series of controlled laboratory manipulations. Coral biology will be explored using a suite of measure that cross scales and include species abundance, morphology and colony size (field survey techniques), colony physiology (pulse amplitude modulated fluorometry and respirometry), endosymbiont diversity, (molecular genetics), metabolite exchange (high pressure liquid chromatography and mass spectrometry), and activities of functional genes in both the coral hosts and their endosymbionts (comparative transcriptomics using microarrays and quantitative PCR).

Dates

June 2 to July 15, 2007

Participating Faculty

Dr. John Bythell, Dr. Sophie Dove, Professor William Fitt, Dr. Laetitia Hedouin, Dr. Ruth Gates, Professor Ove Hoegh-Guldberg, Dr. Stephen Karl, Dr Bill Leggat, Dr. Michael Lesser, Dr. Teresa Lewis, Dr. David Obura, Dr. Xavier Pochon, Dr. Roberto Iglesias-Prieto, Dr. Michael Stat, Dr. Misaki Takabayashi, Dr. Robert Toonen, Dr. Hank Trapido-Rosenthal, Dr. Florence Thomas, Dr. Rebecca Vega Thurber, Dr. Virginia Weis.

Facilities

HIMB is located on Moku o L'oe (Coconut Island) in Kaneohe Bay, Oahu and is a fully equipped marine

laboratory located 20 minutes from an international airport, 30 minutes from the main University of Hawaii campus and 100 feet from a living coral reef. For details see <http://www.hawaii.edu/HIMB/>.

Housing and Fees

The summer program will cover return airfare and accommodation costs. Medical insurance coverage is required and can be obtained locally at UH for those not covered by their own policies.

To Apply

Please send or email 1) your CV, 2) a statement outlining how the program will influence your career development and 3) the contact details for two professional references to Dr. Ruth D. Gates, Hawaii Institute of Marine Biology, P.O. Box 1346, Kaneohe, HI 96744:
email: rgates@hawaii.edu. Closing date for applications is April 1, 2007.

Change of Address

MOVING? To ensure that you continue to receive *Caribbean Marine Science*, notification of upcoming AMLC meetings and other AMLC information, please fill out the following change of address form and mail to:

Dr. David Wilson
The School for Field Studies
10 Federal Street, Suite 24
Salem, MA 01970-3876
USA
dwilson@fieldstudies.org

Name & Title

Institution/Association

Address _____

Telephone _____

FAX _____

E-mail _____

Scientific Interests _____

Dues

Individual membership dues for 2007 are \$25.00 due June 2007. If you are attending the St. Thomas meeting, your two-year membership dues for 2007-08 and 2008-2009 are included in the registration fee. If you are not planning to attend the meeting, please do send your dues as discussed here. You may also help AMLC with a donation membership contribution if you wish; the schedule for these is presented below. Student dues are still \$5 per year.

The AMLC can accept credit card payments (Visa, MasterCard or American Express) for AMLC dues. A 5% service charge will be added to credit card payments. Checks must be in U.S. dollars, from U.S. banks (or a U.S. dollars bank draft), made out to "AMLC", and sent to Laurie Richardson.

Name & Title _____

Institution/Association _____

New Address _____

Telephone _____

FAX _____

E-mail _____

Scientific interests _____

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AMLC Background & Goals

The Association of Marine Laboratories of the Caribbean (AMLC) was founded in 1956 by marine researchers with interests in the marine science of the tropical Atlantic and Caribbean. Founded primarily as a scientific organization, the strength of the AMLC lies in the diversity of its member laboratories and the extensive expertise of its membership. Institutional, individual scientist and student memberships are available.

Annual AMLC meetings are hosted by member laboratories which are actively conducting marine research in the Caribbean. The host laboratory arranges for facilities for research presentations, copies of the presented abstracts (the proceedings) and accommodations for participants. The AMLC has no designated official language so researchers are free to make their presentations in their native language.

Caribbean Marine Science, published in English and Spanish, is the biannual newsletter of the AMLC and informs members of AMLC activities, pertinent events, and relevant research.

The purpose of the AMLC is to advance common interest in the marine sciences by:

- a. Assisting and initiating cooperative research and education programs
- b. Providing for a for exchange of scientific and technical information
- c. Fostering personal and official relations among members
- d. Publishing the proceedings of scientific meetings and a newsletter

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time, to the newsletter. Relevant news items include, but are not limited to: new facilities, faculty/staff changes, positions available, research programs and initiatives, publications of general interest, awards, visiting scientist opportunities, and education programs. Submitted items should be sent to the AMLC newsletter office by the end of February for inclusion in the Spring issue, and by the end of September for the Fall issue.

Please send your information and comments to:

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Contributions to the AMLC Newsletter:

All members of the AMLC (individual and laboratory) are encouraged to send relevant news items at any

Program for the 33rd Scientific Meeting of the Association of Marine Laboratories of the Caribbean

Monday, June 4, 2007		
8:00 AM REGISTRATION		
Time	Presenter	Title
9:00 AM	R. Nemeth	Welcome address by AMLC President
9:05 AM	L. Ragster	Welcome address by UVI President
9:10 AM	A. Barnes	Welcome address by DPNR Assistant Commissioner
9:20 AM	S. LeGore	Welcome & Introduction of Dr. Colwell
9:30 AM	Dr. Rita Colwell	Keynote Address: "Marine Biotechnology in the 21 st Century"
10:00 AM	COFFEE BREAK	
ECOLOGY		
Coral Growth, Calcification, Morphology		
10:30AM	P. Miloslavich - chair	Reproductive biology of <i>Petalocochus cf. varians</i> (Caenogastropoda, Vermetidae) from the Venezuelan Caribbean
10:45 AM	I.M. Sandeman	Why coral calcification rates are higher in the light
11:00 AM	P. Spiniello	Carbon supply and demand on a coastal planktonic system, Morrocoy National Park, Venezuela
11:15 AM	A.T. Yñiguez	What's in a form? Deciphering messages from the morphologies and growth patterns of <i>Halimeda</i> and <i>Dictyota</i>
11:30 AM	E.H. Gladfelter	Skeletal growth in <i>Acropora palmata</i> : its role in past competitive success and in future recovery
11:45 AM	M. Johnson	Using reef resilience principles to improve staghorn coral (<i>Acropora cervicornis</i>) restoration in the Florida Keys
12:00 PM	LUNCH	

Monday, June 4, 2007

RESOURCE MANAGEMENT

Restoration

1:15 PM	V.H. Garrison	Using naturally occurring fragments of elkhorn, staghorn and finger coral for reef restoration in the Caribbean
1:30 PM	J. Schittone	Monitoring the recovery of a coral reef following restoration after a large vessel grounding
1:45 PM	A. Thompson	El rol de las alianzas para la conservacion de los arrecifes coralinos – el caso de la alianza para el arrecife MesoAmericano de ICRAN (ICRAN-MAR)
2:00 PM	R. Garcia	Large-scale coral bleaching response plan for South Florida Reef Tract

2:15 PM **COFFEE BREAK**

ECOLOGY

Ecology & Management of Deep (30-100m) Mesophotic Coral Reef Ecosystems

2:45 PM	R. Ginsburg - chair	Mesophotic coral reefs are the frontier of reef exploration and research
3:00 PM	P. Yoshioka	Ecology, integrity & status of deep Caribbean coral reefs
3:15 PM	R. Ginsburg	Distribution of mesophotic deep water reef species in the Bahamas
3:30 PM	J. Rooney	Deep scleractinian coral reefs and multiple coral optima in the Hawaiian archipelago
3:45 PM	N. SantoDomingo	Azooxanthellate coral communities of Colombian Caribbean
4:00 PM	C. Menza	A deep reef in deep trouble
4:15 PM	J.R. Garcia-Sais	Baseline characterization of the marine community associated with Agelas Reef, Isla Desecheo, Puerto Rico

4:30 PM **ADJOURN FOR DAY**

6:00 PM **COCKTAIL RECEPTION AND POSTER PRESENTATIONS**

Tuesday, June 5, 2007

8:00 AM REGISTRATION		
Time	Presenter	Title
8:15 AM	S. LeGore	Introduction of Dr. Venter
8:30 AM	Dr. Craig Venter	FEATURED SPEAKER
CONNECTIVITY Genetics and Biodiversity		
9:15 AM	J.L. Stake - chair	Anonymous sequence markers for species-level phylogenetic analysis of the coral genus <i>Porites</i> (Scleractinia, Poritidae)
9:30 AM	E. Salas #	Connectivity and gene flow in <i>Stegastes partitus</i> (Perciformes: Pomacentridae) populations along Costa Rica and Panamá
9:45 AM	J. Hoffmann #	Recent thecideide brachiopods (Thecideoidea) in the Caribbean region – an unrecognized diversity
10:00 AM	D. Ruiz-Ramos #	Patterns of genetic polymorphism in the fire coral <i>Millepora</i>
10:15 AM	COFFEE BREAK	
CONNECTIVITY Genetics and Biodiversity		
10:45 AM	P. Sammarco	Distribution, abundance, and genetic affinities of scleractinian corals throughout the northern Gulf of Mexico: the big picture
11:00 AM	A. Domingo	The missing link in the population biology of reef fishes: molecular ecology of larval dispersal in gobies
11:15 AM	A. Zubillaga #	A novel application of polyclonal antibodies to <i>in situ</i> detection of the larvae of <i>Acropora palmata</i> (Order: Scleractinia, Family: Acroporidae)
11:30 AM	J. García	Genetic variability of <i>Acropora cervicornis</i> and <i>A. palmata</i> in Puerto Rico
11:45 AM	LUNCH	

Tuesday, June 5, 2007

RESOURCE MANAGEMENT**Addressing Management Needs at Ecosystem Level**

1:00 PM	B. Devine - chair	Using GIS/GPS to characterize watersheds, evaluate land-based threats and map endangered marine populations
1:15 PM	E. Klein	The use of ecosystem-based models to select areas for the conservation of marine biodiversity in face of offshore gas exploitation in Venezuela
1:30 PM	M.E. Monaco	Characterization and assessment of the St. John, USVI mid-shelf area to support MPA management
1:45 PM	J.W. McManus	Managing coral reefs under changing stresses: information, simulation and interdisciplinary research
2:00 PM	M.A. Phillips #	Analysis of factors influencing southeast Florida coral reef community composition
2:15 PM	V.K. Kosmynin	Evaluation of methods to enhance reef restoration
2:30 PM	J.G. Foster	Acoustic surveys for discrimination of benthic habitats and biomass
2:45 PM	A. Nayegandhi	High-resolution geo-located imagery of benthic communities using the along track reef imaging system

COFFEE BREAK**RESOURCE MANAGEMENT****Marine Protected Areas**

3:30 PM	D. Aldana - chair	Mexican marine parks for restoring the Queen Conch <i>Strombus gigas</i>
3:45 PM	E. Kadison	Using hydro-acoustic tagging to determine the minimum size of fishery closures for protecting grouper spawning aggregations on the USVI
4:00 PM	P.M. Yoshioka	Fish mesograzers as ecological gatekeepers of coral reef communities
4:15 PM	C.E. Morrall	Marine protected area development in Grenada, West Indies
4:30 PM	A.R. Harborne	Reserve effects versus natural variation in coral reef communities

ADJOURN FOR DAY**COCKTAIL RECEPTION AND POSTER PRESENTATIONS**

Wednesday, June 6, 2007		
8:00 AM REGISTRATION		
RESOURCE MANAGMENT Assessment and Monitoring		
8:00 AM	T.J. Goreau - chair	Turks & Caicos Islands coral reef assessment methods: intensive vs. extensive field methods with non-parametric analysis
8:15 AM	T.J. Goreau	Turks and Caicos islands coral reef assessment results: Ecological and environmental interactions
8:30 AM	D. Gulko	CSI on coral reefs: developing standards for underwater injury investigation
8:45 AM	A. Rodriguez-Ramírez	Monitoreo de arrecifes coralinos en América sur tropical: Logros lecciones y perspectivas después de 8 años de trabajo cooperativo
9:00 AM	D.G. Zawada	A new towed platform for surveying benthic habitats
9:15 AM	R.N. Ginsburg	Progress in rapid reef assessments for routine censuses and acute ecological calamities
9:30 AM	S. LeGore	Rapid population assessment of marine ornamental fisheries target species in Western Puerto Rico
9:45 AM	W. Toller	The importance of herbivorous reef fishes (Scaridae and Acanthuridae) to the small-scale commercial fishery of St. Croix, U.S. Virgin Islands
10:00 AM	COFFEE BREAK	
GLOBAL AND REGIONAL ISSUES Land-Sea Interactions		
10:30AM	H. Briceño -chair	Nutrient dynamics along a salinity gradient in the mangrove forest, Florida coastal Everglades
10:45 AM	J.N. Boyer	Relationship between water management and cyanobacterial blooms in Florida Bay, USA
11:00 AM	J. Blondeau	Monitoring terrigenous sedimentation rates on U.S. V. I. reefs: from near-shore to offshore
11:15 AM	R.H. Pierce	Assessing levels and effects of organic contaminants on marine mammals, especially Antillean Manatees, of the Wider Caribbean
11:30 AM	N.R. Buitrago #	Erosión costera en el Caribe Colombiano. Ejemplos: departamentos de Córdoba y La Guajira
11:45 AM	A. McCammon	Marine debris removal and monitoring effort at the Cas Cay Mangrove Lagoon Marine Reserve and Wildlife Sanctuary, St. Thomas, USVI
12:00 PM	LUNCH	

Wednesday, June 6, 2007

GLOBAL & REGIONAL ISSUES
Remote Sensing and Physical Oceanography

1:15 PM	J.C. Brock - chair	Holocene sea level rise and the patch reef population in the northern Florida reef tract
1:30 PM	S. J. Pittman	Predictive mapping of fish species richness across shallow-water seascapes in the Caribbean
1:45 PM	R. Jaffe	Applications of optical properties determinations in surface waters for the assessment of dissolved organic matter in estuaries
2:00 PM	R.A. Watlington	Improved understanding of oceanic processes through an integrated Caribbean coastal ocean observing system
2:15 PM	R. Hays	An analysis of satellite-derived sea surface temperatures from Caribbean and Atlantic coral reef sites, 1982-2003
2:30 PM	D.J. Smith	Near-shore sea temperatures for St. Thomas
2:45 PM	N. Idrisi	Time series (2005-2007) of coastal currents on the shelf south of St. Thomas, USVI
3:00 PM	M. Vega-Rodriguez	Red mangrove litterfall dynamics and remote sensing of leaf area index in southwestern Puerto Rico
3:15 PM	COFFEE BREAK	

ECOLOGY
General

3:45 PM	K. Lewis - chair	Abundance, distribution, and condition of the foraging populations of Green Sea Turtles (<i>Chelonia mydas</i>) around St. Croix and St. Thomas, USVI
4:00 PM	N.E. Chadwick	Anemone shrimp symbionts of Giant Sea Anemones on coral reefs: comparisons between the Red Sea and the Caribbean Sea
4:15 PM	S. Ratchford	Prevention of burial to host corkscrew anemones <i>Bartholomea annulata</i> by symbiotic snapping shrimps <i>Alpheus armatus</i>
4:30 PM	D. Aldana	Different reproductive strategies of American Oyster <i>Crassostrea virginica</i> in the Gulf of Mexico
4:45 PM	P. Susan #	Macrofauna bentónica asociada a bancos ostrícolas en las Lagunas Cost? Carmen, Machona y Mecoacán, Tabasco, México
5:00 PM	D. Banjoo	Assessment of biota quality in the Gulf of Paria, Trinidad and Tobago

ADJOURN FOR DAY

Thursday, June 7, 2007

8:00 AM REGISTRATION

ECOLOGY
Coral Disease, Predation, Damage I

8:15 AM	L.L. Richardson - chair	Toxin production and virulence factors in Black Band Disease on reefs of the Northern Caribbean
8:30 AM	K. Flynn #	Prevalence, distribution and virulence of Aspergillosis in <i>Gorgonia ventalina</i> (Gorgonacea: Gorgoniidae) populations in La Parguera, Puerto Rico
8:45 AM	J. Lentz #	Designing a methodology for the identification of significant coral disease clusters
9:00 AM	J.D. Voss	Coral disease dynamics and nutrient availability on reefs of the Northern Florida Keys and Lee Stocking Island, Bahamas
9:15 AM	M. Brandt	Coral disease and bleaching relationships in South Florida during the 2005-2006 bleaching event
9:30 AM	J. Miller	Coral bleaching and disease combine to cause catastrophic mortality on reefs in U.S.V.I.
9:45 AM	D. Williams	Effects of multiple hurricanes on <i>Acropora palmata</i> (Order: Scleractinia, Family: Acroporidae) in the Florida Keys (U.S.A.)

COFFEE BREAK

ECOLOGY
Coral Bleaching

10:30AM	T.B. Smith - chair	Searching for a refuge: impacts of the 2005 mass coral bleaching event on coral reefs of the U.S. Virgin Islands
10:45 AM	K. Woody	An assessment of the October 2005 coral bleaching event in and around Buck Island Reef National Monument, St. Croix, U.S. Virgin Islands
11:00 AM	S. Steiner	The impact of the 2005 bleaching episode on the stony corals of Dominica
11:15 AM	D.H. Green #	Coral recruitment along the southern coast of St. John, U.S. Virgin Islands: the influence of temperature in mediating spatio-temporal variation
11:30 AM	P.M.H. Gayle	Coral mortality and recovery on Jamaica's north shore reefs following the 2005 Caribbean Region bleaching event
11:45 AM	M.T. Schärer #	Prevalence of bleaching on scleractinian corals of Mona Island, Puerto Rico

LUNCH

Thursday, June 7, 2007

ECOLOGY
Coral Disease, Predation, Damage II

1:30 PM	E. Weil - chair	Status of coral and octocoral diseases / syndromes in Puerto Rico in 2006: preliminary results and general perspectives
1:45 PM	I.B. McRae - Kenny #	The incidence and prevalence of scleractinian coral diseases along the south coast of Jamaica
2:00 PM	J.L. Myers #	Culture, identification, DGGE analysis, and physiology of cyanobacteria associated with Black Band Disease of corals
2:15 PM	N.J. Quinn	The recent collapse of a rapid phase-shift reversal on a Jamaican coral reef
2:30 PM	T. Spitzack	Effects of bleaching and disease on elkhorn coral, <i>Acropora palmata</i> , in St. John, U.S. Virgin Islands
2:45 PM	COFFEE BREAK	
3:15 PM	K.B. Ritchie - chair	In search of mutualistic coral-associated bacteria
3:30 PM	L. Kaczmarzky #	Sewage impact increases Black Band disease prevalence and might alter Black Band microbial community composition on reefs of St. Croix
3:45 PM	E. Weil	Local and geographic variability of the 2005 mass bleaching event in the wider Caribbean
4:00 PM	A.M. Szmant	New ciliate discovered that devours newly settled coral polyps
4:15 PM	D. Bone	Respuesta de los capiteldos (Annelida: Polychaeta) a variaciones de salinidad, Golfete de Cuare, Venezuela
4:30 PM	ADJOURN FOR DAY	
6:00 PM	AWARDS DINNER – CORAL WORLD MARINE PARK	

Friday, June 8, 2007

8:00 AM REGISTRATION		
Time	Presenter	Title
ECOLOGY Reef Fish Ecology		
8:30 AM	M.C. Paddock - chair	Assessing change on coral reefs: long-term trends in Caribbean reef fish abundance
8:45 AM	C. Rabascall	Abundancia y riqueza específica de la ictiofauna presente en cuatro estaciones del extreme north de la Peninsula de Araya, Estado Sucre, Venezuela
9:00 AM	D. Nemeth	Among-site and between-species differences in monogenean parasite (Monopisthocotylea: Capsalidae) loads in two sympatric surgeon fishes (Perciformes: Acanthuridae) in the Virgin Islands
9:15 AM	C. Bastidas	Oceanic and coastal reefs in Venezuela 2003-2006: larger differences among sites than between shelf positions
9:30 AM	S. Frias-Torres	Behavior of juvenile goliath grouper, <i>Epinephelus itajara</i> , and its relevance for conservation
9:45 AM	A. Fariña	Variación Estacional De La Comunidad De Peces Asociados A Un Arrecife Rocos Coralino Del Bajo Las Caracas, Estado Sucre, Venezuela
10:00 AM	COFFEE BREAK	
CONNECTIVITY Recruitment / Habitat		
10:30 AM	I. Nagelkerken - chair	What makes mangroves attractive fish habitat – their shallow depth. Cross-shelf location, or presence of structure
10:45 AM	K. Neely	Patterns of fish colonization on artificial reefs varying in live coral cover
11:00 AM	R.S. Nemeth	Identification of essential habitats for juvenile grouper in the U.S. Virgin Islands
11:15 AM	I. Nagelkerken	Utilization of shallow-water habitats by juvenile coral reef fishes in Bermuda
11:30 AM	A.M. Szmant	Settlement and post-settlement of the Caribbean scleractinian corals <i>Montastrea faveolata</i> and <i>Acropora palmata</i>
11:45 AM	S.M. Williams	Recruitment dynamics of <i>Diadema antillarum</i> in La Parguera, Puerto Rico
12:00 PM	LUNCH	

Friday, June 8, 2007

**SPECIAL SESSION
Census of Marine Life**

1:15 PM	P. Miloslavich - chair	The census of marine life in the Caribbean: a biodiversity program
1:30 PM	E. Weil	Coral reef biodiversity in the wider Caribbean – new records of corals and the goals of the Census of Marine Life
1:45 PM	T.C. Shirley	Bulletin 89n Redux: Biodiversity of the Gulf of Mexico
2:00 PM	A. Antczak	A global perspective of human – mollusk interaction through history: the HMID Project
2:15 PM	A. Osorno	Implementación del protocolo NaGISA en praderas de pastos marinos (<i>Thalassia testudinum</i>) del Caribe Colombiano durante los años 2006 y 2007
2:30 PM	COFFEE BREAK	
3:00 PM	L.F. Artigas	Towards a Latin American and Caribbean international census of marine microbes: overview of some research directions
3:15 PM	M. M. Antczak	Insights into the Queen Conch (<i>Strombus gigas</i>) symbolism in the Caribbean: the claim for the contextual approach
3:30 PM	A. Gracia	Main results in the integrations of the marine biodiversity information system (SIBM) to OBIS
3:45 PM	J.J. Cruz-Motta	Natural geography in shores areas: the Venezuelan experience
4:00 PM	STUDENT ACHIEVEMENT AWARDS FOR BEST PRESENTATIONS	
4:30 PM	ADJOURN MEETING	

Poster Program

33rd Scientific Meeting of the Association of Marine Laboratories of the Caribbean

ECOLOGY		
1	V. Acevedo-Soto	Effects of sedimentation on the distribution of the reef zoanthid <i>Palythoa caribaeorum</i>
2		
3	J.M. Calnan	Coral reefs in the US Virgin Islands: Trends and patterns of health across stress gradients
4	R.L. González-Marrero #	Role of staghorn coral <i>Acropora cervicornis</i> on coral reef fish recruitment
5	A.R. Harborne	Modeling the beta diversity of coral reefs
6	A. Humanes #	What does coral population size structure tell us?
7	A. López	Trophic structure of the fish community associated to seagrass meadow in Los Roques Archipelago National Park, Venezuela
8	M.Q. Lucas #	Molecular genetic analysis of three species of Caribbean <i>Porites porites</i> (Scleractinina: Poritidae)
9	B. Márquez	Biomasa y estructura de la comunidad zooplanctónica en dos estaciones de la Bahía de Mochima, durante 1998
10	B. Márquez	Abundancia de crustáceos decapodos asociados a las raíces sumergidas de <i>Rhizophora mangle</i> en la laguna de bocaripo, estado sucre, Venezuela
11	J. Mayre	Abundancia y riqueza de la macrofauna asociada a la fanerógama <i>Thalassia testudinum</i> (Bank ex König, 1805) en la localidad de los cachicatos, golfo de cariacó, Venezuela
12	E.L. McLean #	Patterns of associations and interactions among sponges and gorgonians
13	M. Medina	Variación estacional de la ictiofauna asociada a una playa de la Isla Caracas Oeste, Parque Nacional Mochima, Estado Sucre, Venezuela
14	A.E. Mercado-Molina #	Relation between water motion and size-specific survivorships of the demosponge <i>Amphimedon compressa</i>
15	M. Nelsen #	Modeling of population dynamics of the corkscrew anemone <i>Bartholomea annulata</i> on Caribbean coral reefs
16	E. Parish #	Macroalgal substrate affects movement of the long spined sea urchin <i>Diadema antillarum</i>
17	S.M. Pauls	Spatial and temporal variability in the prevalence of black band disease affecting the coral <i>Diploria strigosa</i> at Mochima Bay, Venezuela

Poster Program

ECOLOGY		
18	J. Perez-Benitez	Interacciones competitivas directas en tres zonas del arrecife dos mosguises sur, P.N. Archipiélago Los Roques, Venezuela
19	S. Piontek	Preliminary list of fishes from the Smithsonian Tropical Research Institute expedition to Curacao with comparison to previously formulated lists
20	S. Rivero	Characterizing the deep zooxanthellate coral reefs of Puerto Rico with the seabed autonomous underwater vehicle
21	J. Rodríguez	Pequeños peces cripticos de arrecifes coralinos y areas adyacentes en el Parque Nacional Morrocoy y Refugio de Fauna Silvestre de Cuare, Venezuela
22	S. Rodriguez	Epidemiological dynamics of <i>Halofolliculina</i> sp. infections on <i>Acropora palmata</i> populations from Los Roques National Park, Venezuela
23	S. Romano	Multilocus phylogenetic analysis of Caribbean <i>Porites</i> (Scleractinia: Poritidae)
24	P. Rothenberger	Differential Diagnosis: The importance of multidisciplinary techniques in the investigation of the coral disease white plague type II
25	J.R. Sais	Baseline characterization of the marine community associated with Agelas Reef, Isla Desecheo, Puerto Rico
26	M.I. Segnini	Evaluación citotóxica del extracto metanólico de <i>Fagara monophylla</i> en <i>Cyprinodon dearborni</i> (Ciprinodontiformes: Cyprinodontidae)
27	B.M. Soler #	Comparisons between nutrient concentration and dinoflagellate population density at two bioluminescent bays in Puerto Rico
28	A.M. Szmant	Settlement and post-settlement survivorship of the Caribbean scleractinian corals, <i>Montastraea faveolata</i> and <i>Acropora palmata</i>
29	E. Villamizar	2005 Bleaching monitoring in the Parque Nacional Archipelago de Los Roques, Southern Caribbean, Venezuela
30	L. Walters	Foraging by the long-spined sea urchin <i>Diadema antillarum</i> : Are unconsumed fragments perpetuating algal dominance on coral reefs?
31	E. Weil	Sexual reproduction in the Caribbean coral genus <i>Mycetophyllia</i> in La Parguera, Puerto Rico
32	A. Yranzo #	Taxonomy, depth distribution and coral overgrowth of encrusting octocorals in a coral reefs of the Parque Nacional Acrchipiélago de Los Rogues, Venezuela

Poster Program

Connectivity		
33	S.R. Ketcham	Investigation of genetic connectivity of populations of <i>Diadema antillarum</i> in marine habitats of St. Croix and Puerto Rico
34	B. Todd #	Nutrient distribution across the insular shelf of Puerto Rico: assessment by algal tissue nitrogen

Resource Management		
35	J.A. Alfonso	Biomonitoring of potentially toxic metals in Venezuela coastal waters
36	U. Anlauf Toller	The Southgate coastal reserve - wildlife habitat and gateway to the St. Croix east end marine park
37	K.A. Coates	Conservation and management of seagrass habitat in Bermuda
38	V. Coehlo	Status of the reefs in Little Cayman, Cayman Islands, in 2006
39	B. Garcia #	Distribution of metals in Carenero Estuarine and coastal sediments, Venezuela
40	M. González-Rivero #	Comparative analysis of the previous (1999) and present (2006) conditions of some coral reefs in the national park "Archipiélago de los Roques"
41	S. Manuel	Mapping and monitoring seagrass habitat in Bermuda, year 1: species diversity and distribution
42	E. Tyner	Coral reef Ed-Ventures: a marine environmental education program for schoolchildren in Belize, Central America

Global and Regional Issues		
43	M. Boumedine	Towards finding descriptive patterns and building classification models for early predicting coral reef stress
44	V. Coehlo	Marine debris on Little Cayman coastlines
45	D. Fuentes Figuero #	Biomass coupling between phytoplankton and zooplankton in tropical ocean waters Influenced by the Orinoco river Plume
46	E. Klein	Dynamics of the Southern Caribbean upwelling system derived from remote sensing maps
47	I. Lundgren	Bleaching, and mortality of <i>Acropora palmata</i> at Buck Island reef national monument
48	C. Petrovic	Marine Science Education in the British Virgin Islands
49	C.J. Randall #	Elevated sea surface temperatures reduce survivorship and settlement of larvae of the scleractinian coral, <i>Favia fragum</i>
50	A. Rodríguez-Ramírez	The effects of coral bleaching in the Southern Tropical America: Brazil, Colombia, and Venezuela.
51	E. Tyner	Virgin Islands Marine Advisory Service (VIMAS)