Tupper 4pm seminar

No seminar scheduled for Tuesday, October 9. If you wish to give a seminar, please contact Bert Leigh or Annette Aiello.

Paleo-Talk

Wednesday, October 10, at the CTPA, 4pm, Paleo-talk speaker will be Javier Luque, STRI intern

Decapods throughout time and new fossils from Colombia and Panama

Monthly talk

Wednesday, October 10, at 6pm STRI monthly talk speaker will be Argelis Ruíz, STRI and WIDECAST: Panamá Red de Conservación de Tortugas Marinas en el Caribe, Tupper Center Auditorium

Tortugas marinas de Panamá: pasado, presente y futuro

Bambi seminar

Thursday, October 11, Bambi seminar speakers will be Thomas Bunge and Tanja Schnelle from the University of Ulm, and Rachel Page, from the University of Texas at Austin

Detection and assessment of prey in the frog-eating bat, *Trachops cirrhosus*

Arrivals

Dan Warren, STRI short term fellow from the University of California at Davis, to study gamete plasticity in the Bluehead Wrasse, at Bocas del Toro.

Safety number: 212-8211

Smithsonian Tropical Research Institute, Panamá www.stri.org October 5, 2007

STRI expands in Gamboa

From the Director's Office

On 3 October 2007, Eldredge Bermingham, STRI acting director, signed a contract for a 17.5 acre site in Gamboa with Julio Ross, executive secretary of the Administrative Unit for Reverted Assets of the Ministry of Economy and Finance, representing the Government of Panama. The contract is the first step in STRI's long-term strategic plan to establish a new campus in Gamboa that will support advanced research on plant physiology and global climate change, as well as studies on the role tropical forests play in providing ecosystem services such as clean water and carbon storage under changing environmental conditions.

The town of Gamboa has long been an important center for STRI science. It is the transit point for biologists headed to Barro Colorado Island, and sits on the edge of Soberanía National Park where STRI has carried out long-term monitoring studies of bird populations for 30 years. For decades Gamboa has served as the focal point for studies of the Túngara frog —and more recently red-eyed tree frogs— research that has lead to completely novel insights into the roles of natural and sexual selection in animal behavior, and into the processes underlying biological diversity. STRI has also used Gamboa to host and train graduate and undergraduate students from universities around the world, and for the past 11 years, students attending Princeton University's Tropical Biology Semester.

A number of STRI staff have played pivotal roles in the Gamboa campus acquisition, but we would like to particularly acknowledge Rodrigo Ramírez-Blázquez, STRI's legal counsel, for his patience, persistence and ultimate success. Architectural planning is already underway to replace the Old Schoolhouse on the Gamboa site with a world-class laboratory that is energy-efficient and complies with modern safety and security standards. The plans for the new laboratory should be complete in 2008 and construction is slated to begin in 2009.

Acquisition of a campus in Gamboa would not have been possible without the early foresight and efforts of acting Smithsonian secretary Cristián Samper and undersecretary for Science Ira Rubinoff during the time both led STRI. Both scientists have continued to be influential advocates for Gamboa in their new posts, and STRI gratefully acknowledges their strong support. We also thank the Smithsonian Board of Regents for their vote of confidence and approval of the Gamboa acquisition.

De la Oficina del Director:

El 3 de octubre de 2007, el director encargado de STRI Eldredge Bermingham firmó un contrato por un terreno de 17.5 acres en Gamboa con Julio Ross, secretario ejecutivo de la Unidad Administrativa de Áreas Revertidas del Ministerio de Economía y Finanzas, en representación del Gobierno de

More arrivals

Elise Knecht, Wageningen University & Research Centre, The Netherlands, to join STRI's Automated Radio-Telemetry System project, on BCI.

Goncalo Ferraz, STRI postdoctoral fellow from Instituto Nacional de Pesquisas da Amazonia (INPA) Brazil, to study demographic and ecological predictors of vulnerability to fragmentation in Amazon forest birds, at Tupper.

Stephan Schnitzer, University of Wisconsin - Milwaukee to carry out the project Do lianas cause chronic disturbance and alter successional trajectories in tropical forests?, in Gamboa.

Michael Poulsen, University of Wisconsin-Madison, to study the evolutionary ecology of the attine ant-microbe mutualism, in Gamboa.

Departures

Vielka Chang-Yau to attend the 33rd Conference of the IAMSLIC meeting.

Fernando Pascal and José R. Perurena to Washington DC on official business at SI.

Jeffesrson Hall to Boston, on official business.

Ross Robertson to Houston, to collect and photograph fishes.

David Roubik to Austin, Texas to give seminar at the University of Texas.

Steve Paton to Costa Rica, to Attend the 33 Conferencia Latinoamericana en Informática.

Panamá. El contrato es el primer paso del plan estratégico a largo plazo de STRI, para establecer un nuevo campus en Gamboa que dará apoyo al adelanto de las investigaciones en fisiología vegetal y cambio climático, así como estudios sobre el papel que juegan los bosques tropicales al suministrar servicios ambientales como agua limpia y almacenamiento de carbón bajo condiciones cambiantes en los ecosistemas.

La población de Gamboa ha sido un importante centro para la ciencia en STRI. Es un punto de tránsito para los biólogos que se dirigen a BCI, adyacente al Parque Nacional Soberanía donde STRI ha llevado a cabo estudios de monitoreo de poblaciones de aves desde hace 30 años. Durante décadas, Gamboa ha sido el centro de estudios de la rana Túngara —y más recientemente de las ranas arbóreas de ojos rojos —investigaciones que han arrojado conocimientos certeros y novedosos sobre los roles naturales de la selección sexual y la conducta animal, y sobre los procesos que destacan la diversidad biológica. Gamboa también ha sido un centro para la capacitación de estudiantes graduados y de licenciatura de universidades alrededor del mundo. Durante los últimos 11 años ha albergado a los estudiantes del Programa del Semestre de Biología Tropical de la Universidad de Princeton.

La adquisición del campus de Gamboa es el resultado del esfuerzo de varios empleados de STRI. En particular queremos reconocer a Rodrigo Ramírez-Blázquez, consejero legal de STRI, por su paciencia y persistencia para lograr el éxito del proyecto. Los planos arquitectónicos para reemplazar la vieja escuela de Gamboa se han iniciado para construir un laboratorio de primera clase que será energéticamente eficiente y cumplirá con todos los estándares de seguridad industrial moderna. Los planos del nuevo laboratorio deberán completarse en 2008, para dar inicio a la construcción en 2009.

La adquisición de un campus en Gamboa no hubiera sido posible sin la visión inicial y esfuerzos de secretario encargado del Smithsonian Cristián Samper, y del subsecretario para Ciencias Ira Rubinoff durante el período en que ambos dirigían a STRI. Ambos científicos continuarán siendo un apoyo influyente para Gamboa y STRI les agradece su decidido apoyo. También agradecemos a la Junta de Regentes de SI por su voto de confianza y aprobación de la adquisición en Gamboa.

STRI Library remodeling completed

On Tuesday, October 2, the STRI Library at the Tivoli site opened its doors after months of remodeling and upgrading. The Library gained a more functional and operational distribution of the existing space on the main floor. All bathrooms for the staff and the public were upgraded. A new bathroom for people with special needs was added. Better lighting, newly upholstery furniture and flooring to avoid fungal growth and allergies were among the improvements. Windows were added to the new reading area. Communications services were upgraded: eight Online Public Access Catalogs, six computers for the library patrons, working space for WIFI (wireless internet) and a larger reference and circulation area.

El martes 2 de octubre la Biblioteca de STRI en el sitio Tívoli abrió sus puertas luego de meses de remodelaciones y actualización. La Biblioteca ha ganado una mejor distribución funcional y de operaciones con el espacio existente. Todos los baños, para su personal y el público se han remodelado y se instalaron nuevas instalaciones para personas con necesidades especiales. Mejor iluminación, revestimiento del piso para evitar hongos y alergias fueron incluidos en las mejoras. Se instalaron ventanas adicionales en la nueva sala de lectura. También se actualizaron las comunicaciones: ocho catálogos de acceso público en línea, seis computadoras para los usuarios, espacio de trabajo para WIFI (internet inalámbrico) y un área de circulación más amplia.

New publications

Crawford, Andrew J., Bermingham, Eldredge, and Polania S., Carolina. 2007. "The role of tropical dry forest as a long-term barrier to dispersal: a comparative phylogeographical analysis of dry forest tolerant and intolerant frogs." *Molecular Ecology* Online.

Floeter, S.R., Rocha, Luiz A., Robertson, D. Ross, Joyeux, J.C., Smith-Vaniz, W.F., Edwards, A.J., Barreiros, J.P., Ferreira, C.E.L., Gasparini, Joao Luiz, Brito, A., Falcon, J.M., Bowen, Brian W., and Bernardi, Giacome. 2007. "Atlantic reef fish biogeography and evolution." *Journal of Biogeography*. Online.

Freyman, Bernd P. 2007. "Physical properties of fungal rhizomorphs of marasmioid basidiomycetes used as nesting material by birds." *Ibis* Online.

Mendoza-Franco, Edgar F., Aguirre-Macedo, M. Leopoldina, and Vidal-Martínez, Víctor. 2007. "New and previously described species of Dactylogrydae (Monogenoidea) from the gills of Panamanian freshwater fishes (Teleostei)." *Journal of Parasitology* 93(4): 761-771.

STRI in the news

"Shell fame: Paleobiologist Aaron O´Dea has made his name by sweating the small stuff" by Laura Helmut. 2007. *Smithsonian* Special Issue, Fall.

"Hallazgos: Los fósiles en las entrañas canaleras. Findings: the fossils deep within the Canal´s core, by Sofía Kalormakis de Kosmas. 2007. *Panorama* (septiembre): 84-96.

Galeta Point Marine Laboratory launches surface and underwater web cams

The Galeta Point Marine Laboratory recently launched two web video cameras, one directed to the surface of the reefs surrounding its facilities and another to document underwater activities.

This project was possible thanks to a donation from SI Women´s Committee to purchase and install the video-equipment.

The pictures projected from these web cams change every 60 seconds. You may access the site at www.stri.org.

El Laboratorio Marino de STRI en Punta Galeta inauguró dos cámaras de vídeo para la web, una dirigida hacia la superficie de los arrecifes que rodean sus instalaciones, y otra dirigida a documenta las actividades bajo el agua.

Este proyecto fue posible gracias a una donación del Women´s Committee para adquirir e instalar el equipo de video.

Las fotografías de estas cámaras cambian cada 60 segundos y pueden verse en: www.stri.org

STRI´s research associate Phyllis Coley invites the STRI community to participate in: "Interdisciplinary Studies in the Chemical Biology of the Tropics. A Pan-American Advanced Studies Institute"

Pan-American Advanced Study Institutes (PASIs) are designed to disseminate cutting edge knowledge to an audience of young scientists (postdoctoral and upper-level PhD) from across the Americas in Tambopata, Peru May 26-June 5, 2008

This PASI will bring together ecologists, biochemists, geneticists, and plant and microbial biologists with an interest in tropical biology for a ten-day workshop in Tambopata National Reserve, Peru. All keynote speakers are leaders in their fields, and the post-doctoral and advanced doctoral student participants will be rigorously selected based on several criteria, including their proven commitment to interdisciplinary research, and their interest in developing the field of tropical chemical biology during their scientific careers. All participants' expenses are paid. How to apply: This PASI is open to post-docs and high-level PhDs (3rd year and higher) from North and South America. Please email your current resume, including publications, a list of three references and their contact information, and a 2-3 page letter of interest to: Jorge Vivanco at j.vivanco@colostate.edu. Women and minorities are particularly encouraged to apply. Deadline: October 31, 2007.

STRI in the news

DNA barcodes 'tackle disease, protect biodiversity' A mosquito of the *culex* genus, which transmits West Nile virus, by Eva Aguilar. SciDevNet: 21 September.

Nature News: Invasive crabs found flourishing in Panama By UPI. Sep 20, 2007. http://science.monstersandcritics.com/news/printer

Rice grown in China 7,700 years ago, by Thomas H. Maugh II. 2007. *Los Angeles Times* September 27.

Global Warning: Environmental factors like deforestation and global warming will perpetuate spreading parasites and infectious disease by Amanda Koehler. 2007. *ADVANCE for Administrators of the Laboratory* at www.advanceforal.com/common/Editorial/editorial.aspx?CC=97808 September 28, 2007.

"Científicos del Instituto Smithsonian de Investigaciones Tropicales hallaron una especie de cangrejo "invasor" en el área donde se desarrolla la expansión del Canal de Panamá" by José Arcia. 2007. *La Prensa* (September 25).

Empieza a escasear la comida, by Tamara Del Moral. 2007 *La Prensa* Innova (September 22).

Reflexiones sobre un cangrejo, by Eduardo Esquivel. 2007. *La Prensa* (September 25) 5A.

"Cangrejos invasivos prosperan en Panamá" 2007. *Square Feet* (Cuarta semana de septiembre): C7. In Spanish and English.

The mud crab continues to spread

Part two of two

Story: Mark Torchin
Edited by M Alvarado and ML Calderón
Photos: MA Guerra

With funding from Panama´s Secretariat for Science, Technology and Innovation (SENACYT) and the help of the Panama Canal Authority (ACP), Mark Torchin's lab is now evaluating the extent of the crab's distribution within the Canal.

Shipping in the Canal is the most likely mechanism of introduction of *R. harrisii* to Panama, either via hull fouling or release of ballast water.

The Panama Canal is a major center of shipping activity in the Americas, allowing transit of approximately 13 to 14 thousand vessels per year from around the globe.

Given the plans for expanding the capacity of the Canal and the importance of shipping in this region, understanding the role of the Panama Canal in this and other coastal invasions is imperative.

Con fondos de la Secretaría Nacional de Ciencia, Tecnología e Innovación de Panamá (SENACYT) y la colaboración de la Autoridad del Canal de Panamá (ACP), el laboratorio de Mark Torchin se encuentra evaluando la distribución de este cangrejo dentro del Canal.

Se presume que el mecanismo de introducción a Panamá utilizado por el cangrejo *R. harrisii* haya sido a través de incrustaciones en los cascos de los barcos, o cuando éstos liberan aguas de lastre.

El Canal de Panamá es un centro importante de actividad portuaria en las Américas, permitiendo el tránsito de aproximadamente 13 a 14 mil barcos por año de todos los lugares del mundo.

Debido a los planes para ampliar la capacidad del Canal y la importancia de la actividad portuaria de la región, el conocimiento sobre el papel que juega el Canal de Panamá en ésta y otras invasiones costeras, es imperativo.

Smithsonian Tropical Research Institute, October 5, 2007