

ROCKY Gator



The Official Newsletter of the Department of Geological Sciences

Summer 2012

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Outcrop of Honor is unveiled during Homecoming 2011

by Gordon Weidler

The University of Florida Department of Geological Sciences unveiled an exhibit of igneous, metamorphic, and sedimentary rocks to recognize the donors who have helped the department thrive. The Outcrop of Honor occupies a wall in Williamson Hall and currently includes more than 70 different polished stones of varying colors and textures. The unveiling took place at the 2011 Homecoming Alumni and Friends Breakfast hosted by Department of Geological Sciences. The exhibit, organizers say, is as much a work of art as it is an opportunity for alumni to show support for the Department and honor colleagues, family, or friends.

Donors may choose their preference from the many colors of natural stones in the display. A special bronze plaque with the donor's chosen message is then mounted on their stone. For a minimum contribution of \$1,000 that can be donated over several years, each donor's generosity is commemorated by a 1-foot-by-1-foot stone with a brass plaque.

Two of the department's most generous benefactors, **Jon L. Thompson**, retired president of Exxon Mobil Exploration and vice president of ExxonMobil Corporation, and his wife, **Beverly**, have been commemorated with a hand-selected, custom-cut stone to recognize their support over the years. Also recognized with custom stones are **John and Carolyn Dykes**, **James and Glenna Floyd**, and **Henry and Emily Danker**.

The Outcrop of Honor is the brainchild of **Michael Perfit**, a UF Research Foundation Professor and department chair, and **Jack Ryals**, director of Jackson Stoneworks.

"With budgets the way they are now, funding for expenses like vans for field trips and student lab equipment has been cut back by almost two-thirds, and we have to find other ways to support ourselves," said Perfit. "The need is especially great for funding academic enrichment, including the field trips our students must take outside Florida."

Perfit said he looked into various fundraising approaches and really liked something he saw that involved engraving the names of donors onto brick pavers. Perfit said his students brought Jackson Stoneworks to his attention.

"Some of our students had gone (to Jackson Stoneworks) to get small samples of rock for use as coasters and as samples for classroom use, and that was the very first connection," Perfit said. Perfit later spoke with Ryals about possibly obtaining brick-sized pieces of stone for the exhibit. The project soon took on a much broader scope. "Jack kind of took the idea and he turned it into this entire wall," he said.

"I looked at this as an opportunity to create something great," Ryals said, "something that would continue to raise funds for (the department) in the future as it expands to become a major exhibit." Ryals said he is enlisting the support of granite quarries from all over the world, asking them to donate 1-foot-by-1-foot examples of each type of stone from their region.

With participation from enough quarries from around the world, Ryals said, the Outcrop of Honor could grow to encompass the walls of the entire second floor of Williamson Hall.

The initial goal to raise \$25,000 to replace one of the Department's aging vans has been met with the support of alumni and friends, as well as a \$5,000 contribution from the College of Liberal Arts & Sciences' deans office. The van will be invaluable in transporting students to the western U.S. for the annual six-week Field Camp, during which students learn to do field mapping and research.

As donations continue to grow, the Department hopes to replace its other three aging vans.

To make a donation, see the enclosed brochure or call 352-392-2231 or visit the Department of Geological Science's website at www.geology.ufl.edu.



2011-2012 graduate degrees went to ...

Fall 2011:

Aldo Rincon, M.S.

Spring 2012:

Patricia Spellman, M.S.

Summer 2012:

Carolyn Ball, M.S.

Katrina Garman, M.S.

Jennifer Mays, M.S.

Kevin Werts, M.S.

Nichelle Baxter Hann, Ph.D.

Alexander Hastings, Ph.D.

Jin Jin, Ph.D.

Richard Mackenzie, Ph.D.

Derrick Newkirk, Ph.D.



Summer Ph.D. graduates: (from left to right) Nichelle Baxter Hann, Alex Hastings, Rich Mackenzie, Derrick Newkirk, and Jin Jin.

The **ROCKYGator** is the official newsletter of the University of Florida Department of Geological Sciences; issues are provided free of charge to interested friends of the department, faculty, students, and alumni. Due to budget constraints, the ROCKYGator is printed in black-and-white, but a color copy is available in pdf format on our website at www.geology.ufl.edu. If you wish to be included in our mailing list, please contact the department Program Assistant, Pam Haines, at pghaines@ufl.edu, or write or phone the department at 241 Williamson Hall, PO Box 112120, Gainesville, FL 32611-2120; phone (352) 392-2231.

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From the department chair ...



Dr. Michael R. Perfit

Greetings Alumni, Colleagues, and Friends of the Department of Geological Sciences. Sometimes one has to know when to stop and when enough is enough. No, I am not talking about my term as Chair, but rather when there was enough information and news to complete this year's *Rocky Gator*. It seems that every time we were about to finish someone won another award or an important departmental activity took place or a research breakthrough was highlighted, so we kept adding to this issue. I hope the information provided is enlightening and gives you a sense of what has happened here over the past year.

Although it has been another year of budget cuts across the University, our department remains strong and vibrant. For the fifth straight year the number of undergraduate majors has increased to a total of about 90 now. We expect more new students this fall through our new interdisciplinary major in Marine Sciences that we have jointly developed with Biological Sciences and the College of Agriculture and Life Sciences (CALs). As we continue to build and strengthen our graduate program, we have had an exceptional year for graduating students, with six M.S. degrees and five Ph.D. degrees awarded to our graduate students this academic year.

Members of our faculty have had another very successful year in garnering honors and new research grants. **Joe Meert** has been promoted to full Professor and **Ann Heatherington** was promoted to Associate In Geology. **Jon Martin** was selected as a UF Foundation Research Professor—for the second time! During the past year faculty were awarded around \$2.5M in new research grants and in total we have 51 active grants worth nearly \$10M. Jon and **Ellen Martin** just received news their proposal to work on glacial melting in Greenland has been funded by NSF. They have both spent time there doing initial fieldwork with their students.

We also added a new Postdoctoral Associate, Dr. **Amanda Waite**, who is working with Ellen Martin, and a visiting scholar, **Jingnan Shan**, who has been working with **Kyle Min**.

We held another successful UF Geosciences Day. Organized by our graduate students and the Geoscience Ambassadors, this event highlighted departmental research and garnered much interest from students and faculty across campus. Our annual "Can You Dig It" educational event at the Museum of Natural History was visited by more than 1200 members of the public who enjoyed the many interactive displays demonstrating recent and continuing geologic events (see some pictures of the event in this issue). The Geogators group of mostly undergraduate students continues to reach out to the community by giving presentations on geologic topics at local schools, this year making 31 separate presentations.

I am happy to report we had a very successful and well-attended second annual Geological Sciences Homecoming Alumni Breakfast last November during which I unveiled our Outcrop of Honor, a wall of unique granite plaques supported by donations to the Department (see enclosed flyer for details). Donations for Outcrop plaques from our alumni and friends were substantial enough to allow us to purchase a new van that will be used for transporting our students to Field Camp in New Mexico as well as allowing faculty and students to carry out research and field trips within Florida. It is my hope your generosity will continue so we can replace our other aging vans and support student field activities.

Keep us posted on your activities and how we can stay connected with you. Please let us know if you want to make a campus visit and maybe give a talk. Staying connected to our alumni completes the loop of our educational mission.

Interdisciplinary Marine Sciences major begins Fall 2012

Recognizing the importance of oceans to the global environment and the need to know more about them, a new interdisciplinary major in Marine Sciences will be offered beginning Fall 2012. Geological Sciences faculty have been instrumental in developing the program in collaboration with faculty from Biological Sciences and the College of Agriculture and Life Sciences (CALs). Students have the option of earning a BS degree through either the College of Liberal Arts and Sciences or CALs and can tailor a curriculum to suit their own interests and career goals.

"We have been working together since early 2010 to develop this interdisciplinary program because of the importance of the oceans in general and a desire to provide students with broad training in marine sciences while sharing the Department's expertise," explained Chair Michael Perfit. "Many students have expressed interest in pursuing this type of educational opportunity and we are pleased to offer it to them."

Alumni and Friends Homecoming Breakfast 2011

On November 5, 2011, the second annual Alumni and Friends Homecoming Breakfast was a hit. Eighty-nine alumni, faculty, students, and guests attended, enjoying breakfast, chatting with old and new friends, and touring the department's facilities. Department Chair **Michael Perfit** unveiled the Outcrop of Honor to the applause of all in attendance.

Many thanks go to the student volunteers who helped with setup and service. Special kudos go to Associate Professor **Joseph Meert** for revving up the camp stove when the electric burner on the catering stove malfunctioned.

The University of Florida's 2012 Homecoming will be on November 10, 2012. Since campus has become increasingly congested during football game days, some have suggested that our Alumni and Friends Breakfast move to a non-game day or a day on which the Gators play an away game.

The bye-week for the 2012 Gator football team is Saturday, September 29. Away games this fall will be on September 8 (Texas A&M) and 15 (Tennessee), and October 13 (Vanderbilt) and 27 (Georgia in Jacksonville). The event could be switched to a mid-day brunch, making it a more comfortable day trip for those who live outside Gainesville. Additional geology related activities may be added if desired, such as a lecture or visit to the Florida Museum of Natural History.

Please e-mail Department Chair Dr. Michael Perfit (mperfit@ufl.edu) as soon as possible with your suggestions or votes for future gatherings. We want your input to make this a more valuable event.



Department alumni, friends, faculty and students gathered for the unveiling of the Outcrop of Honor during the second annual Homecoming Breakfast in 2011.

Collectors' Day 2012

Associate Professor Dr. **Andy Zimmerman** and Professor and Chair Dr. **Michael Perfit** again shared their personal collections with the public during the Florida Museum of Natural History's annual Collectors Day on January 21.

Zimmerman has been collecting sand from every modern and ancient beach he has visited since the mid-1990s. He now has about three hundred samples stored in vials labeled with where they were found. Museum visitors could view the sand under a microscope, which allowed the public to see the beauty and rich information contained in sand.

Perfit's collection of volcano souvenirs began with a few postcards featuring volcanoes in the Aleutian Islands after his research in Alaska in 1974. His collection now includes hundreds of volcano postcards from around the world, as well as ashtrays, pens, books, samples of ash, coffee grown on the flanks of volcanoes, and even an ashtray that was stamped out of an active lava flow on Mt. Etna.

Perfit was interviewed about his collection by WCJB-TV during the 2012 Collectors Day event, and a photo of him explaining the geology of volcanos to museum visitors also appeared on Gainesville.com.

Graduate student receives awards



Ph.D. candidate **Tania Villaseñor** recently received several competitive national and international student research awards. A student of Associate Professor **John Jaeger**, she was awarded a \$1,500 student research grant in April 2012 by the Society for Sedimentary Geology, a travel grant of \$2,000 from the Geological Society of America (GSA) and U.S. National Committee for the International Union of Geological Sciences, and a \$300 summer graduate travel grant from the UF College of Liberal Arts & Sciences. This travel funding will cover her August trip to the International Geological Congress meeting in Australia, where she will make an oral presentation on Late Pleistocene lithofacies and changes in sediment provenance in Canterbury Basin, South Island of New Zealand.

Villaseñor also received a \$2,000 student research grant from GSA in May for her work on the study of changes in sediment provenance in Canterbury Basin using $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology on the silt size fraction. She will continue her Ph.D. studies in geological sciences at UF with the help of a doctoral studies scholarship from the Advanced Human Capital Formation Program, National Commission of Science and Technology of Chile. The scholarship will cover the cost of tuition, fees, and a stipend until August 2014. Congratulations, Tania!

CAN YOU DIG IT? 2012



Geological Sciences faculty and student researchers

DEPARTMENT:

■ The Department of Geological Sciences was well represented at the annual Geological Society of America meeting in October 2011 in Minneapolis. Four faculty members, six graduate students, and two undergraduate students made presentations.

■ A large contingent from the department, including 12 faculty members, one post-doctoral fellow, 14 graduate students, and five undergraduate students, were also involved in presenting 52 talks and posters among the 18,000 presentations at the 44th Annual Fall Meeting of the American Geophysical Union in December 2011 in San Francisco. This is the world's largest gathering of Earth and space scientists.

FACULTY:

■ Dr. **Jonathan Martin** spent three weeks during summer 2011 doing fieldwork in Greenland one-half mile from the edge of the Greenland Ice Sheet. The work involved collecting water running off the ice sheet and from watersheds isolated from the ice sheet. His research looks at differences in weathering of rocks from these two types of watershed to determine their relative importance in drawdown of atmospheric CO₂ and how these differences may be translated into climate records of marine sediments.

■ Dr. **Mark Brenner** presented a keynote address entitled "A brief history of paleolimnology in the Yucatan Peninsula" at the XIV Congreso Latinoamericano de Geología, XIII Congreso Colombiano de Geología, in Medellín, Colombia from August 29 through September 2, 2011. He had a chance to visit the spectacular El Peñon de Guatapé Monolith near Medellín, from which there is a spectacular view of the reservoir created in the 1960s to produce hydroelectric power.

Dr. Brenner also conducted a short course on Paleolimnology at the invitation of the Programa de Geoquímica Ambiental at the Universidade Federal Fluminense, Niteroi, Rio de Janeiro, Brazil from May 8 through 11, 2012.

■ Distinguished Professor Dr. **James E.T. Channell** gave a talk entitled "Magnetic Stratigraphy within Polarity Chrons" as one of the keynote addresses at the 2011 MagIC Science & Database Workshop at the University of California, San Diego's Scripps Institution of Oceanography in La Jolla, California on September 19, 2011. The Magnetics Information Consortium (MagIC) is a community effort funded by the National Science Foundation to archive data and enable sharing them across geomagnetic, paleomagnetic, and rock magnetic communities.

■ Associate Professor Dr. **Joseph Meert** gave a talk entitled "Gondwana Rising: Whither thou comest East and West?" as one of the keynote addresses at the Gondwana 14 meeting in Buzios, Brazil in late September 2011. Gondwana is believed to be an ancient supercontinent of the Southern Hemisphere that, according to the theory of plate tectonics, broke up to form India, Australia, Antarctica, Africa and South America.

Dr. Meert also gave two invited talks on "The (Paleo) Geography of Evolution: Making sense of changing geography and changing continents." The first presentation was January 31, 2012 at the 49th Annual Florida Regional Junior Science, Engineering, and Humanities Symposium at UF's Reitz Union and the second was February 11 at Broward Community College's 8th Annual Darwin Day.

■ UF Research Foundation Professor and Chair Dr. **Michael Perfit** was one of three speakers on the topic "Deep-sea Exploration: Drugs, Damages, and Other Discoveries" at the Society of Environmental Journalists 21st Annual Conference in Miami in October 2011. Panelists shared deep thoughts on newly discovered hydrothermal vents in the Pacific, potential pharmaceuticals, and the initial results of deep-sea research related to the Deepwater Horizon oil spill.



El Peñon de Guatapé Monolith near Medellin, Colombia

represent the department and the University of Florida

GRADUATE STUDENTS:

■ Research underway by faculty and students through the University of Florida's IGERT in Adaptive Management--a National Science Foundation supported Integrative Graduate Education and Research Training program--was recognized in fall 2011 on the *IGERT.org* website. Led by Geological Sciences Professor **Jonathan Martin**, Environmental Sciences Professor **Mark Brown**, and Forest Water Resources and Watershed Systems Assistant Professor **Matthew Cohen**, Ph.D. candidate **Marie Kurz** (Geological Sciences), **Dina Liebowitz** (School of Natural Resources and Environment), and **Sean King** (Environmental Engineering Sciences), along with other faculty are investigating the changes in Florida springs. The team is learning that declines in the biotic integrity of Florida's springs have no simple cause and effect relationship. The information is presented here: <http://www.igert.org/highlights/478>.

■ M.S. student **Carolyn Ball** won the Geological Society of America/ExxonMobil Bighorn Basin Field Award which provided an all expense paid seven-day study trip to the Bighorn Basin in Cody, Wyoming. During this summer 2011 trip she learned the "tricks of the trade" in integrated basin analysis from some of the best researchers in the industry.

■ In September 2011, Ph.D. candidate **Jennifer Gifford** received an honorable mention award for her oral presentation entitled "Geochemistry and geochronology of mid- to lower crustal granitic xenoliths from the great falls tectonic zone" that she gave in May at the Rocky Mountain/Cordilleran Sectional meeting of the Geological Society of America in Logan, Utah. The panel of judges said it was very impressed with both the scientific aspects of her work and her polished oral presentation.

UNDERGRADUATE STUDENTS:

■ During two sessions in January 2012, undergraduate students **Trevor Cole** and **Matthew Celestino** taught members of the Trinity Church-based Boy Scout troop about geology. The lessons included erosion, rock types, identifying minerals and their use in industry and fossil species found in Gainesville creeks.

■ A group of undergraduate students including **Trevor Cole**, **Sarah Widlansky**, **Janelle Bauer**, **Alia Lesnek**, **Chelsea Fenn**, and **Jerome Sepulchre** volunteered at Newberry Elementary School during the school's Science Fair Showcase on February 22, 2012. During five 30-minute presentations, the group introduced rocks, minerals and fossils to about 100 elementary students.

■ Graduating seniors **Chelsea Fenn** and **Bud Davis** were selected in March 2012 as two of 40 interns in the 2012 Cooperative Summer Geosciences Internship Program co-sponsored by the U.S. Geological Survey and the National Association of Geoscience Teachers. Selection was made based on their outstanding field camp performance at UF in 2011. Established in 1965, this is one of the longest continuously running science internship programs in the country. Davis will work in Lakewood, Colorado analyzing cores from Great Sand Dunes National Park. He will study differences in the physical, magnetic, and biotic properties to gain an understanding of the area's geology. Fenn declined the USGS internship, instead choosing to intern with Denver-based petroleum company Enerplus. She will study the Turner sandstone in the Powder River Basin in Wyoming by doing field work, mapping, and describing cores to better understand the formations' marine depositional setting. The goal is to identify areas where oil and natural gas might be produced and correlate well logs for these areas.

Geology major and UF Swimming athlete competed in the 2012 Summer Olympics

Senior Geological Sciences major **Sarah Bateman** competed for Iceland in the 2012 Summer Olympics in London, England. She raced in the preliminary heats in the 100-meter butterfly, the 4x100-meter medley relay, and the 50-meter freestyle. A member of the UF Swim Team, Bateman also swam for Iceland in the 2008 Olympics. In her swimming career at UF, Sarah has been a nine-time All-American selection, a four-time All-SEC selection, and is the 2009 and 2010 SEC Champion in the 200-meter freestyle. She holds the SEC record in the 200-meter freestyle and is the UF record holder in the 50-meter freestyle with a time of 21.89 seconds. We're very proud of your participation, Sarah, as one of 39 athletes representing the Gator Nation at the 2012 Summer Games!

CAN YOU DIG IT? 2012



Memories of the 2012 End of the Year Party!



Jon Martin selected as UFRF Professor

Professor **Jon Martin** has been selected by the University of Florida Research Foundation (UFRF) as one of 33 UFRF Professors for 2012 through 2015. "This is a very prestigious award that Jon and the department should be proud of," said Chair **Mike Perfit**.

This recognition goes to faculty members with a current distinguished record of research and a strong research agenda likely to lead to continuing distinction in their fields. The selection process included recommendations by college deans based on nominations from their department chairs, a personal statement, and an evaluation of recent research accomplishments as evidenced by publications in scholarly journals, external funding, honors, and awards.

"Deans, department chairs, and colleagues use words like 'scholar of highest distinction,' 'one of the best young talents in his field,' and 'one of our most productive faculty members,' to describe these researchers' work," said **David Norton**, UF's vice president for research. "Typically, these researchers on the cutting edge of their fields are also recognized as outstanding mentors of graduate and undergraduate students. It is scholars like these that make the University of Florida one of the nation's great research institutions."

Martin is one of 10 Geological Sciences faculty and Florida Museum of Natural History affiliate faculty who have been honored with this award to date. "Geological Sciences has had at least one UFRF Professor in 11 of the 15 years these professorships have been awarded—truly a testament to the outstanding faculty we have in the Department and Museum," Perfit noted. "In fact, Jon, **Jim Channell**, **Steven Manchester**, and **David Hodell** (now at Cambridge) have won twice!"

Other awardees have been **Jonathan Bloch**, **David Dilcher**, **David Foster**, **Bruce MacFadden**, **Paul Mueller**, and Perfit. Perfit expects more Geological Sciences faculty will be honored this way in the very near future and says he believes the department has had one of the highest proportions of UFRF awards per capita of any UF department.



Kudos to Geological Sciences graduate students

Ph.D. candidates **Amy Brown**, **John Ezell**, and **Mitra Khadka**, who work with Dr. **Jonathan Martin**, were awarded Geological Society of America (GSA) research grants to study hydrogeology of karst aquifers similar to those in Florida.

Brown received \$2,500 to study the use of strontium and lead isotopes to determine the timing of the formation of metal oxide precipitates in water-filled caves in northern Florida and their effects on water quality. Ezell received \$1,848 to study the tidal and biological controls on water chemistry and dissolution reactions in lakes on carbonate islands in the Bahamas. And Khadka received \$2,080 for his research on developing radon and thoron as hydrological tracers to determine the magnitude, location, and seasonal variability of groundwater and river water exchange.

Based on their grant applications, Brown and Khadka were selected as 2012 Geological Society of America Hydrogeology Division Student Research Award winners. The awards recognize them as two of the top hydrogeology students in the larger GSA grant application pool. Their plaques will be presented during the GSA Annual Meeting in November in Charlotte, NC and each will receive a travel stipend of \$350 to attend the meeting. Only four such awards were given by GSA this year. Congratulations Amy, John, and Mitra!



Amy Brown



John Ezell



Mitra Khadka

Department faculty and students make the news

Assistant Professor Dr. **Mark Panning** discussed the department's role in the Earthscope seismometer project on WUFT-FM on July 19, 2011. This project will locate seismometers every 42 miles throughout the United States. Third-year geology majors **Guri Zeigerman** and **Marko Steiger** contacted property owners in the area from the Florida Panhandle to Savannah, Georgia to obtain permission for underground seismometer placement on their land. The sensitive instruments will be able to measure major earthquakes worldwide, as well as record any local seismic activity.

An article by a team led by Associate In Geology Dr. **George Kamenov** and Professor and Chair Dr. **Michael R. Perfit** entitled "Ancient lithospheric source for Quaternary lavas in Hispaniola" was published online July 10, 2011 by *Nature Geoscience*. The article reports on their discovery of volcanoes near Hispaniola only one million years ago, much more recently than expected, and the surprising finding that the crust underlying the area has chemical characteristics similar to billion-year-old crust found under South and Central America more than 1,000 miles away. Kamenov discussed the research on WCJB-TV and was interviewed for an online article by *OurAmazingPlanet*.

Assistant Professor Dr. **Andrea Dutton** was interviewed by WCJB-TV on October 28, 2011 about the satellite launched by NASA that morning. The National Polar-Orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) is a mission to collect and distribute remotely-sensed land, ocean, and atmospheric data to the meteorological and global climate change communities. She explained the types of data the satellite will collect, why it is important, and what it can tell us about ongoing climate change.

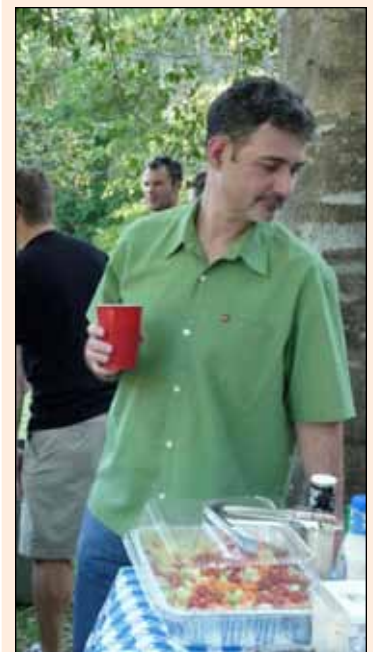
Associate Professor Dr. **Joseph Meert** was quoted in a *Florida Times-Union* story on December 16, 2011 about the recent repainting of airport runway numbers at Jacksonville International Airport due to Earth's shifting magnetic field. The FAA requires runway numbers to match their magnetic compass headings, but those headings change due to magnetic north's constant shift. This happens because the planet's outer liquid core is always moving around its inner solid core, he explained. Other airports are also affected by this phenomenon.

Distinguished Professor Dr. **James E.T. Channell** was quoted on January 8, 2012 by the *New York Times* and the Voice of America suggesting, by analogy with previous ice ages, that the next ice age will be postponed indefinitely because of greenhouse gases in the atmosphere. Research by Channell and co-authors in the United Kingdom and Norway published in *Nature Geoscience* explains that the high current levels of carbon dioxide will prevent the natural cycle of cooling that would, in the absence of high carbon dioxide levels, cause the onset of the next ice age within 1500 years. The delayed cooling will result in melting of continental ice sheets and sea level rise. Comments on the study were also published by the Wall Street Journal, which interviewed Channell, and BBC News.

Information on research by Ph.D. candidate **Alex Hastings** (Geological Sciences and Florida Museum of Natural History) about the discovery of an extinct crocodile, originally published in the September 15, 2011 issue of *Palaeontology*, has been widely disseminated. Hastings was the lead researcher who found fossilized remains of the 20-foot-long crocodile in the same Colombian coal mine where Titanoboa, the world's largest snake, was known to live. Reports on the research were published by *The Gainesville Sun* and online by MSNBC, Smithsonian Science, BBC News, Fox News, International Business Times, National Geographic Daily News, *Discovery.com*, *Wired.com*, *History.com*, *Futurity.org* and numerous other news and science information outlets.

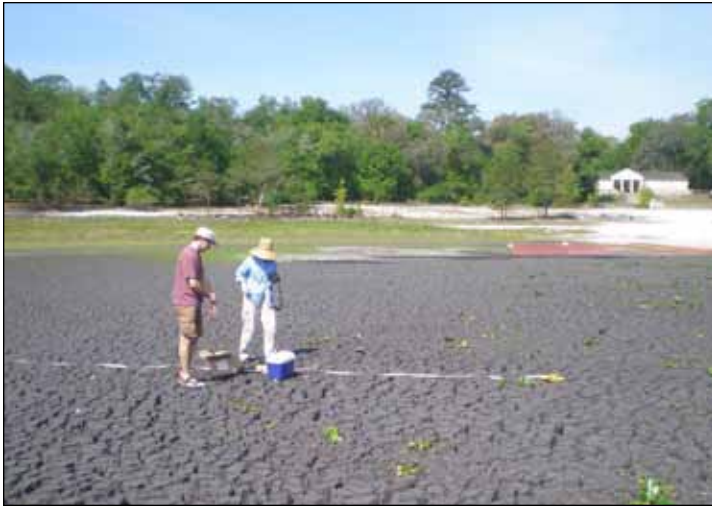
A Smithsonian Channel special entitled "Titanoboa: Monster Snake," about the discovery of the world's largest snake, premiered on April 1, 2012. A team co-organized by Dr. **Jonathan Bloch**, Florida Museum of Natural History Associate Curator of Vertebrate Paleontology and Associate Professor of Geological Sciences, Anthropology, and Zoology, and Dr. **Carlos Jaramillo**, UF Geological Sciences Ph.D. graduate and Smithsonian staff scientist, found fossils of 28 snakes in a Colombian coal mine in 2004, but researchers did not realize they were snakes until 2007 because they were so large. The 48-foot-long, 2500-pound Titanoboa lived 58 million years ago. Other UF team members who appeared on the show included Geological Sciences Ph.D. candidate **Alex Hastings**, Ph.D. student (and M.S. graduate) **Aldo Rincon**, and Biology Ph.D. candidate (and Geological Sciences M.S. graduate) **Fabiany Herrera**. The show was also broadcast on the Gainesville Television Network and can be seen online at <http://www.smithsonianchannel.com/site/sn/show.do?show=140671#main>.

Memories of the 2012 End of the Year Party!



Blair, Brenner, and Curtis study area lakes

Ph.D. candidate **Susanna Blair** stands before the dry bed of Pebble Lake in Goldhead Branch State Park, north of Keystone Heights, Florida (see lower right photo). The notoriously astatic lake is now completely dry as a consequence of protracted drought conditions in north Florida, but has achieved a maximum depth of more than 10 meters in the recent past. Similar to Pebble Lake, the recreational lake in the park, Little Lake Johnson has also dried almost completely. Blair and Dr. **Jason Curtis** prepare to collect surface sediment samples from the dry lake bed (see upper and lower photos at left). It is notable that rhizomes of the floating-leaf lily pad *Nuphar luteum* (spatterdock) are exposed at the sediment surface. The plants remain viable, as the roots tap water deep below the sediment surface, and the leaves continue to photosynthesize atop the mud. Blair, guided by her Ph.D. committee chair, Dr. **Mark Brenner**, is studying the fate of heavy metals in the exposed deposits.



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