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A NEWSLETTER FROM NOVA SOUTHEASTERN UNIVERSITY'S OCEANOGRAPHIC CENTER

OC Scientists Accompany Greenpeace Expedition in Gulf

On August 16, 2010, two oceanographic center faculty members, **Charles Messing**, Ph.D., and **Jose Lopez**, Ph.D., joined the Greenpeace International vessel, *Arctic Sunrise*, as it began its Gulf of Mexico cruise to study the effects of the BP Deepwater Horizon oil spill. These faculty members were invited onto the former Dutch icebreaker by Oceanographic Center alumnus and Greenpeace USA Oceans campaign leader John Hocevar ('93).

For four days, Messing and Lopez focused on the diverse sponge fauna of the Dry Tortugas, a group of islands and reefs some 70 miles west of Key West, now protected as a National Park. This fortuitous opportunity allowed both faculty members to expand current research projects, as well as explore new areas of interest.

Lopez's lab has been developing the use of sponges as bioindicators of environmental degradation and pollution. Because many sponge species can filter several thousand

liters of seawater per day, they may be effective proxies for water quality. He will carry out detailed microscopic and genetic research on sponge samples that may be affected by microdroplets of oil or toxic dispersants.

Already having obtained a research permit from the National Park Service to collect sponges in the Dry Tortugas, Messing used this opportunity to husband valuable research funding, expand collections of sponges for the interactive online identification guide to South Florida sponges (*www.nova.edu* /*ncri/sofla_sponge_guide*), and identify sponges along an existing Florida Fish and Wildlife Conservation Commission reef transect. He reports finding numerous species that do not appear to occur elsewhere in the Florida Keys.

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Left to right: dive logistics officer Shannon Lo Ricco and OC alumnus John Hocevar ('93) by the Arctic Sunrise



Expedition in Gulf

(continued from page 1)

This cruise also assisted in Ph.D. candidate **Andia Chaves Fonnegra's** dissertation research with Lopez, collecting samples of the excavating sponge, *Cliona delitrix*. This sponge has detrimental effects on reefs because it can kill corals. The Dry Tortugas samples represent an important contribution to the investigation of the reproduction and genetic variation in this sponge across multiple Caribbean populations.

Messing and Lopez will also contribute some samples and results from this cruise to a current National Science Foundation Project—Assembling the Sponge Tree of Life. The goal of the NSF project is to provide a phylogenetic context that will improve the understanding of all aspects of sponge biology. More information about this project can be found at *www.portol.org.*



OC faculty member Charles Messing, Ph.D., diving by the Arctic Sunrise

OC Researchers Receive Oil Spill Grants from FIO

The Oceanographic Center is well represented in an effort to research the impact of the BP oil spill on the Gulf of Mexico. In August 2010, the Florida Institute of Oceanography (FIO) Council selected 27 projects out of the 233 proposals submitted statewide to examine the vast impact of the Deepwater Horizon oil spill on the Gulf of Mexico. Four of these grants involve OC researchers. Funding came from a \$10-million block grant provided by BP.

"Given the magnitude and seriousness of the Deepwater Horizon spill, I'm very pleased that [Oceanographic Center] researchers have had successful proposals funded by the BP block grant," said **Richard E. Dodge**, dean and executive director of NSU's National Coral Reef Institute. "We are making concerted efforts to better understand potential and actual impacts to our economically and biologically valuable marine ecosystems, such that we can be better prepared when spills reoccur."

Oceanographic Center scientists will be working on the following projects:

- Monitoring of the Coastal Pelagic Fish Complex for Assessing DWH-Related Trophic Changes and Contaminant Exposure (David Kerstetter, Ph.D.)
- Baseline and Oil Spill-Impacted Marine Sponge Microbial Communities and Gene Expression Analysis with Metagenomics (Jose Lopez, Ph.D., and Pat Blackwelder, Ph.D.)
- Integrative Biodiversity Assessment of Coral-Sponge Communities of West Florida Shelf—Establishing a Baseline for a Sensitive Ecosystem (James Thomas, Ph.D.)
- Assessing Impacts of Oil Exposure to Deep-Sea Ecosystems of the Gulf of Mexico Using Sharks and Scavengers as Integrative Models (Mahmood Shivji, Ph.D.)

NSU is a member in good standing of FIO, which is a consortium of public and private marine science centers and institutes in Florida that have worked cooperatively for more than four decades on scientific projects in Florida's waters and along its more than 1,200 miles of coastline.

OC Faculty Members and Students Research Remote Reef off Mexico's Yucatan Peninsula

In early September 2010, a group of OC faculty members, research scientists, and students traveled to Arrecife Alacranes (Scorpion Reef), a remote and seldom visited coral reef platform off Mexico's Yucatan Peninsula in the southwestern Gulf of Mexico. Arrecife Alacranes is roughly 27 km long x 16 km wide (~245 sq. km) and has classic windward and leeward reef ecosystems, as well as a shallow inner lagoon dispersed with small patch reefs and flats. The area is part of a multiuse marine protected area, managed by CONANP (Comision Nacional de Areas Naturales Protegidas), and receives very few visitors, especially foreign ones. The expedition started with a meeting in Merida, Mexico,

to discuss logistics and other trip details with park sub-director Yrvin Ramirez. The next morning, **Richard Spieler**, Ph.D.; **David Gilliam** ('99), Ph.D.; and **Brian Walker** ('08), Ph.D.; along with Ph.D. candidate **Kirk Kilfoyle**; M.S. candidate **Mauricio Lopez**, and Ramirez loaded gear and boarded a park patrol boat to begin the 70-mile trip to Alacranes. After pounding across the ocean at high speed for three hours, the lighthouse on the main island was finally in sight.

Arrecife Alacranes consists of five small, coralline/sand islands scattered about the outer leeward side of the lagoon, only one of which is inhabited. The other islands function as seabird nesting colonies, with the surrounding waters supporting large seasonal populations of frigate birds, terns, boobies, gannets, and pelicans. On the main island, in addition to the lighthouse, there is an abandoned lighthouse keeper's office, a small naval attachment, and two rustic bunkhouses for visiting researchers and park personnel. There are no roads, cars, plumbing, or tourists. Personnel must bring all food and supplies in (and out) of the area.

While there, the OC/National Coral Reef Institute team made 11 dives around the system in a variety of reef zones—including the fore reef, spur and groove, reef crest, and lagoonal patch reefs. The overall health of the coral and fish populations was impressive, especially the rare sight of huge schools of midnight, rainbow, and blue parrotfish present on several dives. The fishes there were, for the most part, readily approachable and curious, having seldom seen divers in their territory before. Healthy corals and patch reefs were present, although no large stands of staghorn or elkhorn coral were found.

Scientific research on the vast, relatively remote system has been sparse, but is slowly growing. This reconnaissance trip gathered an overview of the reef's condition, as well as consideration of possible future research opportunities, discussion of future collaborative efforts, and strengthening of ties with local park personnel and officials.



OC faculty and staff members and students with CONANP personnel

Director of Academic Programs' Corner Richard Spieler, Ph.D.

There is a lot going on with NSU OC's academic programs.

Some exciting news is that we will receive the first year of funding for a \$2.8-million, five-year grant from the Department of Education. The award is aimed at increasing Hispanic and other minority students in our graduate program. Although the population of Broward County is about 24 percent Hispanic/Latino, our Hispanic enrollment is only about 5 percent. The DOE grant will be used to reduce this differential. Funding is provided for education and recruitment of students into our programs, as well as for graduate student mentoring and training our faculty members in new approaches and technologies of instruction. Our outstanding graduate programs will become even better. (See full article on page 5.)

I'm happy to report that we remain the leading institution in the United States in graduating master's degree students in marine biology. The NSU OC graduates two to three times as many students as our nearest competitor. We are having a banner year; 68 students enrolled for the first time. This makes the 2010–2011 class the largest on record at the Oceanographic Center. Although this means larger class sizes until additional faculty members are brought on board, it also means we can afford to offer a larger variety of courses, including additional specialty courses. (See article on page 9.)

Our Quality Enhancement Program continues to go well for the third year. This program brings in guest speakers with international reputations to discuss their research and meet with students at an informal reception. The program has been a great success, typically filling our auditorium with a standing-room-only crowd. We are planning for a larger auditorium in the new Coral Reef Research building scheduled for construction in 2011. It can't get here soon enough!

On the Go

OC Students Research Queen Conch in St. Croix

One OC alumna and two current M.S. candidates traveled to St. Croix as part of a project directed by NOAA scientist Ronald Hill, Ph.D., and funded by the National Marine Fisheries Service. Paige Switzer ('10) and OC students Jenna Lueg and Katy Brown joined NOAA divers to conduct a pilot project for the island of St. Croix. Divers conducted random 10m radius circle transects in and around the Buck Island National Monument to determine Queen Conch (Strombus gigas) size and densities in different habitats within the protected waters and the surrounding unprotected areas.



Left to right: M.S. student Jenna Lueg, OC alumna Paige Switzer ('10), and M.S. student Katy Brown in St. Croix



Queen Conch in St. Croix

OC Faculty and Students Attend World Sponge Conference

OC faculty members **Jose Lopez**, Ph.D., and **Charles Messing**, Ph.D., along with Ph.D. candidate Andia Chaves Fonnegra and M.S. candidates **Dawn Formica**, **Jignasa Patel**, and **Melinda Peddycoart**, traveled to Gerona, Spain, where they attended the VIII World Sponge Conference from September 20–24. Lopez presented a talk entitled, "The Vast Potential of Transcriptomic Approaches for Advancing Poriferan Genetics Research." The students presented several posters. Fonnegra won first prize in the Evolution and Phylogeny category for her poster, "Glass sponge reef structure: sexual vs. asexual reproduction."

The World Sponge Conference is held every four years. The next conference will be in Australia in 2014.



Ph.D. candidate Andia Chaves Fonnegra and her prize-winning poster





Lopez, Fonnegra, Formica, Peddycoart, and Messing

OC Professor Wins Student Choice Award for Best Professional Talk at International Conference

In a unique twist to evaluating presentations, the graduate students at the Sharks International conference served as judges for choosing the best presentation by a professional (nonstudent) researcher. **Mahmood Shivji**, Ph.D., was the recipient of the *Student Choice Award* at the conference, which was held this past June in Cairns, Australia. His talk was on meta-analysis of global population structure in shark species. Shivji is the director of the Oceanographic Center's Guy Harvey Research Institute and of the Save Our Seas Shark Center.

"I am truly honored by the award. It's especially meaningful to me given that it came from the next generation of scientists," said Shivji.



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Mahmood Shivji, Ph.D., at Sharks International Conference

OC Awarded \$2.8-Million Department of Education Grant

On September 25, the OC was notified about receiving funding for a five-year, \$2.8-million grant through the federal Department of Education Promoting Postbaccalaureate Opportunities for Hispanic Americans (PPOHA) Program. The proposal's guidelines specified development of a flexible, supportive, and effective academic and career pathway as students with bachelor's degrees efficiently transition to graduate degrees. The PPOHA grant's methods and budget allocations will be used to develop and test the improvements.

NSU proposed to accomplish the goals of the program through a system of organized and strategic interventions that emphasize a coherent learning sequence offering the highest-quality and most-efficient instruction and support systems. The project's objective is to have a significant impact on the academic, communitybuilding, and student support for underrepresented populations. Hispanic/ Latinos and other low-income students are recognized as facing additional pressures by often being the first in their families to attend graduate school. Therefore, additional knowledge and a support system to meet the higher-level expectations of graduate studies were proposed to help ensure student success.

Richard Spieler, Ph.D., director of academic programs, will be director of grant activities.

"These are exciting times for the academic programs of the Nova Southeastern University Oceanographic Center. Our goal for this grant is expansion in quality and amount of graduate educational offerings, and consequently, an outstanding pathway for Hispanic students to excel in the marine sciences," said Richard Dodge, dean of the Oceanographic Center.





Sea Turtle Conservation Program Finishes 22nd Season, Granted Another Three Years

On September 30, the Broward County Sea Turtle Conservation Program, operated by staff members, students, and alumni from the OC, completed its 22nd season of sea turtle monitoring and was notified that Broward County renewed the operating contract for another three years.

Endangered sea turtle nests are identified, marked, located by GPS, and sometimes relocated from intensely lighted beaches to avoid hatchling disorientation. While yearly nest counts have been in decline from 2000 to 2009, preliminary 2010 numbers show the highest nesting rate since 2000. The program employs 23 field workers who patrol more than 38 km of Broward County beaches each morning at dawn, from March 1 through September 30, pausing only in the event of hurricane warnings.

Research Scientist Gives GIS Webinar

On October 7, OC research scientist **Brian Walker** ('10), Ph.D., gave a Webinar at the 29th International Submerged Lands Management Conference hosted by the Florida Department of Environmental Protection's Office of Coastal and Aquatic Managed Areas. The Webinar was entitled, "The use of benthic habitat mapping data in marine spatial planning and management of the Southeast Florida coral reef ecosystem."

Part of the conference session, "Mapping, modeling, and the use of GIS in the management of submerged land resources," the well-attended Webinar had a diverse audience of coastal/ natural resource managers, attorneys, consultants, academics, and other professionals. The session was held to increase awareness of the management issues surrounding submerged lands within the United States, Canada, and the Caribbean and provide a forum for discussion about submerged lands issues. The presentation was recorded and can be seen by visiting *www.submergedlandsconference.com/*.

OC/NCRI Scientists Attend United States Coral Reef Task Force Meeting

This September, dean and NCRI executive director **Richard Dodge**, Ph.D., and NCRI associate director and professor **Bernhard Riegl**, Ph.D., traveled to Guam and Saipan for the 24th meeting of the United States Coral Reef Task Force (USCRTF). Also attending was **Wendy Wood**, M.A., NCRI coordinator. Representing the state of Florida on the task force was **Joanna Walczak** ('08), M.S., OC alumna. Walczak is the assistant manager of Florida's Department of Environmental Protection's Coral Reef Conservation Program. At the meeting, Dodge presented an update on NCRI activities to the task force.



Left to right: Bernhard Riegl, NSU OC professor and NCRI associate director; the Hon. Benigno Fitial, Governor of Saipan; NSU OC dean and NCRI executive director Richard Dodge, Ph.D.; and OC alumna Joanna Walczak, M.S., assistant manager of Florida Department of Environmental Protection's Coral Reef Conservation Program

The USCRTF was established in 1998 by Presidential Executive Order to lead the United States in its efforts to preserve and protect coral reef ecosystems. The USCRTF includes leaders of twelve federal agencies; seven states, territories, and commonwealths; and three freely associated states. The USCRTF helps build partnerships, strategies, and support for on-the-ground action to conserve coral reefs.

OC Welcomes Nicholas Holland, Ph.D.

On October 8, the OC welcomed Nicholas Holland, Ph.D., as part of the Distinguished Researcher Seminar Series. A professor at Scripps Institution of Oceanography, Holland presented his seminar, "Molecules and morphology connect up tapeworms, amphioxus, stingrays, and razor clams," to a full house. After his talk, he joined OC students at a buffet dinner where they could continue to discuss his research.

Holland received his B.A. in Biology from Carleton College, Northfield, Minnesota, in 1960, and his Ph.D. in Biology from Stanford University in 1964. Following a National Science Postdoctoral Fellowship at the Stazione Zoologica di Napoli, in Naples, Italy (1964–1966), he joined the Scripps Institution of Oceanography, University of California— San Diego. He has studied cephalochordates [amphioxus = lancelets]. In spite of half a billion years of parallel evolution, amphioxus is a useful stand-in for the proximate invertebrate ancestor of the vertebrates. Its body plan and genomic organization are vertebrate-like, but much simpler. His research takes advantage of the remarkable conservation of developmental genes across a wide range



Charles Messing, Ph.D., with Nicholas Holland



Students enjoying a buffet on the deck after the Distinguished Researcher Seminar Series

of animal phyla—in sequence, expression, and function. By working intensively on the molecular genetics of amphioxus, he was drawn into studying aspects of their ecology and natural history. Among other things, the Florida amphioxus unexpectedly turned out to play a conspicuous part in the life cycle of tapeworms living in the Gulf of Mexico.

The Distinguished Researcher Seminar Series represents the Oceanographic Center's contribution to NSU's Quality Enhancement Program and is held twice a year. Our previous seminar was on April 22 and featured Roger Hanlon, Ph.D., from the Marine Biological Laboratory at Woods Hole, Massachusetts. His seminar was entitled, "Mechanisms and principles of dynamic camouflage in cephalopods and fishes." The next seminar will be held in the spring of 2011.

MASTERCURRENTS Institute of Marine and Coastal Studies

Ph.D. Dissertation Defense

Greg Foster, "Investigation into the Application of Single-Beam Acoustic Backscatter for Describing Shallow Water Marine Habitats." Committee: Bernhard Riegl, Ph.D., chair; Richard Dodge, Ph.D.; Sam Purkis, Ph.D.; and John Brock, Ph.D. (USGS). July 23.



Committee member Sam Purkis, Ph.D., and chair Bernhard Riegl, Ph.D., with Greg Foster

M.S. Defenses

- **Rolando Santos**, "Linkage between mangrove fish community and nearshore benthic habitats in Biscayne Bay, Florida, USA: A seascape approach." Committee: Sam Purkis, Ph.D., chair; Eric Hochberg, Ph.D.; and Diego Lirman, Ph.D. (University of Miami). April 21. (Thesis)
- Adam St. Gelais, "Reproductive ecology of *Siderastrea sidereal*: Histological analysis of gametogenesis, spawning, and latitudinal fecundity variation." Committee: Alison Moulding, Ph.D., chair; David Gilliam, Ph.D.; and Vladimir Kosymynin, Ph.D. (FL DEP). April 28. (Thesis)
- Allison Brownlee, "Transplantation and Parrotfish predation: A study on small *Siderastrea siderea* colonies offshore Broward county, FL USA." Committee: David Gilliam, Ph.D., chair; Vladimir Kosymynin, Ph.D. (FL DEP); Alison Moulding, Ph.D.; and Richard Spieler, Ph.D. April 29. (Thesis)

M.S. degree specialties are marine biology, coastal zone management, marine environmental sciences, and biological sciences. Each course carries 3 credit hours or may be audited. Tuition is \$863 per credit hour (50 percent less for audit). Classes are 12 weeks in length and meet once a week from 6:30 to 9:30 p.m. at the Oceanographic Center (unless otherwise specified.) Registration (\$25 fee) for winter term runs January 3 to April 29 and takes place at *www.webstar.nova.edu* or at the Oceanographic Center. For further information, call Richard Spieler, Ph.D., or Melissa Dore at (954) 262-3610 or 800-396-2326, or *email imcs@nova.edu*. More information can be found at the Web site: *www.nova.edu/ocean*.

- **Tiffany Trent**, "Water chemistry effects on Apple Snail (*Pomacea paludosa*, Say) reproductive patterns in the northern Everglades." Committee: Jennifer Rehage, Ph.D., chair; Philip Darby, Ph.D. (Univ. of Florida); Rebekah Gibble, Ph.D. (ARM Loxahatchee National Wildlife Refuge); and David Kerstetter, Ph.D. April 29. (Thesis)
- **Mieka Kalinoski**, "The visual physiology of the smooth dogfish (*Mustelus canis*): Temporal resolution, irradiance and spectral sensitivities." Committee: Amy Hirons, Ph.D., chair; Richard Brill, Ph.D. (VIMS); and David Kerstetter, Ph.D. April 30. (Thesis)
- **Magdalena Kwapinska**, "Taxonomic review and ultrastructural analysis of the commensal amphipod genus Paraleucothoe (Crustacea: Amphipoda)." Committee: James D. Thomas, Ph.D., chair; Pat Blackwelder, Ph.D.; and Charles Messing, Ph.D. May 3. (Thesis)
- **Dawn Silver**, "A decline in Lake Michigan's water quality and the collaborative effort to restore, protect, and sustain it through the Great Lakes Regional Collaboration." Committee: Steffen Schmidt, Ph.D., chair, and Richard Spieler, Ph.D. May 6. (Capstone)
- **Cheryl Cross**, "Predictive habitat models for four cetaceans in the Mid-Atlantic Bight." Committee: David Kerstetter, Ph.D., chair; Lance Garrison, Ph.D. (NOAA); Edward Keith, Ph.D.; and Amy Hirons, Ph.D. May 27. (Thesis)
- **Ethan Machemer**, "A predictive habitat model for rainbow parrotfish *Scarus guacamaia*." Committee: David Kerstetter, Ph.D., chair; John Walter III, Ph.D. (NOAA); and Richard Spieler, Ph.D. May 28. (Thesis)

- Nina-Marie Santos, "Human impacts on the trophic structure of wetlands: The Florida Everglades as a case study." Committee: Amy Hirons, Ph.D., chair, and Don McCorquodale, Ph.D. June 2. (Capstone)
- Stephanie Healey, "Biological and physical analysis of currents and water masses off the coast of Southeast Florida." Committee: Amy Hirons, Ph.D., chair; Alex Soloviev, Ph.D.; and Jonathan Shenker, Ph.D. (Florida Institute of Technology). June 25. (Thesis)
- Jessica Bostock, "A comparison of copepoda (Order: Calanoida, Cyclopoida, Poecilostomatoida) density and diversity based on taxonomic identification at frontal and central locations in the Florida current off Fort Lauderdale, FL." Committee: Amy Hirons, Ph.D., chair; Alex Soloviev, Ph.D.; and Jonathan Shenker, Ph.D. (Florida Institute of Technology). June 30. (Thesis)
- **Gabriela Wisniewski**, "Occurrence, density, and distribution of the larvae of three commercially important crab species in the Florida Current off Fort Lauderdale, Florida, US." Committee: Amy Hirons, Ph.D., chair; Alex Soloviev, Ph.D.; and Jonathan Shenker, Ph.D. (Florida Institute of Technology). June 30. (Thesis)

- Jason Ratner, "Electronic Tracking and Tagging of Pelagic Tunas." Committee: David Kerstetter, Ph.D., chair, and Curtis Burney, Ph.D. July 15. (Capstone)
- **Paige Switzer**, "Fish senescence and aging: Relevant findings and their importance to human gerontology." Committee: Richard Spieler, Ph.D., chair, and Ken Davis, Ph.D. (USDA). July 16. (Capstone)
- **Hayley Cato**, "Preliminary analysis and comparison of acoustic signals from Delphinids in the northwest Atlantic Ocean." Committee: Edward Keith, Ph.D., chair, and Amy Hirons, Ph.D. July 22. (Capstone)
- Whitney Sapienza, "A holistic approach to understanding and managing the Gulf of Mexico hypoxia." Committee: Don McCorquodale, Ph.D., chair, and Curtis Burney, Ph.D. July 23. (Capstone)
- Jesse Trostadurray, "National approach to nutrient management for reduction of red tide events in the Gulf of Mexico." Committee: James Thomas, Ph.D., chair, and Don McCorquodale, Ph.D. July 23. (Capstone)
- **Elizabeth Larson**, "Establishment of an *Acropora cervicornia* (Staghorn coral) nursery: An evaluation of survivorship and growth." Committee: David Gilliam, Ph.D., chair; Jose Lopez, Ph.D.; and Diego Lirman, Ph.D. (Univ. of Miami). August 13. (Thesis)

Student News

New Student Orientation Welcomes Largest OC Class

This August, the OC welcomed its largest incoming class—68 students. The students come from more than 15 states and 2 countries and have started courses in one of our four M.S. majors. After an afternoon of orientation that included talks from the director of academic programs, Richard Spieler, Ph.D., as well as representatives from financial aid, student counseling, the Registrar's Office, and the RecPlex, the new students met current students and faculty and staff members at a buffet held on our deck overlooking Port Everglades.



Left to right: Jeremy Kerr, M.S. alumni Adam St. Gelais ('10) and Kendra Maroni ('09), and Ph.D. candidates Kirk Kilfoyle and Gwilym Rowlands enjoy the new student party.



New students Brian Kraus and Justin Ruch watch a cruise ship leave during the party.



OC administrative assistant, Jenna Lash, welcomes new students Megan Flora and Emily Marshall.



Faculty members Eduardo Veliz, Ph.D., and Jose Lopez, Ph.D., enjoy the orientation party.

International Coastal Cleanup a Success!

On September 25, 2010, the NSU Oceanographic Center graduate students, in conjunction with Broward County, organized the Ocean Conservancy's International Coastal Cleanup at John U. Lloyd State Park. The park was one of 12 sites throughout Broward County that participated. This was the second year that the Oceanographic Center students were site managers.

Despite the early rain, the John U. Lloyd site hosted 344 volunteers who collected 867 pounds of trash. The cleanup attracted students and faculty and staff members from all over NSU, as well as other organizations from around the county. This event brought together many different people from the community to show a sense of pride and respect for our beaches and overall coastal health, and it also provided a chance to share information on many different topics pertaining to ocean health.

The NSU Oceanographic Center, National Coral Reef Institute, Guy Harvey Research Institute, Save Our Seas Shark Center, Broward County Sea Turtle Program, and International Game Fish Association provided information to our many volunteers. The OC graduate students fielded questions on all topics from our eager volunteers, making this another successful community venture. Congratulations to all that worked on this project, and we look forward to next year!

Student Attends 61st Annual Tuna Conference

Last May, M.S. candidate **Elaine Brewer** traveled to Lake Arrowhead, California, with David Kerstetter, Ph.D., for the 61st Annual Tuna Conference. There, Brewer presented the preliminary findings of her research on the history of South Florida swordfish tournaments and Kerstetter shared his research on using pelagic long-line data to investigate post-hooking behavior of pelagic fishes during the poster session.



M.S. candidate Elaine Brewer and David Kerstetter, Ph.D., at the Tuna Conference

OC Students Present Research at Florida Academy of Sciences

Five OC students orally presented their research at the 74th annual meeting of the Florida Academy of Sciences (FAS). FAS is the Florida affiliate of the American Association for the Advancement of Science and publishes *Florida Scientist*, an internationally distributed journal. M.S. candidates **Cheryl Cross, Heidi Da Silva, Mae Taylor, Nina Thompson**,



OC graduate students and trash (photo by Lisa Morse)

and **Gabriela Wisniewski** traveled with their advisers, **Amy Hirons**, Ph.D., and **David Kerstetter**, Ph.D., to Indian River State College in Fort Pierce, Florida, for the meeting.

OC Students Attend American Elasmobranch Society (AES) Conference

In July, four OC students traveled to Providence, Rhode Island, to attend the joint meeting of Ichthyologists and Herpetologists and the American Elasmobranch Society. Three M.S. candidates, Elaine Brewer, Mike Tousignant, and Tiffany Weidner presented their research in the poster session. M.S. candidate Mae Taylor gave an oral presentation entitled, "Spiral Valve Parasites of Selected Tropical Pelagic Elasmobranches from the Western North Atlantic Ocean." Accompanied by their major adviser, David Kerstetter, Ph.D., the group enjoyed meeting and making contact with other shark biologists in the field. M.S. alumna Lucy Howey ('10) also attended the conference.



M.S. candidates Mae Taylor, Mike Tousignant, and Tiffany Weidner at AES conference

M.S. Candidate Uses Fishing Tournaments to Collect Data

Over the summer, M.S. candidate Travis Moore and a team of OC graduate students traveled to many South Florida fishing tournaments to collect samples from various sports fish. Samples of stomach contents, gonads, liver, and other tissues were collected for an ecological study of the region. These samples will provide baseline data in the event of water contamination, such as in the case of the Deepwater Horizon oil spill in the Gulf of Mexico. "We'll have livers of healthy fish and we can take livers of contaminated fish to see what degree of contamination has occurred." Moore said. 🤝

Alumni News

USS Iwo Jima and OC Alumnus Visit Fort Lauderdale

This April, as part of Broward County Fleet Week, the *USS Iwo Jima* (LHD-7), came to Fort Lauderdale. Aboard this WASP-class Amphibious Assault ship was OC alumnus Lt. Commander **Michael Loomis** ('04).

One of the first graduates from the OC's distance learning M.S. in Coastal Zone Management program, Loomis is now in charge of 10 navy meteorologists. While in Fort Lauderdale, he invited the OC faculty and staff for a tour of the *lwo Jima*. **Jane Dougan**, distance learning coordinator, and some other OC staff members took him up on the offer. This summer, the *lwo Jima* traveled through the Caribbean, visiting 10 countries, including Haiti, Panama, and Costa Rica.

Loomis, who also has worked with NOAA, is incorporating his experience with his Navy job by "taking everything I have learned at NSU and NOAA and using that on the Navy side to promote environmental awareness and protection." After the tour, Dougan commented that the NSU OC could not have a better seaborne ambassador than Loomis.



OC alumnus Michael Loomis ('04), two sea bees, and distance learning coordinator Jane Dougan on board the USS Iwo Jima.

Alumni Featured by American Elasmobranch Society

This September, the American Elasmobranch Society featured OC M.S. alumnus **James Sulikowski** ('92), Ph.D., and his graduate students at the University of New England (Biddeford, Maine). Their research involves active collaborations with colleagues from many different universities and organizations and includes aspects of fisheries biology such as reproduction, maturity, age, and growth; the physiological responses of elasmobranches to stress and how they influence by-catch mortality; and investigations of the composition, movements, and spatial/temporal distribution of these fishes.

Marston Selected as a SmartCEO BRAVA! Award Winner

Past Celebration of Excellence winner and OC alumna **Roseline Hernandez Marston** ('92) of A.D. Marble & Company has been selected as one of *SmartCEO Magazine's* BRAVA! Women Business Achievement award winners. She is one of 25 women chosen for this prize. These women are growing successful companies and giving back to the community through philanthropic acts. This year's list of BRAVA women collectively employ 5,000 individuals and generate more than \$1.6 billion in annual revenues. The 25 winners also support more than 150 local charities and nonprofit organizations. Congratulations!

Alumni wishing to submit stories can contact Melissa Dore via email at *missy@nova.edu*.

In Memoriam

On May 8, the Oceanographic Center lost one of its long-time employees, director of OC computing services, Kevin Kohler. Growing up in North Miami, Kohler was an excellent student and avid fisherman, boater, and scuba diver. He received both his B.A. (math and physics) and his M.S. (physical oceanography) from the University of Miami. He began his oceanography career working in ocean modeling at NOAA in Miami, eventually ending up at Nova Southeastern Oceanographic Institution in 1983, first as a research assistant in charge of programming and general computer facilities and finally as director of computing services. Throughout his career, Kohler was involved with numerous research projects from ocean modeling to coral reef-oriented research. He wrote various software products that are currently in use worldwide for technical plotting (PSPLOT), coral x-radiography analysis (CoralXDS), coral reef monitoring and assessment (CPCe), and habitat equivalency analysis (Visual_HEA). He will be sorely missed.

The Kohler family requested that, in lieu of flowers, people donate to an OC student scholarship fund set up in Kevin Kohler's memory. Donations contributing to the fund may be sent to NSU Oceanographic Center Scholarship Fund, 8000 North Ocean Drive, Dania Beach, Florida 33004-3078. Please make checks payable to NSU with the memo directing it to the Kevin Kohler Scholarship.



Kohler with Peggy Strumski, his partner of 30 years



Kohler at the computer



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Next issue—breaking ground on the new building!





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