

## Tupper 4pm seminar

Tuesday, February 7, 4pm seminar speakers will be Ivan Valdespino and Vincent Abreu, Inter-American Biodiversity Information Network (IABIN) **IABIN and the thematic networks**

## Bambi seminar

Thursday, February 9, Bambi seminar speaker will be Matt Whiles, Southern Illinois University at Carbondale **Assessing the ecological consequences of amphibian declines**

## Arriving next week

Ana Maria Mazzaro, Montclair State University, to work with the Rainforest Connection interactive web-based projects with schools.

John Taylor, Jason Aramburu, David Smith and Dominica Petersen, Princeton University, to participate at the Field Semester Program at STRI.

Smithsonian OFEO Derek Ross, Mark Muller and SI OCON Susan Engelhardt and Melissa Howard.

## STRI in the news

"Rare tree species thrive in local neighborhoods" by Elizabeth Pennisi. 2006. *Science* 311 (January 27): 452-453.

"UCSD researcher details diversity of tropical forests" by Bruce Lieberman. 2006. *San Diego Union Tribune*, January 27.

"Study: nature encourages biodiversity" by *United Press International*. 2006. January 26.



Smithsonian Tropical Research Institute, Panamá

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

February 3, 2006

## The Cofrins visit Panama

STRI donor David A. Cofrin, wife Mary Ann and daughters Mary Ann and Edith traveled to Panama to revisit many of their old friends at STRI and to acquaint their daughters with STRI's programs.

The Cofrins were interested in seeing the Bocas del Toro Research Station, as they had enabled the purchase of the spectacular photovoltaic roof of that building. The family also hosted a reception to welcome Carlos Jaramillo and his family to STRI. Jaramillo's position was established thanks to an Endowed Chair in Paleobiology, created by the Cofrins.

Jaramillo was recently appointed president of the American Association of Stratigraphic Palynologists, and the Bocas del Toro Research Station won the 2005 Federal, Energy and Water Management Award in the Small Group-Renewable Energy Category.

The photo shows Jaramillo presenting a gift to David Cofrin, during the reception at Culebra, on Friday, January 30. In the back is staff scientist emeritus Anthony G. Coates, who traveled to Panama for January's special events.



El donante de STRI David A. Cofrin, su esposa Mary Ann e hijas Mary Ann y Edith, viajaron a Panamá para visitar a muchos de sus viejos amigos en STRI y familiarizar a sus hijas con los programas de STRI.

Los Cofrin estaban interesados en visitar la Estación de Investigaciones de Bocas del Toro, con la que contribuyeron para la compra de un techo de celdas solares para la obtención de energía. La familia Cofrin también ofreció una recepción para darle la bienvenida a STRI a Carlos Jaramillo y su familia. La posición de Jaramillo se estableció gracias a un fondo especial para paleobiología, creado por los Cofrins.

Jaramillo fue nombrado recientemente presidente de la Asociación de los Estados Unidos de Palinólogos Estratigráficos, y la Estación de Investigaciones de Bocas del Toro recibió el Premio Federal 2005 de Administración de Agua y Energía en la categoría de Energía Renovable a Pequeña Escala.

La foto muestra a Jaramillo haciendo entrega de un regalo a David Cofrin, durante la recepción en Culebra, el viernes 30 de enero. En segundo plano aparece el científico emérito de STRI, Anthony G. Coates, quien viajó a Panamá para participar en los eventos especiales celebrados en enero.

## STRI in the news

"Study of tropical forests worldwide reveals that nature encourages diversity" by Kim McDonald. 2006. *UCSD News*. January 26.

"Study of tropical forests worldwide reveals that nature encourages diversity" *Newswise*, January 26.

"Worldwide study reveals nature encourages diversity in tropical forests", by Cheryl Dybas and Kim McDonald. *National Science Foundation*.

"Underdogs in the understory: Study suggests nature favors rarer trees." 2006. *Biology News Net* January 27.

"Mother nature encourages diversity in rainforest trees" 2006. *mongabay.com*. January 26.

"Study: nature encourages biodiversity" 2006. *Mc&C Science and Nature* January 26.

"Study of tropical forests worldwide," by Kim McDonald. 2006. *Innovations Report*, January 27.

Investigación: Smithsonian marca el rumbo. Pequeños avances para cambiar el futuro. 2006. *Capital Financiero* February 6-12: page 9.

## Reminder

Please remember that STRI has changed its Panamanian address to:

Recuerde que STRI cambió su dirección panameña a:

**Smithsonian Tropical Research Institute**  
Att: Facility name/  
Nombre de la Instalación  
Apartado 0843 - 03092  
Panamá  
República de Panamá

## STRI's PIO and OIT join to produce multimedia newsletter

STRI's Public Information Office (PIO) and the Office of Information Technology (OIT) are joining efforts to provide a new product for the STRI community and other *STRI news* subscribers around the world, with links to television programs, clips and documentary, broadcasted both locally and internationally, describing STRI educational and scientific activities.

Today, the *STRI news* offers the segment "El reporterito" [Young reporter] featuring the Culebra Marine Exhibition Center and an interview with Lidia Valencia, coordinated by PIO. Panama's local Tele-7 (Medcom) broadcasted the segment during the kid's program *K-nes y algo más* [Animals and pets] on January 21 from 12:30-1pm. The program was produced by Arkheim Productions, S.A., at no charge to STRI, and had estimated audience of 72,000 viewers from ages 6-15.

PIO has established strategic alliances with local TV producers and networks to produce clippings and documentaries at an initial nominal cost to STRI.

Interested researchers may submit a story to Mónica Alvarado at:

[alvaradm@si.edu](mailto:alvaradm@si.edu)

or Marialuz Calderon at

[calderom@si.edu](mailto:calderom@si.edu)

To watch the video:

Click here!



Para ver el video, presione aquí.

La Oficina de Divulgación de STRI (PIO), y la Oficina de Informática (OIT), están



uniendo esfuerzos para ofrecer un nuevo producto para la comunidad de STRI y otros suscriptores al *STRI news* alrededor del mundo, con enlaces a programas de televisión, cortos y documentales presentados local e internacionalmente, que describen las actividades de STRI, tanto educativas como científicas.

Hoy, el *STRI news* ofrece el segmento "El reporterito" mostrando al Centro de Exhibiciones Marinas en Culebra y una entrevista con Lidia de Valencia, coordinado por PIO. El canal local Tele-7 (Medcom) presentó el segmento durante el programa para niños *K-nes y algo más* el 21 de enero de 12:30 a 1pm. El programa fue producido por Arkheim Productions, S.A. sin ningún costo para STRI, con una audiencia estimada de 72,000 televidentes de 6-15 años de edad.

PIO ha establecido alianzas estratégicas con productores de televisión local para producir cortos y documentales con un costo inicial nominal para STRI. Investigadores interesados pueden enviar una historia a Mónica Alvarado, [alvaradm@si.edu](mailto:alvaradm@si.edu) o Marialuz Calderón, [calderom@si.edu](mailto:calderom@si.edu).

## New publications

Hendler, Gordon L. 2005. "Two new brittle star species of the genus *Ophiothrix* (Echinodermata: Ophiuroidea: Ophiotrichidae) from coral reefs in the southern Caribbean Sea, with notes on their biology." *Caribbean Journal of Science* 41(3): 583-599.

Hugues, William O.H., and Boomsma, Jacobus J. 2006. "Does genetic diversity hinder parasite evolution in social insect colonies?" *Journal of Evolutionary Biology* 19(1): 132-143.

Kalka, Margareta, and Kalko, Elisabeth K.V. 2006. "Gleaning bats as underestimated predators of herbivorous insects: diet of *Micronycteris microtis* (Phyllostomidae) in Panama." *Journal of Tropical Ecology* 22(1): 1-10.

King, David A., Wright, S. Joseph, and Connel, Joseph H. 2006. "The contribution of interspecific variation in maximum tree height to tropical and temperate diversity." *Journal of Tropical Ecology* 22(1): 11-24.

Laurance, William F., Alonso, Alfonso, Lee, Michelle, and Campbell, Patrick. 2006. "Challenges for forest conservation in Gabon, Central Africa." *Futures* 38(4): 454-470.

Mehdiabadi, Natasha J., Hugues, Benjamin, and Mueller, Ulrich G. 2006. "Cooperation, conflict, and coevolution in the attine ant-fungus symbiosis." *Behavioral Ecology* 17(2): 291-296.

# **Drosera (Droseraceae): new STRI book by Correa and Tania dos Santos Silva**

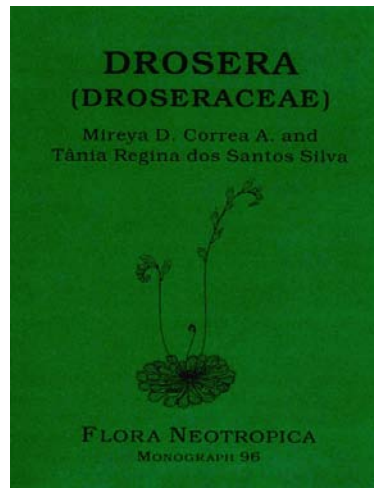
The New York Botanical Garden has published *Drosera* (Droseraceae) for the Organization for Flora Neotropica authored by STRI staff scientist Mireya Correa (also with the University of Panama) and colleague Tania Regina dos Santos Silva, from the Universidade Estatal de Feira de Santana, in Brazil.

The 66-page book, issued in November 2005 is Monograph 96 of the Flora Neotropica series. The monograph is a taxonomic revision of *Drosera*, the only genus of Droseraceae found in the Neotropics. The subgenus *Drosera* and three sections: *Drosera*, *Meristocaulis* Maguire & Wurdack, and

*Thelocalyx* Planchon occur in the region. This treatment includes full synonymy, typification, descriptions, and illustrations for 20 species.

El Jardín Botánico de New York ha publicado *Drosera* (Droseraceae) para la Organización Flora Neotropica, de la científica de STRI, Mireya Correa (también con la Universidad de Panamá) y su colega Tania Regina dos Santos Silva, asociada con la Universidade Estatal de Feira de Santana, en Brasil.

El libro, de 66 páginas aparecido en noviembre de 2005, es la monografía 96 de la serie Flora Neotropica. La monografía



presenta una revisión del género *Drosera*, único representante de la familia Droseraceae en el neotrópico, en donde sólo aparece el subgénero *Drosera* y tres secciones: *Drosera*, *Meristocaulis* Maguire & Wurdack, y *Thelocalyx* Planchon. También se presenta sinonimia completa, tipificación, descripción e ilustraciones de las 20 especies incluidas.

## **STRI's Center for Tropical Forest Science Research Grants Program**

The CTFS's Research Grants Program supports research associated with the CTFS network of Forest Dynamics Plots. This grants program is intended to provide opportunities for senior researchers, post-doctoral fellows, and graduate students to utilize existing Forest Dynamics Plots and to conduct research with scientists associated with these plots.

Anyone working directly in a Forest Dynamics Plot (FDP), analyzing data from a plot, identifying plants or animals in a plot, or generating complementary data that strengthens Forest Dynamics Plot programs is eligible to apply. Projects can be field-oriented, herbarium- or laboratory-based, or analytical. Research projects

can be either basic or applied in nature. Social scientists as well as natural scientists are encouraged to apply.

The CTFS network of FDPs includes 18 sites in 15 countries. Anyone working directly in a Forest Dynamics Plot (FDP), analyzing data from a plot, or generating complementary data that strengthens FDP research programs is eligible to apply.

Grants will range from \$3,000-\$30,000. The CTFS Research Grants Program will make awards for projects three months to three years in length.

Proposals can be sent electronically (preferred method) or by mail to:

Smithsonian Tropical Research Institute, CTFS Grants Program, Apartado 0843-03092, Balboa, Ancón, Panamá, República de Panamá.

Mail from the USA: Smithsonian Tropical Research Institute, CTFS Grants Program Unit 0948, APO AA 34002, USA

E-mail: [ctfslist@stridc.si.edu](mailto:ctfslist@stridc.si.edu)  
<http://www.ctfs.si.edu>,  
<http://www.stri.org>

You may also contact:  
Stuart Davies  
CTFS Director  
Email: [sdavies@si.edu](mailto:sdavies@si.edu)  
or  
Richard Condit  
CTFS Latin America & Africa Program Science Director  
Email: [condit@ctfs.si.edu](mailto:condit@ctfs.si.edu)

## **More publications**

Wills, Christopher, Harms, Kyle E., Condit, Richard, King, David, Thompson, Jill, He, Fangliang, Muller-Landau, Helene C., Ashton, Peter, Losos, Elizabeth, Comita, Liza, Hubbell, Stephen, LaFrankie, James, Bunyavejchewin, Sarayudh, Dattaraja, H. S., Davies, Stuart, Esufali, Shameema, Foster, Robin, Gunatilleke, Nimal, Gunatilleke, Savitri, Hall, Pamela, Itoh, Akira, John, Robert, Kiratiprayoon, Somboon, de Lao, Suzanne Loo, Massa, Marie, Nath, Cheryl, Noor, Md. Nur Supardi, Kassim, Abdul Rahman, Sukumar, Raman, Suresh, Hebbalalu Satyanarayana, Sun, I-Fang, Tan, Sylvester, Yamakura, Takuo, and Zimmerman, Jess. 2006. "Nonrandom processes maintain diversity in tropical forests." *Science* 311(5760): 527-531.

## **Miscellaneous**

For sale: green Volkswagen Polo, 2005, eight months of use, 17,000 km, guaranteed for another year with the agency, \$10,000. Standard transmission, full extras, 1.6 liters, very economical. Interested please call Eric Salas at: 6617-1772.

Looking for a room in a shared house or apartment close to the Smithsonian until April (Ancon, Balboa, Diablo, Quarry Heights etc..). Call Paula on 8090 or [paulamejia17@yahoo.com](mailto:paulamejia17@yahoo.com)

**STRI**  
**Safety number:**  
**212-8211**

science in progress:

# Simon loves the night life in Panama

Story: Simon Tierney and William T. Wcislo

Photos: MA Guerra and Michael Engel

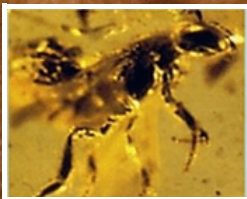
Most of the 20,000+ species of bees are sun-loving creatures. However, a number of lineages have switched to a nocturnal lifestyle—unusual for insects sharing a long history of co-dependence with flowering plants.

Over the past eight years, STRI scientist Bill Wcislo and colleagues have investigated the behavior and neurophysiological adaptations that enable these bees to forage at very low light levels—10 to 20 times dimmer than starlight.

Work thus far is based on two Panamanian species, yet little or nothing is known about the 30+ other nocturnal species.

STRI Tupper fellow Simon Tierney, from Flinders University in Australia (in the photo looking into a bee nest) joins Wcislo to examine the habits of these bees from a historical perspective. This involves collecting specimens throughout the Neotropics to gather comparative information on life history and establish

a species level 'family tree', based on morphology and DNA.



Amber fossils (inset above) of closely related bees will be used in conjunction with genetic data to estimate divergence times within the 'family tree'. Such information will then be used to study changes in functional genes that may have a role in enabling nocturnal activity, and to address questions relating to biogeography and biotic relationships with other nocturnal organisms.

Más de las 20,000 especies de abejas son criaturas que aman el sol. Sin embargo, un número de linajes han cambiado a un estilo de vida nocturno—poco común para insectos que tienen una larga historia de co-dependencia con plantas en floración.

Durante los últimos ocho años, el científico de STRI, Bill Wcislo y colegas han investigado el comportamiento y adaptaciones neurofisiológicas que permiten que estas abejas forrajeen a niveles de luz 10 a 20 veces más baja que la luz de las estrellas.

Hasta el momento el trabajo se basa en dos especies panameñas,

pero se sabe muy poco o nada sobre otras 30+ especies nocturnas.

El becario Tupper de STRI, Simon Tierney de Flinders University en Australia (en la foto, observando un nido de abejas), se une a Wcislo para examinar los hábitos de estas abejas desde un punto de vista histórico. Esto conlleva coleccionar especímenes en los neotrópicos para tener información comparativa de su historia natural y establecer un "árbol familiar" a nivel de las

especies, usando morfología y ADN.

Fósiles de ámbar (recuadro) de abejas muy relacionadas se usarán junto con información genética para estimar la edad de la divergencia en el árbol familiar. Con esta información se estudiarán los cambios en los genes que permiten la actividad nocturna, para luego responder a preguntas sobre biogeografía y relaciones bióticas con otros organismos nocturnos.

