

## Tupper seminar

Tuesday, November 18,  
noon seminar speaker will  
be Egbert g. Leigh Jr.  
Title to be announced

## Bambi seminar

Thursday, November 20,  
Bambi seminar speaker will  
be Stefan Laube, University  
of Vaiserslautern.

**Long-term changes in an  
epiphyte community**

## Arrivals

Mike Kaspari and Mary  
Johnston, University of  
Oklahoma, Nov 23 - Dec  
23, to study the the  
dynamics and regulation of  
brown food webs-a pilot  
study, on BCI.

James Nieh and Daniel  
Sanchez, University of  
California in San Diego,  
Nov 24 - Dec 24, to study  
food recruitment  
communication of stingless  
bees, on BCI.

Andrea Vincent, University  
of Cambridge, Nov 26 -  
Apr 15, to investigate the  
influence of plant-litter and  
soil nutrient in tropical  
forests, on BCI.

Thomas Eltz, University of  
Dusseldorf, Germany, Nov  
28 - Dec 21, to study  
fragrance biology of orchid  
bees (Apidae: Euglossine),  
on BCI.

## Departures

Ira Rubinoff, Nov 12-19,  
to Galapagos, to attend the  
Charles Darwin  
Foundation Board  
meetings.



Smithsonian Tropical Research Institute, Panamá

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

November 14, 2003

## NYT: How much nature is enough?

Scientists Philip C. Stouffer,  
Richard O. Bierregaard, Jr., and  
Thomas E. Lovejoy from  
STRI's Biological Dynamics of  
Forest Fragments Project in  
Brazil, and collaborators from  
Columbia, Duke and Southern  
Louisiana universities, North  
Carolina University and The H.  
John Heinz III Center for  
Science, Economics and the  
Environment, published "Rates  
of species loss from Amazonian  
forest fragments" in the

*Proceedings of the National Academy of Sciences (PNAS)* of October 28 (100, 14069-14073). In a comment by *The New York Times* (November 11) regarding this article, important questions arise. "Even some ardent conservationists acknowledge that the biodiversity of life on Earth cannot be fully sustained as humans populations expand, use more resources, nudge the climate and move weedlike pests and predators from place to place." Losses are inevitable... What goes? "How small can a fragment of an ecosystem be and still function in all its richness, and thus be considered preserved? And as global biodiversity diminishes, is it a valid fallback strategy to bank organisms and genes in zoos, DNA banks or the like, or does this simply justify more habitat destruction? Is nature on ice a sufficient substitute for the real thing? The articles in *PNAS* and *NYT* are available from [calderom@tivoli.si.edu](mailto:calderom@tivoli.si.edu)



Fragmented forest in the Panama Canal Watershed, Las Pamas, 1992.  
Bosque fragmentado en la Cuenca del Canal de Panamá en Las Pamas, tomado en 1992.

Los científicos Philip C. Stouffer, Richard O. Bierregaard, Jr., y Thomas E. Lovejoy del Proyecto de Dinámica de Fragmentos de Bosques (BDFFP, por sus siglas en inglés) de STRI en Brazil, y colaboradores de las universidades de Columbia, Duke, Southern Louisiana y North Carolina, y del Centro para Ciencias, Economía y Ambiente H. John Heinz III, publicaron Tasa de pérdida de especies de los fragmentos boscosos del Amazonas (en inglés) en el número del 28 de octubre de la revista *Proceedings of the National Academy of Sciences (PNAS)* 100, 14069-14073). En un comentario de *The New York Times* (11 de noviembre) sobre este artículo, surgen preguntas importantes. "Aún algunos de los conservacionistas más ardientes aceptan que la biodiversidad de la vida en la Tierra no puede mantenerse en su totalidad mientras las poblaciones de seres humanos sigan creciendo, usen más recursos, afecten el clima y transporten pestes tipo maleza y depredadores de un lado a otro." Las pérdidas son inevitables... ¿Qué se va? "¿Qué tan pequeño puede ser un fragmento de ecosistema para seguir funcionando con toda su riqueza y entonces ser considerado protegido? Mientras la biodiversidad global disminuye, ¿es válida la estrategia de almacenar organismos y genes en zoológicos y bancos de ADN, o con esto simplemente justificamos más destrucción de hábitats? Es una naturaleza congelada suficiente substituto para lo real? Ambos artículos en *PNAS* y *The New York Times* pueden obtenerse en: [calderom@tivoli.si.edu](mailto:calderom@tivoli.si.edu)

## More departures

Haris Lessios, Nov 13-18, to Los Angeles, to consult with colleagues and to San diego, to attend the Marine Biodiversity Conference.

Fernando Santos-Granero, Nov 18-24, to Chicago, to attend the American Anthropological Association meetings and present a paper.

## New publications

Aiello, Annette, and Solis, M. Alma. 2003. "Defense mechanisms in Pyralidae and Choreutidae: fecal stalactites and escape holes, with remarks about cocoons, camouflage and aposematism." *Journal of the Lepidopterists' Society* 57(3): 168-175.

Cooke, Richard G., and Sanchez, Luis Alberto. 2003. "Panamá prehispánico: tiempo, ecología y geografía política (una brevísima síntesis)." *Istmo (revista virtual estudios literarios y culturales centroamericanos)* Nov 7: 1-37.

Cooke, Richard G., Sánchez H., Luis Alberto, Carvajal, D., Griggs, J.D., and Isaza Aizpurua, Ilean Isel. 2003. "Transformaciones sociales y culturales de los amerindios de Panamá durante el siglo XVI: una perspectiva arqueológica y paleoecológica." *Mesoamérica* 45: 1-34.

Ferraz, Goncalo, Russell, Gareth J., Stouffer, Philip C., Bierregaard, Richard O., Jr., Pimm, Stuart L., and Lovejoy, Thomas E. 2003. "Rates of species loss from Amazonian forest fragments." *Proceedings of the National Academy of Sciences* 100(24): 14069-14073.



A SI exhibition on the book *The magic web: The tropical forest of Barro Colorado Island* by Egbert G. Leigh and Christian Ziegler was presented at the Organization of American States (OAS) headquarters in Washington DC, on Monday, November 3, as part of the celebrations of Panama's centennial. In the photo, Panamanian ambassador at OAS Juan M. Castulovich talks to a 150 audience with STRI director Ira Rubinoff and Elena Lombardo, from External Affairs (right). For more photos of the event please visit: [www.oas.org/OASpage/eng/photos/2003\\_november/01/index.htm](http://www.oas.org/OASpage/eng/photos/2003_november/01/index.htm)

Una exhibición de SI sobre el libro *El tejido mágico: el bosque tropical de la Isla de Barro Colorado* de Egbert G. Leigh y Christian Ziegler se presentó en las oficinas principales de la Organización de Estados Americanos (OEA) en Washington DC, el lunes 3 de noviembre, como parte de las celebraciones del Centenario de Panamá. En la foto, el embajador panameño ante la OEA Juan M. Castulovich dirige unas palabras a la audiencia de cerca de 150, con el director de STRI Ira Rubinoff y Elena Lombardo, de la Oficina de Asuntos Externos (derecha). Más fotos del evento en: [www.oas.org/OASpage/eng/photos/2003\\_november/01/index.htm](http://www.oas.org/OASpage/eng/photos/2003_november/01/index.htm)

## PRORENA Symposium

Native Species Reforestation Project (PRORENA) invites the community to the Symposium on Financing Reforestation in Latin America, on Fri, Nov 21, 1-5:30pm, at the Tupper Conference Center. Speakers include James Gustave Speth and John Forgach, Yale, Stefano Pagiola, World Bank Group, Carlos Herrera, FUNDECOR and Juan Pablo Buchet, BHP Consulting Bradford Gentry, Yale-UNDP will serve as moderator. Spanish-English simultaneous translation will be available. For more information and to RSVP please contact PRORENA at 212-8235 • [info@prorena.org](mailto:info@prorena.org)

El Proyecto de Reforestación con Especies Nativas (PRORENA) invitan a la comunidad al Simposio sobre Financiamiento de la Reforestación en Latinoamérica el viernes 21 de noviembre, de 1-5:30pm en el Salón de Conferencias del Centro Tupper. Participarán James Gustave Speth y John Forgach, Yale, Stefano Pagiola, Banco Mundial; Carlos Herrera, FUNDECOR; y Juan Pablo Buchet, BHP Consulting. Bradford Gentry, Yale/UNDP, servirá como moderador. Habrá traducción simultánea. Para más información o confirmar su participación favor comunicarse con PRORENA al 212-8235 • [info@prorena.org](mailto:info@prorena.org)

## New publications

Ferrer, Astrid, and Gilbert, Gregory S. 2003. "Effect of tree host species on fungal community composition in a tropical rain forest in Panama." *Diversity and Distribution* 9(6): 455-468.

Stuntz, Sabine, Linder, C., Linsenmair, K. E., Simon, Ulrich, and Zotz, Gerhard. 2003. "Do non-myrmecophilic epiphytes influence the community structure of arboreal ants?" *Basic and Applied Ecology* 4: 363-373.

Toscano, M.A., and Macintyre, Ian G. 2003. "Corrected western Atlantic sea-level curve for the last 11,000 years based on calibrated 14C dates from *Acropora palmata* framework and intertidal mangrove peat." *Coral Reefs* 22(3): 257-270.

Williamson, Mark. 2003. "Species-area relationships at small scales in continuum vegetation." *Journal of Ecology* 91(5): 904-907.

Zayed, Amro, Roubik, David W., and Packer, Laurence. 2003. "Use of diploid male frequency data as an indicator of pollinator decline." *Proceedings of the Royal Society Biological Sciences Series B Online*

## For sale

Apt on 5<sup>th</sup> floor, Plaza Granada Bldg., near the Granada Hotel, Cangrejo. 2 b/rooms 3/baths, 82m<sup>2</sup>, low monthly fee, pool area. Please contact Nino Franco at 226-5597.

"Xtreme" electric car for children, 2 speeds, reverse blue/yellow/red, like new \$150 negotiable. Interested please call Sabina Walker at 621-9220, 266-5262