Tupper 4pm seminar

Tue, May 30: Boris Baer, University of Western Australia
Sexual reproduction in social insects

Paleo-talk

Wed, May 31: Edwin Cadena, STRI intern
The first Paleocene tropical vertebrates of South America

Bambi seminar

Thu, Jun 1: Piotr Lukasik, Jagiellonian University, Poland
Herbivory and plant defenses in wet and dry forests - what are the patterns?

Arriving next week

Paula Rodgers, SERC, to study the behavior, ecology and evolution of fiddler crabs genus Uca, at Naos.

Paula Trillo, University of Montana, to study alloparental care in tortoise beetles, in Gamboa.

Kim Hoke, University of Texas at Austin, to study comparative, structural and functional development of the hypothalamus, in Gamboa.

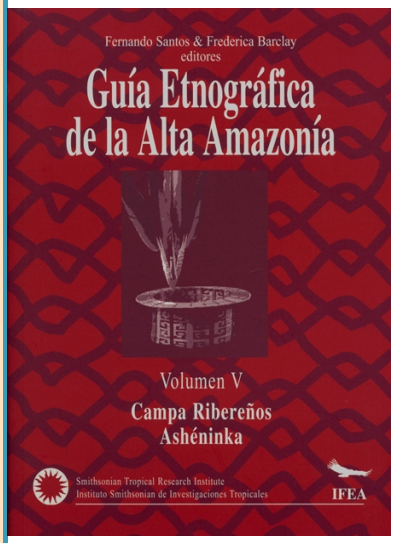
Karin Akre, University of Texas at Austin, to study the influence of signal complexity and context on memory duration, in Gamboa.

James Bryson Voirin, New College of Florida, to radio track a three-toed sloth on BCI.

Sanjay Sane, University of California at Berkeley, to the ecophysiology and orientation mechanisms of migratory Neotropical butterflies, on BCI.

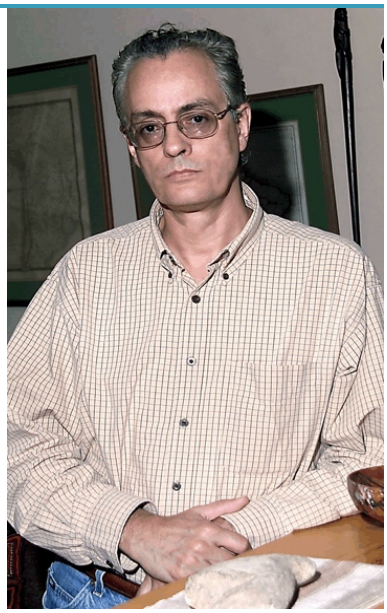
Smithsonian Tropical Research Institute, Panamá www.stri.org May 26, 2006

New edition by Santos Granero and Barclay



The latest book edited by Fernando Santos-Granero and Frederica Barclay *Guía etnográfica de la Alta Amazonía* [High Amazon ethnographic guide] is part of a long term project aiming to publish guides for indigenous peoples of the Amazon, by distinguished scholars.

The fifth volume "Campa Ribereños Ashéninka" refers to the Campa ethnolinguistic group, the Asháninka and Ashéninka.These segments are part of communities whose territories are located in central Peru.



La edición más reciente de Fernando Santos-Granero y Frederica Barclay *Guia etnográfica de la Alta Amazonía* es parte de un proyecto a largo plazo que se propone publicar guías de diversos pueblos indígenas de la Amazonía, por destacados especialistas.

El volumen "V: Campa Ribereños Ashéninka", se refiere al grupo etnolingüístico Campa, los Ashéninka y Asháninka. Estos segmentos son parte de los pueblos cuyos territorios están localizados en la región central del Perú.

ScienceNow: "Wrapped up tight"

"Venom is the weapon of choice for most spiders, but some prefer a satisfying "crunch." *Philoponella vicina* wraps its prey in hundreds of meters of silk to make a crushing shroud, researchers [William Eberhard, STRI, and Gilbert Barrantes and Ju-Lin Weng from Universidad de Costa Rica] report in the May issue of *Naturwissenschaften*.

Tension in the silk threads delivers a force many times the spider's own weight, enough to break legs and collapse compound eyes. The study is the first to show that wrapping can damage or even kill prey, instead of merely immobilizing it. Lacking poison to finish the job, *Philoponella* regurgitates digestive fluid into the shroud, creating a self-contained liquid meal." *ScienceNow*:

You may ask for the article in *Naturwissenschaften* at: **calderom@si.edu**

Arriving next week

David Carlon and Stephen Barnes, University of Hawaii, to study species boundaries in tropical reef corals, at Bocas.

Jessie Cameron, University of Winnipeg, to work with PRORENA, in Gamboa.

Joshua Grimm, University of Wisconsin, Oshkosh, to study the interactions between two species of toads, on BCI and Gamboa.

Elizabeth Arnold and Michelle Hoffman, University of Arizona, to study tropical microbial diversity, on BCI.

Meredith Blackwell, Nhu Huynh Nguyen and Sung-Oui Suh, Louisiana State University and Joe McHugh and James Robertson, University of Georgia, to study beetles and their yeast endosymbiont from basidiocarp habitats, on BCI.

Sonja Riddle-Ford, University of Minnesota, to study the liana propagation ecology, on BCI.

Luis Alberto Bonachea and Alexander Baugh, University of Texas, to study female mating preferences in the tungara frog, in Gamboa.

Ryan Taylor,University of Texas, to study the multi-modal communication and mate choice in the Tungara frog, *Physalaemus pustulosus*, in Gamboa.

Kyle Harms, Louisiana State University, to study the effects of soil-borne resources on the structure and dynamics of lowland tropical forests, on BCI and Gamboa.

Departures

William F. Laurance to Gabon, to work on the impacts of roads and hunting on rainforest mammals.

STRI-Patronato Panama Viejo

As part of the collaboration between STRI and Patronato Panamá Viejo, researchers Richard Cooke, Enrique Moreno, Aaron Odea, Félix Rodríguez and Máximo Rodríguez from the Center for Tropical Paleoecology and Archaeology participated as instructors in a conference series of Palaeocology organized for students of Segunda Escuela de Arqueología, on Monday, May 22.

Segunda Escuela de Arqueología aims to offer a research alternative for future archaeologists. The conferences included evolution and the raise of the Isthmus of Panana; malacology contributions for archaeological research; and the application of palinology in archaeology.

Como parte del acuerdo de colaboración entre STRI y el Patronato Panamá Viejo, los investigadores Richard Cooke, Enrique Moreno, Aaron Odea, Félix Rodríguez y Máximo Rodríguez del CTPA participaron como instructores en una serie de conferencias de paleoecología organizada para estudiantes de la Segunda Escuela de Arqueología, el lunes, 22 de mayo.

La Segunda Escuela de Arqueología ofrece una alternativa de investigación para nuevos arqueólogos. Se habló sobre evolución y formación del Istmo de Panamá, los aportes de la malacología en la investigación arqueológica, así como la aplicación de la palinología.

New STRI stamp

OPAT, a Panamanian organization fighting tuberculosis issued a new stamp featuring an underwater photograph taken by STRI´s diving officer Edgardo Ochoa.

In a thank you letter addressed to Ochoa, OPAT president Elmer Miranda praises any effort aiming to preserve Panama´s flora and fauna, emphasizing the importance of Coiba Island National Park.

OPAT, la Organización Panameña Antituberculosa emitió una nueva estampilla que muestra una foto submarina tomada por el director del Programa de Buceo Científico, Edgardo Ochoa.

En una carta de agradecimiento dirigida a Ochoa, el presidente de OPAT, Elmer Miranda, celebra cualquier esfuerzo dirigido a la conservación de la flora y fauna panameña, haciendo énfasis en la importancia del Parque Nacional Isla Coiba.

New publications

Christy, John H., and Backwell, Patricia R. Y. 2006. "No preference for exaggerated courtship signals in a sensory trap." *Animal Behaviour* 71(5): 1239-1246.

Ewers, Robert M. 2006. "Interaction effects between economic development and forest cover determine deforestation rates." *Global Environmental Change* 16: 161-169.

Gilbert, Benjamin, Wright, S. Joseph, Muller-Ladau, Helene C., Kitajima, Kaoru, and Hernandez, Andres. 2006. "Life history trade-offs in tropical trees and lianas." *Ecology* 87(5): 1281-1288.

King, David A., Davies, Stuart James, Tan, Sylvester, and Supardi Md. Noor, Nur. 2006. "The role of wood density and stem support costs in the growth and mortality of tropical trees." *Journal of Ecology* 94(3): 670-680.

Kirkpatrick, Mark, Rand, A. Stanley, and Ryan, Michael J. 2006. "Mate choice rules in animals." *Animal Behaviour* 71(5): 1215-1225.

Laube, Stefan, and Zotz, Gerhard. 2006. "Neither host-specific nor random: vascular epiphytes on three tree species in a Panamanian lowland forest." *Annals of Botany* 97(6): 1103–1114.

Mayo, Julia. 2006. "Los estilos cerámicos de la región cultural de Gran Coclé, Panamá." *Revista Española de Antropología Americana* 36(1): 27-46.

Niven, Jeremy E. 2006. "Colorful days, colourless nights." *Journal of Experimental Biology* 209(11): v.

Peres, Carlos A., Barlow, Jos and Laurance, William F. "Detecting anthropogenic disturbance in tropical forests." *Trends in Ecology and Evolution* 21(5): 227-229.

Recent arrival at ICBG

Catherina Caballero George is the new Laboratory manager of the International Collaborative Biodiversity Groups (ICBG) at STRI.

Caballero George obtained a bachelor´s degree in Pharmacy at the University of Panama in 1996. In 2002, she received her Ph.D. in Pharmaceutical Sciences with a specialization in Molecular Pharmacology and Pharmacognosy at the University of Antwerp, Belgium.

Before coming to STRI, Catherina worked as researcher at Free University of Brussels, the University of Antwerp, the University of Panama, the Panama´s Ministry of Health and the University of Mississippi in the US.

We welcome Catherina and wish her all success at STRI.

Catherina Caballero George es la nueva administradora del Laboratorio de los Grupos de Cooperación Internacional para la Biodiversidad (ICBG) de STRI.

Caballero George obtuvo una licenciatura en Farmacia en la Universidad de Panamá, en 1996. En 2002 recibió un doctorado en Ciencias Farmacéuticas con una especialización en Farmacología Molecular y Farmacognocia en la Universidad de Antwerp, Bélgica.

Antes de unirse a STRI, Catherina trabajó como investigadora en Free University de Bruselas, la Universidad de Antwerp en Bélgica, la Universidad de Panamá, el Ministerio de Salud de Panamá, y la Universidad de Mississippi en los Estados Unidos.

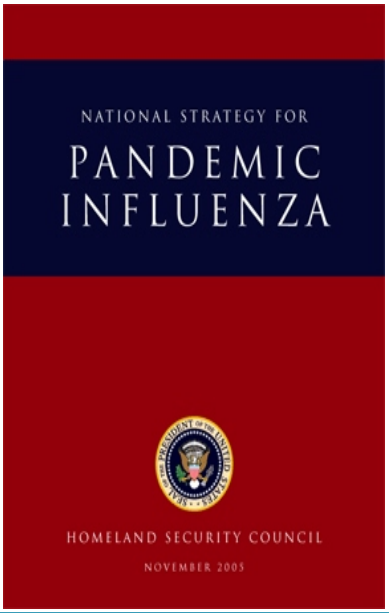
Le damos una cordial bienvenida a Catherina y le deseamos muchos éxitos en STRI.

US National Strategy for Pandemic Influenza

www.whitehouse.gov/homeland/pandemic-influenza.html

Please be aware of the above site containing the US National Strategy for Pandemic Influenza: Implementation Plan released by the White House on May 3, along with other information and recommendations of the US Department of Health and Human Services.

Asegúrese de conocer la dirección de internet del Plan de Puesta en Marcha de la Estrategia Nacional de los EU para la Influenza Pandémica, distribuida por la Casa Blanca el 3 de mayo, junto con otra información y recomendaciones del Departamento de Salud y Servicios Humanos de EU.



From External Affairs

To enter Panama, it is required to carry a passport with a validity of at least six months. Passengers not carrying a valid passport will not be allowed to board any flight to Panama. Please plan accordingly.

Para entrar a Panamá, se requiere portar un pasaporte válido por al menos seis meses. Los pasajeros que no cumplan con este requisito, no podrán abordar ningún vuelo hacia Panamá. Se les solicita planear sus viajes con anticipación.

More publications

Thies, Wibke, Kalko, Elisabeth K.V., and Schnitzer, Hans-Ulrich. 2006. "Influence of environment and resource availability on activity patterns of *Carollia castanea* (Phyllostomidae) in Panama." *Journal of Mammalogy* 87(2): 331–338.

Wright, S. Joseph, and Muller-Landau, Helene C. 2006. "The uncertain future of tropical forest species." *Biotropica* Online

June birthdays

Ruth Gisela Reina	1
Plinio Gondola	2
Argelis Ruíz	2
Erika Garibaldo	2
Rolando Pérez	4
Harold Maduro	7
Gabriel Abrego	7
Lizbeth González	8
Klaus Winter	10
Arturo Morris V.	10
Maritza del C. López	12
Norma Cedeño	16
Omar Sousa	16
Aureliano Valencia	16
James La Frankie	17
Milton Jackson	19
José Navarro	21
Alberto González	23
Marlene Flores	23
Melissa de Balcázar	24
Juan Murillo	24
Rodolfo Rojas	26
Gian Montúfar	26
Carmen Galdames	27
Jose Barahona	27
Miguel Samaniego	27
Eleuterio Santos	29

Miscellaneous

For sale: 1989 Volvo GSL, four door, sedan, automatic. Good condition, runs great. Perfect, safe car for driving in Panama. $3000 or best offer. Call Chimene 276-6621 or 6674-6621.

science in progress:

The Coiba honey bee, (science is slow!)

Part III
When DNA analyses fail: Back to the field

Story: David W. Roubik
Edited by M Alvarado and ML Calderon
Photo: MA Guerra

Because colonies are very hard to find (high in the living trees of a large forest) the nest of the Coiba honey bee has never been found, the molecular route seemed the least complicated.

The snag, apparently, is that the Coiba honey bees have a very pungent chemical alarm pheromone that is released into the ethanol fluid used to desiccate them and to prepare their DNA for lab work.

So far, two tries with material collected in December 2005 have been unsuccessful- the samples were worked at Harvard University by Santiago Ramirez, who works with Dave on related projects.

So, more collecting techniques and lab procedures need to be tried out but, as a fair consolation, Coiba Island is wonderful to visit and always provides tantalizing glimpses of tropical nature and the grand processes of biogeography, evolution and speciation.

Debido a que las colonias son bastante difiíciles de encontrar (a lo alto de árboles vivos de un extenso bosque) el nido de las abejas de miel de Coiba nunca se localízaron. La vía molecular pareció la menos complicada.

El obstáculo, aparentemente, es que las abejas de miel de Coiba tienen un químico fuerte que les sirve de alarma de feromona que liberan en el etanol usado para disecarlas y preparar su AND para el trabajo de laboratorio.

Hasta el momento, dos intentos de material colectado en diciembre de 2005 han fallado— las muestras se trabajaron en la Universidad de Harvard por Santiago Ramírez, quien trabaja con Dave, en proyectos relacionados.

Así que se necesitarán más colectas y procedimientos de laboratorio, pero, como premio de consolación, es maravilloso visitar Isla Coiba y siempre ofrece vistas tentadoras de naturaleza tropical y de grandes procesos de biogeografía, evolución y diversificación