

Tupper seminar

Tuesday, May 22, noon seminar speaker will be Mikko Pyhala, Finland Ambassador to Perú and Bolivia

Machu Picchu-protecting a world heritage site

The ritual Inca citadel of Machu Picchu is one of the world's most appreciated tourism targets. It is UNESCO's world heritage site since 1983 for its cultural and natural value. It is host to between one fifth and one tenth of Peru's known biodiversity, including many endemics, and new species are continuously being described. Machu Picchu is plagued by rampant wildfires, uncontrolled urbanization, invasions by rootless people as well as exotic plants and animals as well as landslides aggravated by climate change. Tourism flows growing some 20 per cent annually put a heavy strain on any management capacity. Finland has a debt swap program for the environmental management and socio-economic well-being at Machu Picchu since 1997. The Government of Peru established a Management Unit in 1999 and in 2000 a Management Committee was appointed. Success in the management of all risks will require smooth cooperation among a large number of public and private operators.

Two-Bambi week

Wed, May 23, Bambi seminar speaker will be Mikko Pyhala
Allpahuayo-Mishana-Amazonian superdiversity now protected

There will be another Bambi on Thursday. Check your e-mail

Arrivals

Elizabeth Tait, SI Public Information Officer, May 12-19, to meet with scientists and members of the STRI staff, and visit BCI and Galeta.

Gonodonta ditissima (Noctuidae) by A. Aiello

STRI news

2007



Smithsonian Tropical Research Institute, Panamá www.stri.org

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PC watershed at the beginning of the 21st century

With the support of STRI, the US Agency for International Development, Panama's National Authority for the Environment and the US Department of Defense, Condit et al. just published a review article of the present status of the Panama Canal Watershed that includes its surrounding, forest remaining, tree species diversity, avifauna, amphibians, the impact of hunting, the human population, the Canal's water supply and greenhouse

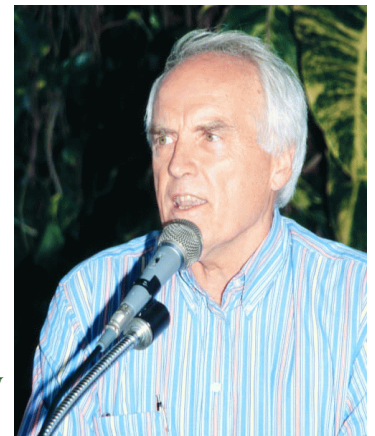
gases and reforestation [*BioScience* 51(5): 135-144]. The long-term studies reported reveal a diverse flora and fauna near the Panama Canal, one of the last sites in the world where a corridor of forest stretches from the Atlantic to the Pacific, which is crucial to operate the Canal. The Panamanian government will face difficult decisions to reconcile new development opportunities with the commitment to keep the Panama Canal running since deforestation, land degradation, erosion and over-hunting remain threats.

Condit, Richard, Robinson, Douglas W., Ibáñez D., Roberto, Aguilar, Salomón, Sanjur, Amelia, Martínez, Raúl, Stallard, Robert F., García, Tomás, Angehr, George R., Petit, Lisa, Wright, S. Joseph, Robinson, Tara R., and Heckadon, Stanley. 2001. "The status of the Panama Canal watershed and its biodiversity at the beginning of the 21st century." *BioScience* 51(5): 135-144.

Con el apoyo de STRI, USAID, ANAM y el Departamento de Defensa de los Estados Unidos, Condit et al. acaban de publicar un reporte en *BioScience* [51(5): 135-144] sobre el actual estatus de la Cuenca del Canal de Panamá que incluye sus alrededores, bosques, diversidad de especies de árboles, avifauna, anfibios, el impacto de la caza, la población, el suministro de agua para el Canal y los gases de invernadero y reforestación. Los estudios a largo plazo reportan una flora y fauna diversa cerca del Canal de Panamá, uno de los últimos lugares del mundo con un corredor boscoso que se extiende desde el Atlántico hasta el Pacífico, esencial para las operaciones del Canal. El gobierno de Panamá deberá enfrentarse con decisiones difíciles para poder reconciliar nuevas oportunidades de desarrollo con el compromiso de mantener el Canal de Panamá operando, ya que la deforestación, la degradación de la tierra, la erosión y la cacería siguen siendo una amenaza.

Coates held institution-wide meetings at STRI

SI director for the Scientific Research Program, Anthony Coates held institution-wide meetings on Barro Colorado Island and the Tupper Center on Wednesday, May 16. He briefed the employees on the present political and economic climate at the Smithsonian and explained recent topics related to the Smithsonian that have received extensive media coverage, such as the scientific reorganization. Coates also met with the scientists on Thursday, May 17, at the Tupper Center.



Arrivals

Karen Warkentin, postdoctoral fellow from the University of Kentucky, May 20-Aug 30, to study the adaptive timing of hatching in red-eye treefrogs, in Gamboa.

Alyssa Stocks, University of Illinois, May 20 - Aug 10, to work with Jim Dalling on a study of herbivore effects on habitat requirements of pioneer species, on BCI.

Kalan Ickes, University of Illinois, May 20 - Jul 20, to work with Jim Dalling on the elevation effects on the life-history characteristics of tropical trees, in Chiriquí and Bocas del Toro.

Sara Dewalt, Louisiana State University, May 20 - June 3, to work with Jim Dalling on the elevation effects on the life-history characteristics of tropical trees, in Chiriquí and Bocas del Toro.

Robert Srygley, SI senior postdoctoral fellow from Oxford University, UK, May 21 - Jul 10, to work on "Do migrating Neotropical butterflies use a magnetic compass?" on BCI and Gamboa.

Steve Hubbell, STRI, May 21 - Aug 30, to continue research in Panama.

Luis Borda, University of Georgia, May 21- Aug 30, to work with Steve Hubbell on a seedling census, on BCI.

William Grauel, May 23 - Aug 20, to work with Tom Kursar on the management of cativales and non-timber products of Darién, on BCI.

Evandro de Oliveira, Universidade Federal do Minas, Brazil, May 25 - Jul 10, to work on "Do migrating neotropical butterflies use a magnetic compass to orient?" on BCI.

Anthony Coates, director del Programa de Investigación Científica del Smithsonian, sostuvo dos reuniones abiertas en Barro Colorado y el Centro Tupper el miércoles, 16 de mayo. Coates hizo una reseña general sobre el clima político y económico de SI y explicó ciertos aspectos relacionados al Smithsonian que han recibido gran cobertura por los medios recientemente, como la reorganización científica de la Institución. Coates también se reunió con los científicos el jueves 17 de mayo en el Centro Tupper.

Coates se reunió con STRI

New at STRI Nueva en STRI

Damaris de Martínez was selected for the position of Procurement Technician at STRI's Procurement Office, effective Monday, May 7. She will be in charge of purchasing supplies and services both locally and internationally. Martínez brings to STRI thirteen years of experience as purchasing agent with the United States Army. We welcome her and wish her luck.

Damaris de Martínez fue seleccionada para la posición de técnica de compras en el Departamento de Compras de STRI a partir del lunes 7 de mayo. Estará encargada de la adquisición de suministros y servicios a nivel local e internacional. Martínez trae consigo a STRI trece años de experiencia como agente de compras en el Ejército de los Estados Unidos. Le damos la bienvenida y le deseamos suerte en esta posición.

Jornada de conferencias

La Universidad de Panamá y la Ciudad del Saber invitan a la comunidad de STRI a una jornada de conferencias dictadas por Donald Worster, historiador ambiental:

Mayo 21 "Ecología Profunda, Historia Ambiental y Ciencias Ambientales". Auditorio de la Vicerrectoría de Investigación y Postgrado de la Universidad de Panamá, 7-9pm

Mayo 22 "El Agua en la Historia". Auditorio de la Vicerrectoría de Investigación y Postgrado de la Universidad de Panamá, 7-9pm

Mayo 23 "Foro de Agua" ANAM y CATHALAC. Campus Harmodio Arias Madrid (Domo) de la Universidad de Panamá, 10:30am

"El Agua en la Historia de Panamá. Omar Jaén Suárez, Alfredo Castellero y Donald Worster. Auditorio del Museo del Canal Interoceánico de Panamá, 7-9pm

Mayo 24 Encuentro con Organizaciones Ambientalistas. Salón Las Oropéndolas, Parque Natural Metropolitano, 10:30am.



Central telefónica en Bocas del Toro: 757-9754

Recientemente, la Oficina de Informática de STRI completó la instalación de una central telefónica en Bocas del Toro con cuatro líneas y 16 extensiones.

New publications

Bringmann, Gerhard, Ochse, Michael, Zotz, Gerhard, Peters, Karl, Peters, Eva Maria, Brun, Reto, and Schlauer, Jan. 2000. "6-Hydroxyluteolin-7-O-(1"-alpha-rhamnoside) from *Vriesea sanguinolenta* Cogn. and Marchal (Bromeliaceae)." *Phytochemistry* 53(8): 965-969.

Büdel, Burkhard, Meyer, Angelika, Salazar, Noris, Zotz, Gerhard, and Lange, Otto L. 2000. "Macrolichens of montane rain forests in Panama, Province Chiriquí." *The Lichenologist* 32(6): 539-551.

Engelbrecht, Bettina M.J., and Herz, Hubert M. 2001. "Evaluation of different methods to estimate understory conditions in tropical forests." *Journal of Tropical Ecology* 17: 207-224.

Lange, Otto L., Buedel, Burkhard, Meyer, Angelik, Zellner, Hans, and Zotz, Gerhard. 2000. "Lichen carbon gain under tropical conditions: Water relations and CO₂ exchange of three *Leptogium* species of a lower montane rainforest in Panama." *Flora* 195(2): 172-190.

Marsh, David M. 2001. "Behavioral and demographic responses of túngara frogs to variation in pond density." *Ecology* 82(5): 1283-1292.

Zotz, Gerhard. 2000. "Size-related intraspecific variability in physiological traits of vascular epiphytes and its importance for plant physiological ecology." *Perspectives in Plant Ecology Evolution and Systematics* 3(1): 19-28.

STRI in the news

"Managing the rainforest" by I. De Marajo and Paragominas. *The Economist* May 10, 2001.