

## Tupper 4pm seminar

Tuesday, April 28, 4pm  
Tupper seminar speaker will be Stefan Schnitzer, University of Wisconsin, Milwaukee  
**The ecology of lianas and their role in tropical forests**

## CTFS forest science talk

Tuesday, April 28, CTFS talk speaker will be Laura Schreeg, Large Meeting Room, at 10am  
**Leaf litter leachate and the fate of phosphorus in seasonal lowland tropical forests**

## BDG meeting

The Behavior Discussion Group will meet on Tuesday, April 28 at 2pm in the Large Meeting Room with Oscar Puebla, STRI and McGill

**Mate choice and mimicry in the hamlets (*Hypoplectrus*): preliminary behavioral experiments and observations in Bocas del Toro**

## Bambi seminar

No Bambi seminar scheduled for this week. If you wish to give a Bambi, please contact Bambi Jefe at [bcibambi@gmail.com](mailto:bcibambi@gmail.com)

## Arrivals

Suzanne den Boer, University of Copenhagen, to join a project on evolutionary ecology of fungus growing ants, in Gamboa.

Jacalyn Giacalone and Gregory Willis, Montclair State University, to continue with Barro Colorado Island mammal census.

## Safety number

# STRI news 2009



Smithsonian Tropical Research Institute, Panamá

[www.stri.org](http://www.stri.org)

April 24, 2009



## STRI carbon footprint conference on Earth Day

A main event attended by the STRI community was conducted on Earth Day by director Eldredge Bermingham, Bill Laurance, Catherine Potvin, Fernando Pascal, Georgina de Alba and Beth King.

According to Bermingham, this is the first time SI has engaged in reducing carbon emissions as a priority. "We are leaders, we must provide leadership," concluded Bermingham, who is committed to increase research at STRI on how to reduce our general footprint here and on the globe.

Laurance emphasized STRI efforts to understand how much carbon we are producing, in response to the latest estimates of carbon emissions which have greatly accelerated around the globe. According to a carbon audit conducted by the Edinburgh Centre for Carbon Management, UK, STRI's annual emissions are about 3900 tons of CO<sub>2</sub> per year, the equivalent of burning seven hectares of tropical forest every year.

Catherine Potvin described our efforts to compensate STRI's carbon emissions in association with Embera communities in Ipetí, located in the northeast Panama province near Darien. The efforts include providing tree species saplings for reforestation and paying for CO<sub>2</sub> sequestration over time.

OFEO associate director Fernando Pascal presented ongoing institutional efforts implemented at STRI, their positive results and challenges, as well as future plans to reduce the use of thermic electricity, gasoline and construction products not labeled as "green."

Georgina de Alba, associate director for Finance and Administration at STRI presented an update on the recycling project launched last year, and encouraged everybody to implement the necessary measures not only here, but at home. Finally, Beth King announced the design of a survey to gather ideas on what can we do to reduce our carbon footprint.

Other activities to celebrate Earth Day were conducted at different facilities of STRI.

En el Día de la Tierra se llevó a cabo un importante evento para la comunidad de STRI, liderado por el director Eldredge Bermingham, Bill Laurance, Catherine Potvin, Fernando Pascal, Georgina de Alba y Beth King.

De acuerdo a Bermingham, esta es la primera vez que SI se ha comprometido a reducir nuestras emisiones de carbono como prioridad. "Somos líderes y debemos proporcionar liderazgo," concluyó Bermingham, quien está comprometido a aumentar las investigaciones en STRI sobre como reducir nuestra huella en general, aquí y alrededor del planeta.

Laurance enfatizó los esfuerzos de STRI para conocer qué tanto carbono producimos, ya que de acuerdo a los cálculos publicados más recientemente sobre las emisiones de carbono,

## More arrivals

Corinne Richards, University of California at Berkeley, to study the selection and the rapid evolution of morphological variation among Strawberry poison-dart frogs of the Bocas del Toro archipelago.

Boris Baer, University of Western Australia, to collaborate in the project on evolutionary ecology of fungus-growing ants, in Gamboa.

## Departures

Carlos Jaramillo to Washington DC, to attend Strategic Planning meetings.

Oris Sanjur to Cali, Colombia, to attend a Ph.D. thesis presentation and present a conference about STRI research at Universidad del Valle.

Eldredge Bermingham to Laramie, Wyoming to attend the Experimental Program to Stimulate Competitive Research (EPSCoR) Ecology Review Committee meeting. To San Francisco on fund-raising activities at Moore Foundation, and to sign a memorandum of understanding between Carnegie and STRI. To New York to meet with donors and Washington DC to launch the Amphibian rescue effort at the National Zoological Park, attend climate change meetings, TBC: SIGEO briefing and to Montreal, Canada, to attend Oscar Puebla's thesis defense at McGill University.

D. Ross Robertson to Atlanta, Georgia, to collect and photograph fishes.

estas están aumentando exponencialmente alrededor del mundo. De acuerdo a un cálculo llevado a cabo por Edinburgh Centre for Carbon Management, UK, las emisiones anuales de STRI son de cerca de 3900 toneladas de CO<sub>2</sub> por año, lo equivalente a quemar siete hectáreas de bosques tropicales al año.

Catherine Potvin describió nuestros esfuerzos para compensar las emisiones de carbono de STRI en asociación con comunidades Emberá en Ipétí, al noreste de la

provincia de Panamá. El esfuerzo conlleva proporcionar plantones de especies de árboles para reforestar, y pagar por el secuestro de CO<sub>2</sub> con el tiempo.

Fernando Pascal, director asociado para Instalaciones y Operaciones presentó los esfuerzos institucionales que se están llevando a cabo, sus resultados positivos y los retos, así como los planes futuros para reducir el consumo de electricidad térmica, gasolina y productos para construcción no clasificados como "verdes".

Georgina de Alba, directora asociada para Administración y Finanzas presentó los logros y expectativas del programa de reciclaje en STRI que se empezó el año pasado, y animó a todos a implementar las medidas de reciclaje aquí y en nuestros hogares. Finalmente, Beth King anunció el diseño de una encuesta para reunir ideas sobre qué hacer para reducir nuestra huella de carbono.

En otras instalaciones de STRI también se llevaron a cabo actividades para celebrar el Día de la Tierra.

## Smithsonian to celebrate Panama in 2009

The Smithsonian Latino Center (SLC), whose mission is "to promote the cultural, educational and scientific advancement of America's [United States of America] fastest growing population" has chosen Panama as their subject of celebration for 2009.

The SLC program "Panama at the Smithsonian" has been organized in partnership with STRI and Museo del Canal Interoceánico de Panamá. Its first activity, a concert by the Danilo Pérez Trio will be held on Sunday, April 26, 3-5pm at the Carmichael Auditorium, National Museum of American History, in Washington DC.

Those of you in the Washington area can celebrate Jazz Appreciation Month with the Danilo Pérez Trio! Join the innovative Panamanian pianist and composer, Danilo Pérez, for a free afternoon concert that reinterprets jazz with traditional Latin American genres. Danilo will be accompanied by bassist Ben Street and percussionist Adam Cruz."



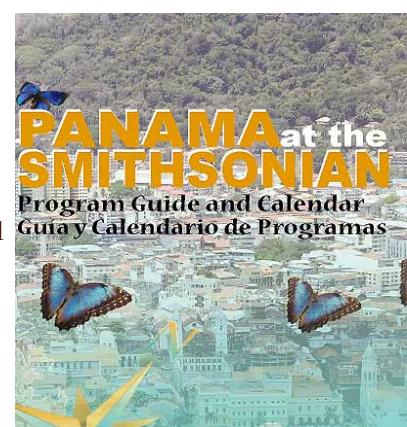
<http://www.cottonclubroma.it/public.images/Danilo%20Prez%20Trio.jpg>

El Centro Latino del Smithsonian (SLC, por sus siglas en inglés), cuya misión es "fomentar los avances culturales, educativos y científicos de la población de mayor crecimiento en los Estados Unidos de América", ha escogido a Panamá como tema de celebración para 2009.

El programa de SLC "Panamá en el Smithsonian" ha sido organizado en conjunto con STRI y el Museo del Canal Interoceánico de Panamá. Su primera actividad, el concierto de Danilo Pérez Trio, se llevará a cabo el domingo 26 de abril, de 3-5pm en el Auditorio Carmichael del Museo Nacional de Historia de los EU en Washington DC.

Aquellos de ustedes que se encuentran en el área de

Washington DC, ¡celebren el Mes de Apreciación del Jazz con el Danilo Pérez Trío! Acompañen al innovador pianista y compositor panameño Danilo Pérez en un concierto gratuito que reinterpreta el jazz con géneros latinoamericanos tradicionales. Además de Danilo, el trío está compuesto por el bajista Ben Street y el percusionista Adam Cruz.



## More departures

Ira Rubinoff to Washington DC to attend the Annual James Smithsonian Society reception and dinner at the National Museum of American History, Behring Center, representing director Eldredge Bermingham, visit the Development Office, and Archives. He will also travel to Chattanooga, Tennessee, to meet with Hacker Caldwell, Chairman of the SI National Board.

## New publications

Baker, Timothy R., Phillips, Oliver L., Laurance, William F., Pitman, Nigel C.A., Almeida, Samuel, Arroyo, Luzmilla, DiFiore, Anthony, Erwin, Terry L., Higuchi, Niro, Killeen, Timothy J., Laurance, Susan G.W., Nascimento, Henrique E.M., Monteagudo, Abel, Neill, David A., Silva, Jose Natalino Macedo, Malhi, Yadvinder, Gonzalez, G. Lopez, Peacock, Julie, Quesada, Carlos Alberto, Lewis, Simon L., and Lloyd, Jon. 2009. "Do species traits determine patterns of wood production in Amazonian forests?" *Biogeosciences* 6(2): 297-307.

Clark, Christopher James, and Dudley, Robert. 2009. "Flight costs of long, sexually selected tails in hummingbirds." *Proceedings of the Royal Society B: Biological Sciences* 276(1664): 2109-2115.

Dalling, James W., and Brown, Thomas A. 2009. "Long-term persistence of pioneer species in tropical rain forest soil seed banks." *The American Naturalist* 173(4): 531-535.

Heckadon Moreno, Stanley. 2009. "De Panamá a Soná en 1953: recuerdos del naturalista Watson Perrygo." "Épocas" Tercera Era (Supplement to *El Panamá América*) 24(1): 10-11.

## CTPA intern recognized in Germany for best conference

STRI intern Sara Morón (in the photo, by Jorge Herrera) doing research with Carlos Jaramillo at the Center for Tropical Paleontology and Archaeology, won the contest for the best conference during the Latin American Earth Science Colloquium (LAK) 2009 with her talk on Panama Canal geology. LAK 2009 was organized by Geowissenschaftliches Zentrum der Georg-August-Universität Göttingen, in Germany.

La pasante de STRI Sara Morón quien hace investigaciones en el Centro de Paleoecología y

## Pinta con los amigos de Galeta

As part of the Earth Day activities conducted by STRI's Marine Laboratory at Galeta, a coloring book *Pinta con los amigos de Galeta* [Paint with Galeta's friends] was published and distributed among local schools in Colón. Financial support was provided by Global Forwarding, Express Distributors Inc., Manzanillo International Terminal, Imprenta Edicano, Colon Import and Export and J. Cain & Co.

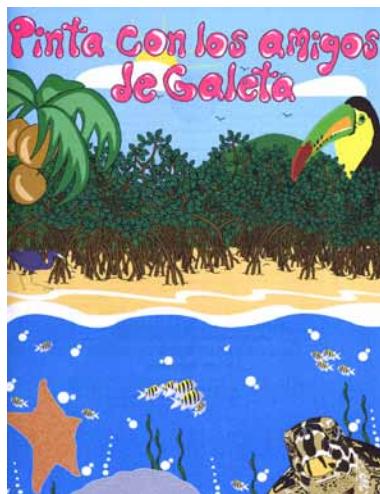
The project, led by Stanley Heckadon Moreno, was produced with Jairo Castillo and the nature guides at Punta Galeta. Design and photographs by Celso Hernández and Marcos Guerra.

El libro de colorear *Pinta con los amigos de Galeta* se publicó como parte de las actividades que el Laboratorio Marino de STRI llevó a cabo para celebrar el Día de la Tierra. El libro, que se está



Photo: Jorge Herrera

Aqueología Tropical con Carlos Jaramillo, ganó el concurso de la mejor conferencia durante el Coloquio de Ciencia sobre Ciencia de Suelos Latinoamericanos (LAK) 2009, con una charla sobre geología del Canal de Panamá. LAK fue organizado por el Centro de Geociencias de la Universidad Georg-August de Göttingen en Alemania.



distribuyendo en las escuelas de Colón, contó con el financiamiento de Global Forwarding, Express Distributors Inc., Manzanillo International Terminal, Imprenta Edicano, Colon Import and Export y J. Cain & Co.

El proyecto, liderado por Stanley Heckadon Moreno, fue producido con Jairo Castillo y los guías naturalistas en Punta Galeta. El diseño y fotografías son de Celso Hernández y Marcos Guerra.

## More publications

Heckadon Moreno, Stanley. 2009. "A. Wetmore y W. Perrygo: de la boca de Rio Indio a Uracillo en 1952." "Épocas" Tercera Era (Supplement to *El Panamá América*) 24(2): 8-9.

Hirsch, Ben T. 2009. "Seasonal variation in the diet of ring-tailed coatis (*Nasua nasua*) in Iguazu, Argentina." *Journal of Mammalogy* 90(1): 136-143.

Mendoza-Franco, Edgar F., Reina, Ruth G., and Torchin, Mark E. 2009. "Dactylogyrids (Monogenoidea) parasitizing the gills of *Astyanax* spp. (Characidae) from Panama and Southeast Mexico, a new species of *Diaphoroleidus* and a proposal for *Characithecium* N. Gen." *Journal of Parasitology* 95(1): 46-55.

Roche, Dominique G., Torchin, Mark E., Leung, Brian, and Binning, Sandra A. 2009. "Localized invasion of the North American Harris mud crab, *Rhitropanopeus harrisii*, in the Panama Canal: implications for eradication and spread." *Biological Invasions* 11(4): 983-993.

Sizling, Arnost, Storch, David, Sizlingova, Eva, Reif, Jiri, and Gaston, Kevin J. 2009. "Species abundance distribution results from a spatial analogy of central limit theorem." *Proceedings of the National Academy of Sciences* 106(16): 6691-6695.

## STRI in the news

"Rainforest clash in Panama signals larger debate" by David Ariosto. 2009. CNN.com: April 22, at <http://www.cnn.com/2009/WORLD/americas/04/21/panama.deforestation/>



The Environmental Leadership and Training Initiative  
and the Department of Biological Sciences  
of the National University of Singapore,

invite you to attend the conference:

# BIOFUELS: THE IMPACT OF OIL PALM ON FORESTS AND CLIMATE

## Presenters:

**Dr. William Laurance**  
Smithsonian Tropical Research Institute

**Dr. Yusof Basiron**  
Malaysian Palm Oil Council

**Dr. Holly Gibbs**  
Stanford University

**Mr. Fitrian Ardiansyah**  
World Wildlife Fund - Indonesia

**Mr. Mark Bujang**  
Borneo Resources Institute of Malaysia

**Dr. Daniel Murdiyarso**  
Center for International Forestry Research

**Mr. Ibrahim Rahman**  
The Energy and Resources Institute

**Dr. Koh Lian Pin**  
Swiss Federal Institute of Technology

**Mr. Toby Garrit**  
Emerald Planet Asia

**Dr. Jeff Obbard**  
National University of Singapore

**Dr. Vengeta Rao**  
Roundtable on Sustainable Palm Oil

**Dr. Rosediane Suharto**  
Indonesian Palm Oil Commission

**Mr. Bustar Maitar**  
Greenpeace

**Ms. Beth Gingold**  
World Resources Institute

## May 12-13, 2009

Centre for Life Sciences Auditorium  
National University of Singapore, Kent Ridge Campus

Information: [www.elti.org/biofuels2009](http://www.elti.org/biofuels2009)

Registration: [www.elti.org/registerbiofuels2009](http://www.elti.org/registerbiofuels2009)

The event is free of charge, but registration is required. Seating is limited.

ELTI is a joint initiative of: