

Tupper seminar

Tuesday, December 2, noon seminar speaker will be Wilhelm Boland, visiting scholar from Max-Planck Institute for Chemical Ecology, Germany
Evolution of leaf beetle defenses: a chemist's approach

Bambi seminar

Thursday, December 4, Bambi seminar speakers will be Mike Kaspari, University of Oklahoma and Mirna Santana, University of Puerto Rico
All that rots: experiments with brown food webs

Arrivals

Edmund Taner, Mellon fellow from the University of Cambridge, UK, Nov 27 - Dec 21, to study the importance of litterfall for tree growth and nutrient by a large scale litter renewal experiment in tropical deciduous forests in Panama, on BCI.

Christian Voight and Stephanie Speck, Institute for Zoology and Wildlife Research, Germany, Dec 1-13, to study the role of bacteria in the olfactory communication of the greater sac-winged bat *Saccopteryx bilineata* (Emballonuridae, Chiroptera), on BCI.

Peter Bechier, SI Migratory Bird Center, Dec 4 - Feb 29, to work with Sunshine Van Bael, on Bocas del Toro.

Steven Poe, University of New Mexico, Dec 3-28 to study the phylogeny of Anolis lizards and other reptiles and amphibians, on different sites in Panama.



Smithsonian Tropical Research Institute, Panamá

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November 28, 2003

UNEP visit to STRI

Klaus Töpfer, executive director of the United Nations Environment Program (UNEP), Ricardo Sanchez-Sosa, director of UNEP Regional Office for Latin America, the Caribbean, and Mexico and Cristina Böлке, director of UNEP Division of Regional Cooperation visited STRI with STRI director Ira Rubinoff and deputy director Eldredge Bermingham, and Panama's Environmental Authority's general administrator Ricardo Anguizola. They were toured to STRI's Canopy Crane Access System in Ft. Sherman, to BCI and Gamboa. The photo shows STRI plant physiologist Klaus Winter (first from the left) explaining the use of large glass enclosures to study CO₂ sequestration of tropical trees to Töpfer, Sanchez-Sosa, Anguizola, Böлке, Rubinoff and Bermingham, at the Plant Physiology Program facilities in Santa Cruz, Gamboa.



Klaus Töpfer, director ejecutivo del Programa Ambiental de las Naciones Unidas (UNEP, por sus siglas en inglés), Ricardo Sánchez-Sosa, director de la Oficina Regional de UNEP para América Latina, el Caribe y México, y Cristina Böлке, directora de la División de Cooperación Regional de UNEP visitaron STRI con el director Ira Rubinoff y el subdirector Eldredge Bermingham, y el administrador general de la Autoridad Nacional de Medio Ambiente (ANAM), Ricardo Anguizola. El grupo fue conducido en un recorrido al Sistema de Acceso al Dosel de STRI en Fuerte Sherman, BCI y Gamboa. La foto muestra al fisiólogo vegetal de STRI, Klaus Winter (primero desde la izquierda) explicando el uso de cámaras de vidrio para estudiar cómo los árboles tropicales secuestran su CO₂, a Töpfer, Sanchez-Sosa, Anguizola, Böлке, Rubinoff y Bermingham, en las instancias del Programa de Fisiología Vegetal en Santa Cruz, Gamboa.

Visita de UNEP a STRI

More arrivals

Lynn Martin II and Peggy Han, Princeton University, Dec 5, to study immunological comparisons of house sparrow, in Gamboa.

Cameron Currie and Ainslie Litte, University of Kansas, Dec 6-14, to study the evolutionary-ecology of the attine ant-microbe mutualism, in Gamboa.

Departures

Fernando Santos-Granero, Dec 2-14, to Lima, Perú, to work with collaborator Frederica Barclay, on a manuscript.

Rick Condit, Dec 5-27, to Santa Barbara, to attend meetings of the National Center for Ecological Synthesis, followed by some vacation.

Congratulations!

To Vileka Rodríguez and David Dahani, for the birth of their sons Ravi Lucas and Suraj Andrés, on Wednesday, November 19. They weighed 7lb each.

Congratulations to Jaime Flores and Dalys Valdes, for the birth of their son, Anthony Yonel, on Saturday, November 22. He weighed 10.3lb. and measured 55cm.

New publications

Franz, Nico M., and Weislo, William T. 2003. "Foraging behavior in two species of *Ectatomma* (Formicidae: Ponerinae): Individual learning of orientation and timing." *Journal of Insect Behavior* 16(3): 381-410.



ANAM assigns 300 hectares to STRI's PRORENA project

Director Ira Rubinoff and Ricardo Anguizola, general administrator of the Panamanian Authority for the Environment (ANAM) signed an agreement of collaboration to develop a Research and Forest Restoration Program (PIRFOR) to be carried out by STRI's Project for Reforestation with Native Species (PRORENA). PIRFOR is a long-term initiative designed for 20 years of forest research in 150 hectares in the Panama Canal watershed inside the Soberania National Park that has been invaded with the exotic grass *Saccharum spontaneum*. It will also work on an extra 150 hectares of degraded lands in the central region of Panama, in Río Hato, province of Coclé. PRORENA is a joint effort between STRI's Center for Tropical Forest Science and Yale University. This agreement strengthens the relationship between STRI and ANAM, and is expected to be highly beneficial to Panama's reforestation efforts. This country has two million hectares of degraded lands due to its non-sustainable practices of cattle ranching, logging and agriculture.

El director Ira Rubinoff y el administrador general de la Autoridad Nacional del Ambiente (ANAM), Ricardo Anguizola, firmaron un convenio de colaboración para desarrollar el Programa de Investigación y Restauración Forestal (PIRFOR) que llevará a cabo el Proyecto de Reforestación con Especies Nativas (PRORENA) de STRI. PIRFOR es una iniciativa a largo plazo diseñada para trabajar durante 20 años en investigaciones forestales en 150 hectáreas de la Cuenca del Canal de Panamá dentro del Parque Nacional Soberanía que han sido invadidas por paja blanca (*Saccharum spontaneum*), una especie exótica. También trabajará en otras 150 hectáreas de tierras degradadas en la región central de Panamá en Río Hato, provincia de Coclé. PRORENA es un esfuerzo conjunto que llevan a cabo el Centro de Ciencias Forestales del Trópico de STRI y la Universidad de Yale de los Estados Unidos. Este convenio fortalece las relaciones entre STRI y la ANAM y se espera sea de gran beneficio para los esfuerzos de reforestación en Panamá. Este país tiene dos millones de hectáreas de tierras degradadas debido a las prácticas no sostenibles de ganadería, explotación maderera y agricultura de subsistencia.

More publications

Harrison, Rhett D., and Yamamura, Norio. 2003. "A few more hypotheses for the evolution of dioecy in figs (*Ficus*, *Moraceae*)." *Oikos* 100(3): 628-635.

Hugues, W.O.H., and Boomsma, Jacobus J. 2003. "Let your enemy do the work: within-host interactions between two fungal parasites of leaf-cutting ants." *Proceedings of the Royal Society of London B. Online*(Supplement).

Knowlton, Nancy, and Rohwer, Forest. 2003. "Multispecies microbial mutualisms on coral reefs: The host as a habitat." *American Naturalist* 162(Suppl.): S51-S62.

Piperno, Dolores R. 2003. "A few kernels short of a cob: On the Staller and Thompson late entry scenario for the introduction of maize into northern South America." *Journal of Archaeological Science* 30(7): 831-836.

Puyravaud, Jean Philippe, Mohandass, Dharmalingam, and Chhabra, Tarun. 2003. "A rediscovery of *Eriochrysis rangacharii* C.E.C. Fisch. (*Poaceae*) in the Nilgiri Mountains of southern India." *Candollea* 58(1): 97-100.

Puyravaud, Jean Philippe, Davidar, Priya, Pascal, Jean Pierre, and Ramesh, B.R. 2003. "Analysis of threatened endemic trees of the Western Ghats of India sheds new light on the Red Data Book of Indian plants." *Biodiversity and Conservation* 12(10): 2091-2106.

Puyravaud, Jean Philippe. 2003. "Standardizing the calculation of the annual rate of deforestation." *Forest Ecology and Management* 177(1-3): 593-596.

More publications

Puyravaud, Jean Philippe, Dufour, Celine, and Aravajy, Subramanian. 2003. "Rain forest expansion mediated by successional processes in vegetation thickets in the Western Ghats of India." *Journal of Biogeography* 30(7): 1067-1080.

Sampaio, Erica M, Kalko, Elisabeth K V, Bernard, Enrico, Rodriguez, Herrera Bernal, and Handley, Charles O, Jr. 2003. "A biodiversity assessment of bats (Chiroptera) in a tropical lowland rainforest of Central Amazonia, including methodological and conservation considerations." *Studies on Neotropical Fauna and Environment* 38(1): 17-31.

Schaller, Michaela, Schroth, Gotz, Beer, John, and Jimenez, Francisco. 2003. "Species and site characteristics that permit the association of fast-growing trees with crops: The case of *Eucalyptus deglupta* as coffee shade in Costa Rica." *Forest Ecology and Management* 175(1-3): 205-215.

Srygley, Robert B. 2003. "Wind drift compensation in migrating dragonflies Pantala (Odonata: Libellulidae)." *Journal of Insect Behavior* 16(2): 217-232.

STRI in the news

"Obstáculos para el desarrollo de la reforestación." 2003. *La Prensa* (November 24): 44A.



resource management, and environmental amelioration, as stipulated in a Memorandum of Understanding between the two parties signed on January 13, 1999. The agreement focuses on joint activities in the field of native-tree species reforestation carried out with the Native Species Reforestation Project (PRORENA) in Panama, with the intention of extending the program to other countries in Central America and throughout the tropics. The photo shows director Ira Rubinoff with James Gustave Speth, dean of the Yale School of Forestry and Environmental Studies after signing the MOU, and PRORENA director Mark Wishnie.

STRI y la Facultad de Forestería y Ciencias Ambientales de la Universidad de Yale firmaron un Memorandum de Entendimiento para ampliar cooperación en el campo de restauración de bosques, el sábado 22 de noviembre, en la Oficina del Director de STRI. Este acuerdo extiende el compromiso de ambas partes para unir esfuerzos en forestería tropical, manejo de recursos naturales y mejoramiento ambiental, como fue estipulado en el Memorandum de Entendimiento formado por ambas partes el 13 de enero de 1999. El convenio se concentra en actividades conjuntas en el campo de la reforestación con especies nativas que lleva a cabo el Proyecto de Reforestación con Especies Nativas (PRORENA) de STRI en Panamá, con la intención de extender el programa a otros países de Centroamérica y los trópicos. La foto de arriba muestra al director Ira Rubinoff con James Gustave Speth, decano de la Escuela de Forestería y Estudios Ambientales de la Universidad de Yale después de firmar el convenio, y al director de PRORENA, Mark Wishnie.

PRORENA symposium

STRI's Project for Reforestation with Native Species (PRORENA) held a "Symposium on financing reforestation in Latin America" on Friday, November 21, at the Tupper Conference Center. The symposium, that was opened to the public, explored new challenges and opportunities for financing reforestation at a variety of scales. Speakers at the symposium included James Gustave Speth, dean of the Yale School of Forestry & Environmental Studies and prior director of the United Nations Development Program (UNDP), the World Resources Institute (WRI) and president Jimmy Carter's Council on Environmental Quality; John Forgach, McCluskey fellow at Yale and founder of the world's first Biodiversity Enterprise Fund and the first green investment bank in Brazil; Stefano Pagiola, senior environmental economist at the World Bank Group and author of *Selling forest environmental services: Market-based mechanisms for conservation and development*, Jorge Illueca, UNEP, Juan Pablo Buchert, BHP Consulting and Carlos Herrera, FUNDECOR. The event was attended by a large group of decision makers, government officials, the academic and scientific community, and members of the media. Several local newspapers, TV and radio stations published and broadcasted the event and interviewed the experts. In the photo above (sitting, from the left) are Jorge Illueca, United Nations Environment Program (UNEP), Pagiola and Speth.

MOU between STRI and Yale

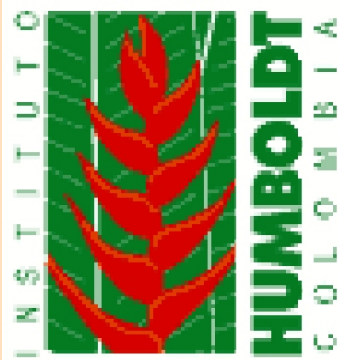
STRI and the Yale School of Forestry and Environmental Studies entered into a Memorandum of Understanding to further cooperation in the field of tropical forest restoration, on Saturday, November 22, at the STRI's Director's Office. This MOU extends the commitment of both parties to joint activities in tropical forestry, natural



STRI birthdays

Francisco Javier Morales	3
Venicio Teran,	4
Lina Gonzalez	4
Luis H. Castillo	6
Leonardo M. Chavez	6
Mirna Samaniego	8
Jorge Melgar	11
José Ramón Perurena	12
Tania Quiel	12
Grettehum Grajales	13
Alejandro Garrido	15
Pierre Jacinto Fuentes	17
Héctor Montenegro	17
Andrés Ramos	17
Dayra Navarro	17
Julio A. Polo	20
Damaris Martinez	20
Ira Rubinoff	21
José Nuñez	22
Adriana Bilgray	24
Raúl Rios	25
Elizabeth Sanchez	26
Clementina Chung	26
Zuleika Maynard	26
Mario Santamaria	27
Sixto Martinez	28
Jaime Flores	28

Becas Humboldt



El Instituto de Investigación de Recursos Biológicos Alexander von Humboldt invita a la comunidad de STRI a participar en el programa de becas para el conocimiento, conservación y uso sostenible de la biodiversidad de Colombia. Para mayor información, consulte con Adriana Bilgray de la Oficina de Educación de STRI y/o visite <http://humboldt.org.co/>

El Proyecto de Reforestación con Especies Nativas (PRORENA) de STRI, llevó a cabo el "Simposio sobre Financiamiento para la Reforestación en América Latina" el viernes, 21 de noviembre, en el Centro Tupper. El simposio, que fue abierto al público, exploró nuevos retos y oportunidades de financiamiento para la reforestación en una variedad de escalas. Los conferencistas incluyeron a James Gustave Speth, decano de la Escuela de Forestería y Estudios Ambientales de la Universidad de Yale y antiguo director del Programa de Desarrollo de las Naciones Unidas, el Instituto de Recursos Mundiales (WRI), y el Consejo de Calidad Ambiental del presidente Jimmy Carter; John Forgach, becario McCluskey de Yale y fundador del primer Fondo para la Biodiversidad y del primer banco para inversiones ecológicas en Brasil; Stefano Pagiola, economista ambiental "senior" Grupo Banco Mundial y autor del libro *Selling forest environmental services: Market-based mechanisms for conservation and development* [Vendiendo servicios ambientales: Mecanismos basados en el mercado para la conservación y el desarrollo], Jorge Illueca, Programa Ambiental de las Naciones Unidas (UNEP), Juan Pablo Buchert, Consultores BHP y Carlos Herrera, FUNDECOR. El simposio recibió a una nutrida audiencia de administradores, funcionarios gubernamentales, personalidades de la comunidad científica y académica, y miembros de los medios locales. Varios periódicos locales, la televisión y estaciones de radio cubrieron el evento con artículos, documentales y entrevistas de los expertos. En la foto de la página anterior aparecen (sentados de izquierda a derecha) Jorge Illueca de the event and interviewed the experts. In the photo above (sitting, from the left) are Illueca, Pagiola y Speth.



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