Tupper 4pm seminar

Tuesday, November 24, 4pm seminar speaker will be Alan Herre, STRI
Figs and wasps for Charles

Paleo-Talk

Wednesday, November 25, 4pm, Paleo-Talk speaker will be Humphrey Ajonina, STRI fellow. CPA, Ancon
Depositional environments and palynostratigraphy of Lower Cretaceous sediments in the Mamfe Basin, SW Cameroon: Implications for the Early Cretaceous paleoclimate of the equatorial domain of eastern West Africa

Bambi seminar

Thursday, November 26 is Thanksgiving Day. No Bambi seminar is scheduled for BCI.

Arrivals

Scott A. Mori, New York Botanical Garden, to conduct a biodiversity survey, on BCI.

Burkhard Stumpf, University of Bayreuth, to study regional distribution patterns in tropical forest: direct and indirect consequences of drought periods, in Gamboa.

Departures

David Roubik to Washington DC, to represent STRI at the OUSS Endowment Review Meeting and evaluate proposals and meet with Lisa Barnett at the STRI Development office to plan funding proposals. Work on identification of African bees in the entomology collection.

Smithsonian Tropical Research Institute, Panamá www.stri.org November 20, 2009

International Workshop on Marine Invasions

STRI marine biologist Mark Torchin and Greg Ruiz, specialist from the SI Environmental Research Center (in the photo at right) hosted an International Workshop on Marine Invasions from November 16-19, at the Tupper Auditorium. The workshop was sponsored by SENACYT.

Specialists from STRI, SERC, the University of Panama, Panama's Authority for the Environment (ANAM), Maritime and Aquatic Resources (AMP and ARAP), the Panama Canal Authority (ACP), and representatives from other international universities and research centers in Belgium, Canada, Mexico, Tasmania, Australia and the US participated in the event, aimed at exploring the opportunities to establish an international team of collaborators to carry out research on marine invasive species associated with marine transportation between the Pacific and Atlantic Oceans.

El biólogo marino de STRI Mark Torchin y Greg Ruiz, especialista del Centro de Investigaciones Ambientales del Smithsonian fungieron como anfitriones del Taller Internacional sobre Invasiones Marinas del 15 al 19 de noviembre, en el Auditorio del Centro Tupper. El taller fue financiado por SENACYT.

Especialistas de STRI, SERC, la Universidad de Panamá y las Autoridades de Panamá para el Ambiente (ANAM), Recursos Marinos (AMP) y Recursos Acuáticos (ARAP), la Autoridad del Canal (ACP) y universidades y centros de investigación en Bélgica, Canadá, México y los Estados Unidos participaron en el evento. El objetivo del Taller fue explorar las oportunidades para establecer un equipo internacional de colaboradores para llevar a cabo estudios sobre especies invasoras asociadas con el transporte marítimo entre los Océanos Pacífico y Atlántico.

More departures

Ben Turner to Perth, Canberra and Brisbane, Australia, to participate in the Working Group 64 on Soil Phosphorus, ARC-NZ Research Network for vegetation function at the University of Western Australia, Perth, followed by meetings on ongoing projects in Canberra with Alan Richardson at CSIRO, and in Brisbane with Chengrong Chen at Griffiths University.

Monica Alvarado to San José, Costa Rica, to participate in the launch of the HSBC Climate Partnership and to present a talk on the SIGEO project to HSBC.

Nélida Gómez to San José, Costa Rica, to participate in the CADAN-R annual meeting.

New publications

Anker, Arthur, Baeza, Juan Antonio, and De Grave, Sammy. 2009. "A new species of *Lysmata* (Crustacea, Decapoda, Hippolytidae) from the Pacific coast of Panama, with observations of its reproductive biology." *Zoological Studies* 48(5): 682-692.

Bernal, Ximena E., Page, Rachel A., Ryan, Michael J., Argo, IV, Theodore F., and Wilson, Preston S. 2009. "Acoustic radiation patterns of mating calls of the túngara frog (*Physalaemus pustuosus*): Implications for multiple receivers." Journal of the Acoustical Society of America 126(5): 2767.

Cernusak, Lucas A., Winter, Klaus, and Turner, Benjamin L. 2009. "Plant $\delta^{15}N$ correlates with the transpiration efficiency of nitrogen acquisition in tropical trees." *Plant Physiologist* 151(3): 1667-1676.

Rachel Page joins STRI

Rachel Page joined STRI this month as staff scientist. Page has a bachelor´s degree from Columbia University, where she studied Japanese and East Asian Studies. Her career then took a sharp turn into the field of biology, starting with seabird work on Great Gull Island with Helen Hays of the American Museum of Natural History. She worked with honeycreepers, terns, puffins and guillemots at the USGS, Hawaii, and the Petit Manan National Wildlife Refuge in Maine.

In 2002, Rachel joined STRI research associate Mike Ryan at the University of Texas at Austin and started her Ph.D. studies in Ecology, Evolution and Behavior. She was granted a STRI predoctoral fellowship, working with Stanley Rand and Elizabeth Kalko. Ryan, Rand and Kalko introduced her to the joys and rigors of tropical field biology. She obtained her degree in 2008.

Her research focuses on vertebrate behavior, in particular the cognitive behavior of animals in nature. She is interested in predator-prey interactions, the sensory and cognitive ecology of foraging, and the effect of eavesdroppers on the evolution of their prey, with the frog-eating bat, *Trachops cirrhosus*.

After her selection as staff scientist at STRI in 2008, Page completed a Humboldt Research Fellowship at the Max Planck Institute for Ornithology in Seewiesen, Germany, in comparative studies of learning and flexibility in European bat species.

Rachel is joined by husband David Bethel, a freelance science writer, and their 16-month-old daughter, Gwendolyn Wren. She will be dividing her time at between Gamboa, BCI, and Tupper. Her Tupper office is in room 426. Her office phone is 212-8252.

Rachel Page se unió al personal científico permanente de STRI este mes. Page tiene una licenciatura en japonés y estudios sobre Asia Oriental de la Universidad de Columbia. Su carrera giró hacia la biología estudiando aves marinas en la Great Full Island con Helen Hays del Museo de los EU de Historia Natural. Luego trabajó con aves (tangaras mieleros, charranes, frailesillos y aras) en el US Geological Survey en Hawaii y el Refugio de Vida Silvestre Petit Manan en Maine.

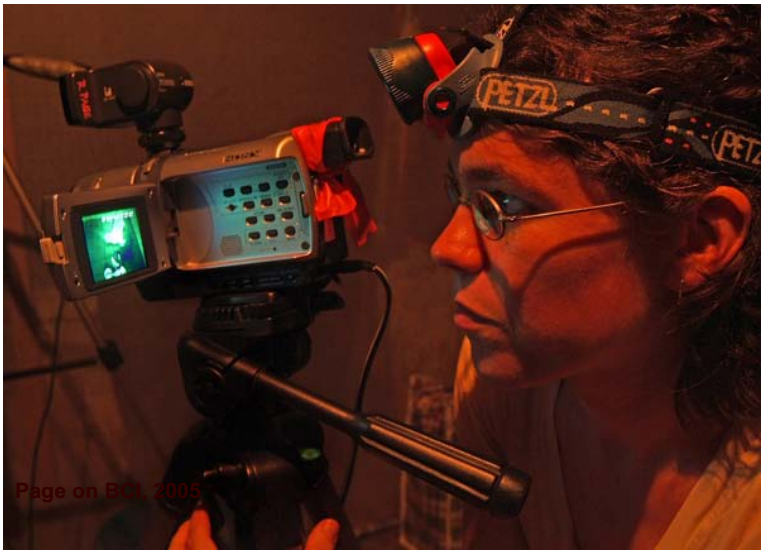
En 2002, Rachel se unió al a investigador asociado a STRI, Mike Ryan en la Universidad de of Texas en Austin y empezó su doctorado en Ecología, Evolución y Comportamiento. Recibió una beca predoctoral de STRI y trabajó con Stanley Rand y Elizabeth Kalko. Ryan, Rand y Kalko la expusieron a las alegrías y rigores del trabajo de campo en biología tropical y obtuvo su doctorado en 2008.

Los estudios de Page se enfocan en el comportamiento de vertebrados, particularmente su comportamiento cognoscitivo en condiciones silvestres. Está interesada en las interacciones entre depredadores y sus presas,

la ecología sensorial y cognoscitiva del forrajeo, y el efecto de los oyentes furtivos en la evolución de sus presas, basándose en el murciélago que se alimenta de ranas, *Trachops cirrhosus*.

Luego de ser seleccionada como nueva científica en STRI en 2008, Page cumplió con una beca de Investigaciones Humboldt que obtuvo para trabajar en Max Planck Institute for Ornithology in Seewiesen, Alemania, donde llevó a cabo estudios comparativos sobre aprendizaje y la flexibilidad en especies de murciélagos europeos.

Rachel llegó a Panamá con su esposo David Bethel, escritor científico independiente, y su hija de 16 meses, Gwendolyn Wren. Page dividirá su tiempo entre Gamboa, BCI, y Tupper. Su oficina en Tupper es la 426 y su teléfono es el 212-8252.



Page on BCI, 2005

More publications

Dick, Christopher W. and Kress, W. John. 2009. "Dissecting tropical plant diversity with forest plots and a molecular toolkit." *BioScience* 59(9): 745-755.

Genome 10K Community of Scientists. 2009. "Genome 10K: A proposal to obtain whole-genome sequence for 10,000 vertebrate species." *Journal of Heredity* 100(6): 659-674.

Graham, Catherine H., Parra, Juan L., Rahbek, Carsten, and McGuire, Jimmy A. 2009. "Phylogenetic structure in tropical hummingbird communities." *Proceedings of the National Academy of Sciences* 106(Supplement 2): 19673-19678.

Heckadon-Moreno, Stanley. 2009. "Alexander Wetmore y las aves de Cerro Campana, 1951." "*Épocas" Tercera Era* (Supplement to *El Panamá América*) 24(6): 10-11.

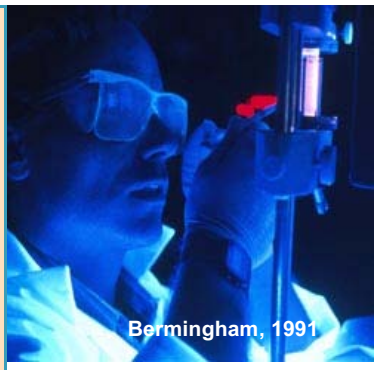
Jaramillo, Cesar A., Crawford, Andrew J., and Ibanez D., Roberto. 2009. "*Incilius melanochlorus* (Wet Forest Toad) Panama, Bocas del Toro." *Herpetological Review* 40(1): 108.

Kress, W. John, Erickson, David L., Jones, Frank Andrew, Swenson, Nathan G., Perez, Rolando, Sanjur, Oris I., and Bermingham, Eldredge. 2009. "Plant DNA barcodes and a community phylogeny of a tropical forest dynamics plot in Panama." *Proceedings of the National Academy of Sciences* 106(44): 18621-18626.

STRI in the news

"10,000 genomes." 2009. *Nature.com blogs*: November 7.

"Genome 10K: A new ark" by Janet Raloff. 2009. *Science News web edition*: November 4.



In the most comprehensive study of animal evolution ever attempted, an international consortium of scientists plans to assemble a genomic zoo —a collection of DNA sequences for 10,000 vertebrate species, approximately one for every vertebrate genus. "... Capturing the genetic diversity of vertebrate species would create an unprecedented resource for the life sciences and for worldwide conservation efforts."

"The growing Genome 10K Community of Scientists (G10KCOS), made up of leading scientists representing major zoos, museums, research centers, and universities around the world, is dedicated to coordinating efforts in tissue specimen collection that will lay the groundwork for a large-scale sequencing and analysis project." STRI director Eldredge Bermingham represents STRI in this scientific community. "Genomes contain information from the past --they are molecular fossils" said Nobel laureate Sydney Brenner, Genome 10K representative from the Agency for Science, Technology and Research.

"The Genome 10K database catalogs specimens from more than 16,000 vertebrate species, living and recently extinct. The species include mammals, birds, non-avian reptiles, amphibians, and fishes, many of which are threatened or endangered." Its inaugural publication appeared in the *Journal of Heredity*, November 4. More at http://genome10K.org

STRI joins *Genome 10K*

En el estudio de evolución animal más comprehensivo que jamás se haya intentado, un consorcio de científicos internacionales planean construir un zoológico genético—una colección de las secuencia de ADN de 10,000 especies de vertebrados, aproximadamente uno por cada género de éstos. "... Capturar la diversidad genética de especies de vertebrados podría crear un recurso sin precedentes para las ciencias vivas y para los esfuerzos de la conservación a nivel mundial."

"La creciente comunidad científica de Genome 10K (G10KCOS) se compone de científicos líderes que representan los zoológicos más importantes, museos, centros de investigación y universidades alrededor del mundo, dedicados a coordinar esfuerzos en la colección de tejidos de especímenes que suministrarán la base un proyecto de secuencias y análisis a gran escala." El representante de STRI en esta comunidad científica es el director Eldredge Bermingham. Los genomas contienen información del pasado "son los fósiles moleculares" comentó Sydney Brenner, quien ganó un premio Nobel y es el representate ante Genome 10K de Agency for Science Technology and Research.

"La base de datos de Genome 10K cataloga especímenes de más de 16,000 vertebrados actuales y recientemente extintos. Las especies incluyen mamíferos, aves, reptiles que no vuelan, anfibios y peces, muchos de los cuales están en peligro. Su publicación inaugural apareció en *Journal of Heredity* (noviembre 4).

More publications

Laurance, William F., Goosem, Miriam, and Laurance, Susan G.W. 2009. "Impacts of roads and linear clearings on tropical forests." *Trends In Ecology & Evolution* 24(12): 659-669.

Legendre, Pierre, Mi, Xiangcheng, Ren, Haibao, Ma, Keping, Yu, Mingjian, Sun, I-Fang, and He, Fangliang. 2009. "Partitioning beta diversity in a subtropical broad-leaved forest of China." *Ecology* 90(3): 663-674.

Maan, Martine E. and Cummings, Molly E. 2009. "Sexual dimorphism and directional sexual selection on aposematic signals in a poison frog." *Proceedings of the National Academy of Sciences* 106(45): 19072-19077.

Ostrovsky, Andrew N., O'Dea, Aaron, and Rodriguez, Felix. 2009. "Comparative anatomy of internal incubational sacs in cupuladriid bryozoans and the evolution of brooding in free-living cheilostomes." *Journal of Morphology* 270(12): 1413-1430.

Shen, Guochun, Yu, Mingjian, Hu, Xin-Sheng, Mi, Xiangcheng, Ren, Haibao, Sun, I-Fang, and Ma, Keping. 2009. "Species-area relationships explained by the joint effects of dispersal limitation and habitat heterogeneity." *Ecology* 90(11): 3033-3041.

Tan, Sylvester, Yamakura, Takuo, Tani, Masako, Palmiotto, Peter A., Mamit, Damis Dawos, Pin, Chin Siew, Davies, Stuart James, Ashton, Peter S., and Baillie, Ian. 2009. "Review of soils on the 52 ha long term ecological research plot in mixed dipterocarp forest at Lambir, Sarawak, Malaysian Borneo." *Tropics* 18(2): 61-86.

HSBC launches 2009 *Climate Confidence Monitor*

The HSBC Group launched their interactive *2009 Climate Confidence Monitor* web site at: http://www.hsbc.com/1/2/sustainability/2009-reports/ccm-2009 This tool shows the results from a survey conducted in Australia, Brazil, Canada, China, France, Germany, Hong Kong, India, Malaysia, Mexico, the UK and the US, to measure public awareness, expectations and level of commitment with regard to environmental issues.

The Climate Partnership was launched in 2007, between HSBC, The Climate Group, Earthwatch, the Smithsonian Tropical Research Institute and WWF.

The Climate Confidence Monitor addresses the most important topics of concern today, indicating those who feel that large organizations should be doing something about the most environmentally pressing issues, those who feel they should be doing something personally to combat climate change, and whether government and non-governmental agencies should have more assertive policy programs. Their results reveal that 65% of the global population demands that governments commit to a climate deal.

The HSBC has officially given its support to the Copenhagen Communiqué on Climate Change, a statement from the business community calling for equitable treatment ahead of the United Nations climate change conference in Copenhagen coming up in December.

As part of the HSBC Latin American corporate sustainability meeting celebrated in Panama, HSBC Climate champions —bank employees committed as volunteers to personally fighting climate change, visited BCI´s original 50-ha plot, the beginning of the largest forest monitoring project ever established, and to get acquainted with the monitoring methodology used by the CTFS.

El Grupo HSBC publicó su versión 2009 de la página de web Climate Confidence Monitor en: http://www.hsbc.com/1/2/sustainability/2009-reports/ccm-2009. Esta herramienta muestra los resultados de una encuentra realizada en Alemanian, Australia, Brasil, Canadá, China, los EU, Hong Kong, India, Malaysia, México y el Reino Unido, para medir la conciencia, expectativas y nivel de compromiso en asuntos ambientales entre los ciudadanos, como parte de la iniciativa del HSBC Climate Partnership.

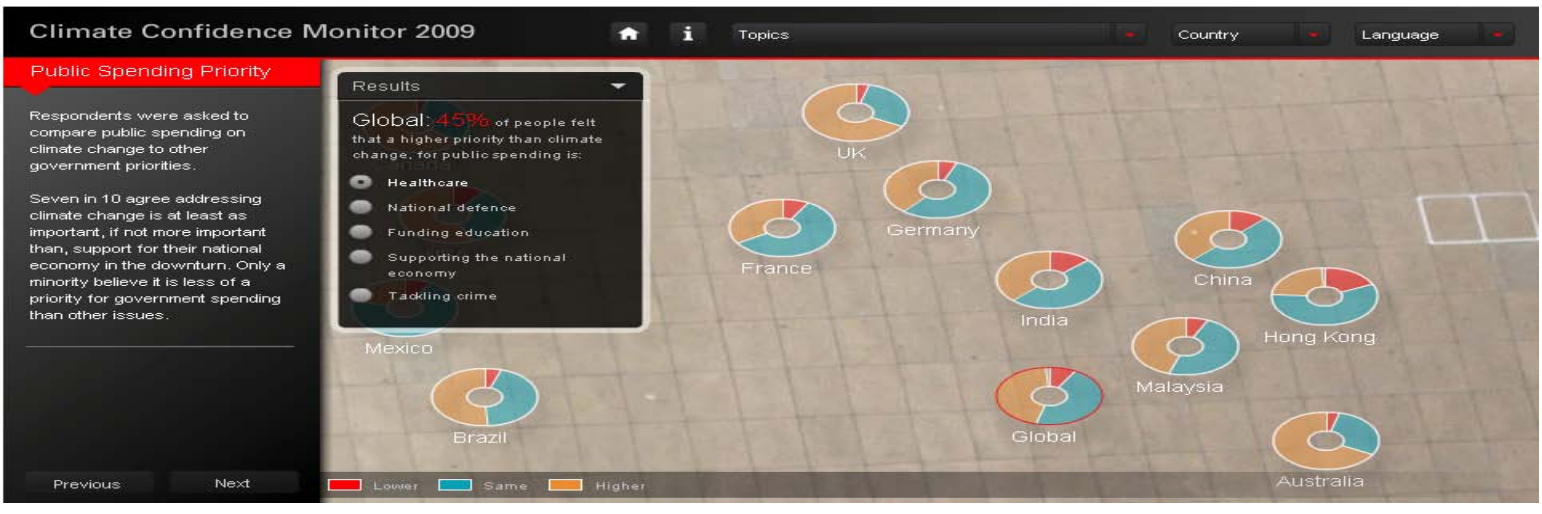
El Climate Partnership fue lanzado en 2007, entre el HSBC, El Climate Group, Earthwatch, STRI y WWF.

El Climate Confidence Monitor evalúa los asuntos más importantes que nos preocupan hoy día. Muestra cuántos están de acuerdo con que las grandes organizaciones deben hacer algo por los asuntos ambientales más apremiantes, aquellos que sienten que deben hacer algo para combatir el cambio climático, y si los gobiernos y entidades no gubernamentales deben llevar a cabo programas con políticas más asertivas. Sus resultados arrojaron que el 65% de la población global reclama que los gobiernos se comprometan a negociar el asunto climático.

El HSBC ha ofrecido su apoyo oficial a Comunicado de la comunidad empresarial de sobre Cambio Global que reclama tratado equitativo de parte de las Naciones Unidas durante la conferencia sobre cambio climático que se llevará a cabo en Copenhagen en diciembre próximo.

Como parte de la reunión de sostenibilidad corportiva del familiarizarse Latinoamericano celebrado en Panamá, los campeones climáticos del HSBC, empleados del banco comprometidos como voluntarios para combatir el cambio climático personalmente, visitaron la parcela original de 50 ha de Barro Colorado, la primera establecida para la red de monitoreo forestal de mayor alcance mundial, y familiarizarse con la metodología de monitoreo usada por el CTFS.

Climate Confidence Monitor 2009



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ARAP
AUTORIDAD DE LOS RECURSOS ACUÁTICOS DE PANAMÁ

The Nature Conservancy, el Instituto Smithsonian de Investigaciones Tropicales y la Autoridad de los Recursos Acuáticos de Panamá

Tienen el agrado de invitarle a la Presentación de Resultados de Proyectos para la Conservación y Manejo de los Recursos Marino Costeros en el Pacífico Panameño.

Miércoles, 25 de noviembre de 2009
Centro de Conferencias Earl S. Tupper, Ancón

8:30 a.m.
Traje de calle

RSVP: 212-8000
Ext. 0

Smithsonian Institution

You are cordially invited to the Service Pins Awards Ceremony 2009.
Place: Exhibit Hall, Earl S. Tupper Center
Date: Wednesday, November 25, 2009.
Time: 3:00 p.m. to 5:00 p.m.

20 years

Alejandro Arze
Ricardo Beteta
Luis Castillo
Vielka Chang-Yau
Walter Dillon
Lastenio Guzman
Gilberto Howell
Dora Justo
Erick Lam
Leopoldo Leon
Julio Polo
America Staff
Alejandro Ureña
Raineldo Urriola

30 years

Angel Aguirre
William Eberhard
Agapito Gonzalez
Harilaos Lessios
David Roubik

40 years

Egbert Leigh