Smithsonian Tropical Research Institute, Panamá www.stri.org May 16, 2003

Tupper seminar

Tuesday, May 20, noon seminar speaker will be Priya Davidar, STRI senior fellow from Pondicherry University, India
Patterns of tree diversity in the rain forests of the Western Ghats, India

Bambi seminar

Thursday, May 22, Bambi seminar speaker will be Jonathan Myers, University of Florida-Gainesville
Carbon allocation to storage as a basis for trade-offs between plant growth and survival in temperate and tropical forests

Bocas seminar

Thursday, May 22, Bocas seminar speaker will be David Kline, University of California at San Diego
The decline of Caribbean reefs: Coral diseases and human impacts

Arrivals

Michael Kaspari, Mellon fellow from the University of Oklahoma, and assistants Ysabel Milton and Shelley Bagwell, May 20 - Jun 9, to conduct a pilot study on the dynamics and regulation of brown food webs, on BCI.

Lindsay Cray, State University of New York, May 20 - Aug 7, to study Agouti movement patterns relative to available resources, on BCI.

Peter Meylan, Eckerd College, Florida, May 23 - Jun 26, to study the ecology and migrations of marine turtles of Bocas del Toro province, at Bocas.

Slow burn: the insidious effects of surface fires on tropical forests: Laurance

STRI staff scientist William F. Laurance published "Slow burn: The insidious effects of surface fires on tropical forests", in the May issue of *Trends in Ecology and Evolution* (18: 209-212). Each year, thousands of fires are lit in the humid tropics, to raze vast expanses of forest for ranching and slash-and-burn farming. Although highly destructive to natural ecosystems, these intentional fires are now being rivaled in terms of their ecological impacts by a more subtle menace: accidental surface fires. Surface fires are deceptively unimpressive, creeping along the forest floor as a thin ribbon of flames and rarely exceeding 20 cm in height. Unlike fast-burning intentional fires, which are lit after vegetation has been slashed and felled to dry out forests and increase flammability, surface fires merely consume the leaf and woody litter and generate only modest heat, covering as little as 150m in a day. Nevertheless, surface fires are deadly to many rain-forest plants and animals, and even more alarming than their initial impacts, is that surface fires can set in motion an irreversible process of forest degradation. Article in .pdf available.

Slow-moving animals, such as three-toed sloth, suffer heavy mortality during surface fires.

Los fuegos de superficie causan alta mortalidad entre animales de lento movimiento, como el perezoso de tres dedos.

El científico William F. Laurance de STRI, publicó "Slow burn: The insidious effects of surface fires on tropical forests" [Quema lenta: los insidiosos efectos de los fuegos de superficie en los bosques tropicales] en el número de mayo de *Trends in Ecology and Evolution* (18: 209-212). Cada año, miles de fuegos se encienden en los trópicos húmedos, para cortar grandes extensiones de bosques para ganado y agricultura de roza y quema. Aunque estos fuegos son muy destructivos para los ecosistemas naturales, ahora tienen un rival en términos de impactos ecológicos: la sutil amenaza de los fuegos de superficie accidentales. Los fuegos de superficie pueden pasar inadvertidos, arrastrándose sobre el suelo del bosque como una cinta delgada de llamas que raramente pasan de los 20 cm en altura. A diferencia de los fuegos intencionales de quema rápida, que se inician cuando la vegetación ha sido cortada y ha caído al bosque seco aumentando su volatilidad, los fuegos de superficie sólo consumen hojas y hojarasca y generan un calor moderado, cubriendo apenas 150 metros al día. Sin embargo, los fuegos de superficie son mortales para muchas plantas en los bosques lluviosos y para animales, y aún más alarmante que sus efectos inmediatos, es que estos fuegos pueden poner en acción un proceso de degradación forestal irreversible.

More arrivals

John Auga, Brus Isua and Richard Kutil, Parataxonomist Training Center, Papua New Guinea, May 23 - Jun 4, to work with the Crane herbivore project, on Parque Natural Metropolitano and Sherman.

Paula Trillo, University of Montana, May 23 - Aug 20, to study the plastic expression oa a sexually slelected trait in the tortoise beetle *Acromis sparsa*, in Gamboa.

New publications

Laurance, William F. 2003. "Slow burn: the insidious effects of surface fires on tropical forests." *Trends in Ecology and Evolution* 18(5): 209-212.

Greenfield, Michael D., and Snedden, W. Andrew. 2003. "Selective attention and the spatio-temporal structure of orthopteranchoruses." *Behaviour* 140: 1-26.

Laurance, William F., Rankin-de Merona, Judy, Andrade, Ana, Laurance, Susan G., D'Angelo, Sammya, Lovejoy, Thomas E., and Vasconcelos, Heraldo L. 2003. "Rain-forest fragmentation and the phenology of Amazonian tree communities." *Journal of Tropical Ecology* 19: 343-349.

Zeh, David. W., Zeh, Jeanne A., and Bonilla, Melvin M. 2003. "Phylogeography of the giant harlequin beetle (*Acrocinus longimanus*)." *Journal of Biogeography* 30(May): 747-753.

Biodiversity Day at Galeta

This coming weekend (Saturday, May 17 - Sunday, May 18) STRI will celebrate Biodiversity Day (May 22) at the Marine Laboratory in Galeta with a taxonomic marathon that will include STRI staff and associate scientists, guest biologists, and the media. This is the first time the Biodiversity Day will be celebrated in Panama, following efforts carried out in Europe, US and some Latin American countries. The ´tax-a-ton´ was organized by STRI, SENACYT (National bureau for Science, Technology and Innovation), ANAM (National authority for the Environment) University of Panama, Technological University of Panama, and Colon governor's office.

Este fin de semana (Sábado a domingo, 17-18 de mayo) STRI celebrará el Día de la Biodiversidad (22 de mayo) en el Laboratorio Marino de Galeta Marine Laboratory in Galeta con un maratón taxonómico que incluirá científicos del personal de STRI, investigadores asociados, biólogos invitados, y los medios de información. Esta es la primera vez que se celebra el Día de la Biodiversidad en Panamá, siguiendo los esfuerzos que se llevan a cabo en Europa, los Estados Unidos, y otros países latinoamericanos. El 'tax-a-ton' fue organizado por STRI, SENACYT, ANAM, la Universidad de Panamá, la Universidad Tecnológica de Panamá, y la Gobernación de Colón.

Día de la Biodiversidad en Galeta

Bocas´ first seminar

STRI's Bocas del Toro Research Station located in the Caribbean coast of Panama, presented a first in a series of seminars on May 8th at the Panamanian Institute for Tourism (IPAT), by Tim Carruthers, a Mellon postdoctoral fellow from the University of Maryland. The seminar "Seagrass habitats of the Bocas del Toro Archipelago" was attended by about 60 locals, resident Americans, and even school children from the community. The next seminar was announced for Thursday, May 22, by David Kline from the University of California at San Diego, and will focus on corals of Bocas del Toro.

La Estación de Campo de STRI en Bocas del Toro, localizada en la costa caribeña de Panamá, presentó el primero en una serie de seminarios, el jueves, 8 de mayo , en el Instituto Panamneño de Turismo (IPAT), por Tim Carruthers, becario postdoctoral Mellon, de la Universidad de Maryland. El seminario "Hábitats de pasto marino en el Archipiélago de Bocas del Toro" contó con la presencia de 60 miembros de la comunidad, extranjeros, y hasta niños de escuela de la comunidad. El próximo seminario fue anunciado para el jueves, 22 de mayo, por David Kline de la Universidad de California en San Diego, y se enfocará en los corales de Bocas del Toro.

Primer seminario en Bocas

Funding for Las Perlas Biodiversity Assessment

The British government has announced funding for a project to assess and develop marine biodiversity in the Las Perlas archipelago, on the Pacific side of Panama. The project was successful under the annual Darwin Initiative competition. Funding will support research and training links between Heriot-Watt University, Edinburgh and STRI building up information about the marine and coastal environment of Las Perlas. Practical training will be provided for young researchers working alongside project team members. Three young Darwin fellows, to be recruited to the project, will also receive training on a Master of Science degree course in Edinburgh. School and local community education material and leaflets will be produced to promote awareness of the importance of protecting and managing the Archipelago's marine natural and commercial resources. According to Jim Malcolm British ambassador to Panama, "The Darwin Initiative is part of the UK's commitment to tackling environmental problems at an international level. We are supporting important projects aimed at saving species and ecosystems. Panama has incredible marine biodiversity and this funding will help with its conservation." Further information on the Darwin Initiative is available at: http://www.darwin.gov.uk and http://www.defra.gov.uk