

Tupper 4pm seminar

Tue, Feb 19, 4pm seminar speaker will be Steve O'Brien, National Cancer Institute Felidae genomics for conservation, species recognition, and the rest—one amazing journey

Bambi seminar

Thu, Feb 21, Bambi seminar speaker will be Steven Orzack, Fresh Pond Research Institute Eight cells and beyond: the demographic trajectory of the human sex ratio

Arrivals

Ni Feng, Chinese Academy of Sciences, to study hormonal and neural control of a sexually dimorphic behavior, in Gamboa.

Maria Vittoria Modica, Università di Roma La Sapienza, to study intoxicating connections: Bridging the gap between the lab bench and informal science education using venomous molluscs, at Naos and the R/V *Urraca*.

Charlotte Jander, Cornell, to study plant sanctions and wasp pollination behavior in the fig tree-fig wasp mutualism, on BCI.

Kathrin Barboza Marquez, BIOTA-PCMB, to study the use of bat habitats on island borders and continuous forests, on BCI.

Tracy Stetzinger, US, to join Corinne Richards in the study of selection and the rapid evolution of morphological variation among Strawberry poison-dart frogs of the Bocas del Toro archipelago.

David King, CTFS fellow from the University of Virginia, to infer height growth histories from leaf scars in palms, on BCI



Smithsonian Tropical Research Institute, Panamá

www.stri.org

February 15, 2008

Not only size: Location also matters



“Numerical superiority confers a competitive advantage during contests among animal groups, shaping patterns of resource access, and, by extension, fitness. However, relative group size does not always determine the winner of intergroup contests. Smaller, presumably weaker social groups often defeat their larger neighbors, but how and when they are able to do so remains poorly understood.”

Margaret C. Crofoot and Ian C. Gilby from Harvard, Martin C. Wikelski, from Princeton, and Roland W. Kays, New York State Museum, published “Interaction location outweighs

the competitive advantage of numerical superiority in *Cebus capucinus* intergroup contests” in the January 15 issue of *Proceedings of the National Academy of Sciences (PNAS)*, product of a study of six groups of white-faced capuchin monkeys between June 2004 and September 2005 on BCI.

In their article, the authors “demonstrate that contest outcome depends on an interaction between group size and location, such that small groups can defeat much larger groups near the center of their home range. The tendency of resident groups to win contests may help explain how small

groups persist in areas with intense intergroup competition.”

PNAS provides a supporting movie in their web site at: <http://www.pnas.org/> with animation of data from the Automated Radio Telemetry System (ARTS) that was used in this study. The video shows the movements of 12 capuchin monkeys in six social groups over the course of one day and includes an intergroup interaction.

The article can be obtained from calderom@si.edu

More arrivals

Antje Kretzschmar, Humboldt-University, Berlin, to join Dina Dechman in her studies of the role of odors for mate choice and social structure in *Noctilio albiventris*, the lesser Bulldog-bat, in Gamboa.

New publications

Angehr, George R., and Kushlan, James A. 2007. "Seabird and colonial wading bird nesting in the Gulf of Panama." *Waterbirds* 30(3): 335-357.

Anker, Arthur. 2007. "*Alpheus zimmermani* sp nov., a new colourful snapping shrimp (Crustacea: Decapoda) from the Caribbean Sea." *Cahiers de Biologie Marine* 48(3): 241-247.

Anker, Arthur. 2007. "New species and records of Alpheid shrimps, genera *Salmoneus bolthuisi* and *Parabetaeus coutierei*, from the Tropical Western Atlantic (Decapoda, Caridea)." *Zootaxa* 1653: 21-39.

Anker, Arthur, and Dworschak, Peter C. 2007. "Description of a new species of *Richalpheus* Anker and Jeng, 2006 (Crustacea : Decapoda : Alpheidae) from the Red Sea." *Journal of Natural History* 41(37-40): 2331-2340.

Baeza, J. Antonio. 2007. "No effect of group size on sex allocation in a protandric-simultaneous hermaphroditic shrimp." *Journal of the Marine Biological Association* 87(5): 1169-1174.

Baeza, J. Antonio, and Anker, Arthur. 2008. "*Lysmata bochi* n. sp., a new hermaphroditic shrimp from the Southwestern Caribbean Sea (Caridea: Hippolytidae)." *Journal of Crustacean Biology* 28(1): 148-155.

CTFS Neotropical coordinator

Alberto "Beto" Vicentini, was selected for the position of Neotropical coordinator of STRI's Center for Tropical Forest Science, effective February. He is posted in Panama. Vicentini obtained a Ph.D. in Ecology, Evolution and Systematics at the University of Missouri Saint Louis, with the thesis "*Pagamea Aubl.* (Rubiaceae), from species to processes, building the bridge" in 2007. He also holds a BS in Forestry from the Universidade Federal do Paraná, Curitiba, Brazil. Vicentini brings experience in teaching, field work and project coordination, speaks five languages and has been a recipient of important research grants. He will be stationed in Panama. Welcome to the hall!

Alberto "Beto" Vicentini, fue seleccionado para la posición de coordinador para el Neotrópico del Centro de Ciencias Forestales del Trópico de STRI, a partir de febrero, con oficinas en el Centro Tupper en Panamá. Vicentini obtuvo su doctorado en Ecología, Evolución y Sistemática en la Universidad de Missouri en Saint Louis, con la tesis "*Pagamea Aubl.* (Rubiaceae), from species to processes, building the bridge" [*Pagamea Aubl.* (Rubiaceae) de las especies a los procesos, construyendo el puente]. También tiene una licenciatura en Forestería de la Universidad de Paraná, Curitiba, Brasil. Vicentini tiene experiencia en enseñanza, trabajo de campo y coordinación de proyectos,



Photo: courtesy of Stuart Davies

habla cinco idiomas y ha sido ganador de importantes becas para sus investigaciones. Sus oficinas están en Panamá. ¡Bienvenido a bordo!

Ilana Schoenfeld joins STRI as CTFS program manager

Recently, Ilana Schoenfeld joined STRI's Center for Tropical Forest Science as Program Manager. She has a background in science content development, project management and evaluation, and fundraising. Her experience ranges from the development of science-based educational media, to the development and evaluation of programs related to science education and urban community development. She has worked at a variety of organizations including Brown Publishing Network, The JASON Foundation for Education, Mystic Aquarium's Immersion Institute, the Coalition for Environmentally Responsible Economies, and the Ecological Society of America. Schoenfeld has served as project manager, senior science editor, museum exhibit developer, evaluator, and grant writer. She holds a Bachelor of Arts in History from Brandeis University and a Master's in

Environmental Science/Social Ecology from Yale University. At STRI, she will be in charge of CTFS' diverse array of projects. Welcome!

Recientemente, Ilana Schoenfeld se unió al Centro de Ciencias Forestales del Trópico de STRI, como administradora de programas. Ha trabajado en desarrollo de contenido científico, administración y evaluación de proyectos y recaudación de fondos. Su experiencia se extiende desde el desarrollo de medios educativos con base en ciencia, hasta el desarrollo y evaluación de programas relacionados a la educación científica y desarrollo de comunidades urbanas. Ha trabajado en una variedad de organizaciones como *Brown Publishing Network*, Fundación Jasón para la Educación, *Mystic Aquarium's Immersion Institute*, *Coalition for Environmentally Responsible Economies*, y *Ecological Society of America*. Schoenfeld ha



Photo courtesy of Ilana Schoenfeld

fungido como administradora de proyectos, editora científica "senior", encargada del desarrollo de exhibiciones en museos, evaluaciones y desarrollo de propuestas para proyectos educativos y de investigación. Tiene una licenciatura en Arte e Historia de la Universidad de Brandeis y una maestría en Ciencias Ambientales y Ecología Social de Yale. En STRI, Schoenfeld estará encargada de una amplia variedad de proyectos del CTFS. ¡Bienvenida!

New publications

Basset, Yves. 2008. "Ecologia globale: interazioni insetto/pianta nelle foreste pluviali tropicali [Global ecology: insect-plant interactions in tropical rainforests]." In Curletti, G., and Giacobino, E. (Eds.) *Insecta, scienza e arte tra forme e colori. Cataloghi del Museo Regionale di Scienze Naturali di Torino: 42-46.* Torino: Eventi & Progetti.

Guimaraes, Jr., Paulo R., Rico-Gray, Victor, Oliveira, Paulo S., Izzo, Thiago J., dos Reis, Sergio F., and Thompson, John N. 2007. "Interaction intimacy affects structure and coevolutionary dynamics in mutualistic networks." *Conservation Biology* 17: 1-7.

Hurlbert, Allen H., Ballantyne, Ford, and Powell, Scott. 2008. "Shaking a leg and hot to trot: the effects of body size and temperature on running speed in ants." *Ecological Entomology* 33(1): 144–154.

Laurance, William F. 2007. "Road to ruin." *Himalayan Journal of Science* 4(6): 9.

Metz, Margaret R., Comita, Liza S., Chen, Yu-Yun, and Nordena, Natalia. 2008. "Temporal and spatial variability in seedling dynamics: a cross-site comparison in four lowland tropical forests." *Journal of Tropical Ecology* 24(1): 9-18.

Meyer, Christoph F.J., Frund, Jochen, Lizano, Willy Pineda, and Kalko, Elisabeth K.V. 2008. "Ecological correlates of vulnerability to fragmentation in Neotropical bats." *Journal of Applied Ecology* 45(1): 381-391.

CTFS-AA Field Biology Course: The Biodiversity of Borneo 2008



Photo > courtesy of Stuart Davies

In association with the Harvard University Summer School, STRI's Center for Tropical Forest Science and the Arnold Arboretum (CTFS-AA) will offer a field biology course to be held in Sarawak and Sabah (East Malaysia) from July 1st to August 5, 2008. Ten Southeast and South Asian participants will join ten Harvard students to study terrestrial and marine biodiversity, ecology and conservation, with instructors from Harvard University and other institutions.

A key feature will be the development of skills in research project design, execution and analysis, based around the statistical platform 'R'. The students will complete two independent projects, from conception to presentation, and participate in a group project on the coral reef. They will gain database and web publishing skills by developing a community digital record of the trip.

The course is aimed at advanced undergraduates, recent graduates currently active in biological research, and postgraduate entry-level students. Travel, food, accommodation and course fees will be funded for Tropical Asian nationals (ASIAN, PNG, India, Sri Lanka, Bangladesh, China) by the CTFS-AA program. Students will be responsible for other costs and some students may be requested to pay their international travel. Places may be available for non-Harvard, non-Asian, paying students. Students will be selected to provide broad international representation.

For more information see: <http://phylodiversity.net/borneo-course>
Send application materials to: Cam Webb, c/o borneo2008@phylodiversity.net

Deadline: March 15, 2008

More publications

Remigio, E.A., and Duda, Jr., Thomas F. 2008. "Evolution of ecological specialization and venom of a predatory marine gastropod." *Molecular Ecology* 17(4): 1156-1162.

Meyer, Christoph F.J., and Kalko, Elisabeth K. V. 2008. "Bat assemblages on Neotropical land-bridge islands: nested subsets and null model analyses of species co-occurrence patterns." *Diversity and Distributions Online*.

Remigio, E.A., and Duda, Jr., Thomas F. 2008. "Evolution of ecological specialization and venom of a predatory marine gastropod." *Molecular Ecology* 17(4): 1156-1162.

Yavitt, Joseph B., and Wright, S. Joseph. 2008. "Seedling growth responses to water and nutrient augmentation in the understorey of a lowland moist forest, Panama." *Journal of Tropical Ecology* 24(1): 19-26.

Zotz, Gerhard, and Schultz, Steffen. 2008. "The vascular epiphytes of a lowland forest in Panama—species composition and spatial structure." *Plant Ecology* 195(1): 131-141.

STRI in the news

"Parasitized ants get berry sick" by Cynthia Graber. 2008. *Scientific American*: February 5. www.sciam.com/podcast/episode.cfm?id=E6CF0FA2-051B-D169-C8898C7A371DCB6B

"Ants do it. So do bees. Why shouldn't we?" by Norm Kamikow. 2008. *Chief Learning Officer*, February. <http://www.climedia.com/columnists/2008/February/2069/index.php>

Science, money and people —together to fight the heat

Story: M Alvarado
& ML Calderon

Photo: Courtesy of
Stuart Davies

Brunei Darussalam, officially the State of Brunei, the remnant of a very powerful sultanate, is located on the island of Borneo, in Southeast Asia. It regained its independence from the UK in 1984. Apart from its coastline with the South China Sea it is completely surrounded by the state of Sarawak, Malaysia. Has a total surface of 5,765 km² dissected by many rivers and streams, and has a population under 400,000.

STRI's Center for Tropical Forest Science (CTFS) the largest tropical forest research network in the world, is rapidly coordinating the SI Global Earth Observatory system

(SIGEO) across the globe, to study the effects of the global warming. The studies are possible thanks to funds from the Hongkong and Shanghai Banking Corporation (HSBC). In 2007 they launched a Climate Partnership to fight the effects of global warming. Their most important asset —315,000 employees—are committed in a volunteer effort, the Climate Champions * program.

The new Brunei 25ha site, home to the Kuala Belalong Field Studies Center set up in 1991, is the latest of SIGEO's associations.

* www.hsbccommittochange

The center is located deep in the country's unspoiled jungle as an international focus for research into the threatened rainforests of Borneo. It is a place for researchers with approved short or long term projects, students who follow one of the educational programs run by the Center, or government officers working on approved environmental programs.



El estado de Borneo, remanente de un muy poderoso sultanato, está localizado en la Isla de Borneo, al sureste de Asia. Recuperó su independencia del Reino Unido en 1984. Aparte de una línea costera con el Mar del Sur de China, está completamente rodeado por el Estado de Sarawak, Malasia. Tiene una superficie total de 5,765 km² interrumpida por muchos ríos y fuentes de agua, y tiene una población menor a 400,000 habitantes.

* www.hsbccommittochange

El Centro de Ciencias Forestales del Trópico de STRI (CTFS) la red de parcelas de bosques más extensa del mundo, está coordinando rápidamente el sistema de Observatorios Globales de la Tierra del Smithsonian (SIGEO) alrededor del globo, para estudiar los efectos del cambio climático. Los estudios se llevan a cabo gracias a fondos del Hongkong and Shanghai Banking Corporation (HSBC) quienes iniciaron el Climate Partnership en 2007. El mayor de sus activos —315,000 empleados— están comprometidos en un esfuerzo voluntario, el programa Climate Champions *

La nueva parcela de 25ha de Borneo, hogar del Centro de Estudios de Campo de Kuala Belalong establecido en 1991, es la asociación más reciente de SIGEO. El centro está localizado en bosques intactos en las entrañas del país, como punto internacional para investigaciones sobre los bosques tropicales que se encuentran en peligro en Borneo. Es un lugar para investigadores con proyectos cortos o a largo plazo aprobados, estudiantes que siguen alguno de los programas de educación manejados por el Centro y funcionarios gubernamentales que trabajan en programas ambientales aprobados

Are you fluent in English?



Have you had any experience as a nature guide and enjoy working with groups of visitors? Are you enthusiastic and would like to share your knowledge with BCI's "one day" visitors?

If you are interested in working as a BCI nature guide, please send your CV before February 22, 2008 to Tamara Castillo at: castillot@si.edu

A background in biology, ecology, zoology or related fields is desirable. We will contact you for an interview.