

Tupper 4pm seminar

Tuesday, February , 4pm seminar speaker will be Paul Ehrlich, Stanford University
One with Nineveth: The human prospect in 2007

Bambi seminars

Wednesday, February 14, Bambi seminar speaker will be Pierre Taberlet, Laboratoire d'Ecologie Alpine

The IntraBioDiv project: comparing species richness with genetic diversity

Thursday, February 15, Bambi seminar speaker will be Paul Ehrlich, Stanford University

On the wings of checkerspots: a model system for population biology

Arrived this week

Margaret Louise Eng, York University, Canada, to study the evolution of courtship song in tropical passerine birds, in Gamboa.

Sharlene Santana, short term fellow from the University of Massachusetts, to study the evolution of cranial Morphology and diet in phyllostomid bats, at Bocas.

John Skillman, California State University, to study ecophysiology of tropical forest plants, in Gamboa.

Mary Hart, University of Kentucky, to study the effects of density and risk on the mating behavior of an egg-trading simultaneous hermaphrodite, *Serranus tortugaram*, at Bocas.

James White, Rutgers University, to conduct a survey of epibiotic and endophytic fungi on tropical plants, on BCI.



Smithsonian Tropical Research Institute, Panamá

www.stri.org

February 9, 2007

STRI and Mars meet to dip in chocolate

STRI and Mars, Inc held a one-day multidisciplinary symposium on cacao at the Tupper Center on Tue, Jan 30.

A medical study on the Kuna people who drink great amounts of unprocessed chocolate and show little hypertension was presented by Norm Hollengerg from Harvard University—he calls for a 25-year controlled study of the medical effects of cocoa. “Forestry, genetics, ecology, sociology, climate change, politics and economic all shared the stage with the biomedical implications of cocoa flavanols.”

Allen Herre recounted his experimental findings inoculating cacao trees with certain endophytes that appear to fight black pod (*Phytophthora*). Sunshine van Bael spoke about the benefits of growing cacao in a natural forest setting where birds are not driven out of the habitats thus help control insects. Other STRI scientists including director Ira Rubinoff, experts from the US Department of Agriculture, the Royal Botanical Gardens, the University of California at Davis, the Gorgas Institute, McGill University,



Conservation International, the Joint Global Research Institute, Harvard University and Mars also contributed the symposium.

Read the whole story at:
http://www.thepanamanews.com/pn/v_13/issue_03/science_01.html

Hollengerg pide un estudio controlado de 25 años para conocer los efectos médicos del cacao. “Forestería, genética, ecología, sociología, cambio climático y economía compartieron la escena con las implicaciones biomédicas de los flavonoides del cacao.”

The photo above shows (from the left) STRI's Lisa Barnet, Harold Schmitz, Chief Science officer for Mars, Inc. and Norm Hollengerg.

STRI y Mars, Inc celebraron un simposio multidisciplinario de un día sobre cacao en el Centro Tupper, el martes, 30 de enero.

Norm Hollengerg, de la Universidad de Harvard presentó un estudio médico sobre el pueblo Kuna, quienes toman grandes cantidades de chocolate sin procesar y muestran poca hipertensión—

Allen Herre hizo un recuento de sus resultados al inocular árboles de cacao con ciertos endófitos que parecen tener efecto contra la mancha negra (*Phytophthora*). Sunshine van Bael habló sobre los beneficios de sembrar cacao en bosques naturales, donde las aves permanecen y controlan los insectos. Otros científicos de STRI incluyendo el director Ira Rubinoff, expertos del Departamento de Agricultura de los Estados Unidos, Royal Botanical Gardens, la Universidad de California en Davis, el Instituto Gorgas, la Universidad de McGill,

Arrived this week

Markus Adamek, University of Goettingen, to study the impact of elevated nitrogen input on the biogeochemistry and productivity of tropical forest, at Fortuna.

Yu-Yun Chen, University of Georgia, to study plant reproductive biology and seedling recruitment, in Gamboa.

Arriving next week

Erin Kurten, short term fellow from Stanford University, to study whether herbivores and seedling predators maintain tropical diversity: testing the Jansen Connell at the community level, on BCI.

Students and instructors from the University of Toronto, to participate in the field course Tropical Ecology and Evolution: BIO303, at Bocas.

Margarita Maria Lopez Uribe, intern, to work with Bill Wcislo on vision in nocturnal bees, on BCI.

Samuel Diaz, University of California at Berkeley, to study "Why help? An assessment of indirect and direct fitness benefits of alloparental care in male rufous-naped tamarins (*Sanguinus geoffroyi*), in Gamboa.

Hannah Ter Hofstede, short term fellow from the University of Toronto, to study the auditory sensitivity and defense strategy in katydids, on BCI.

Rick Meinzer, Barb Lachenbruch, US Forest Service, and Kate McCulloh, Oregon State University, to study the comparative hydraulic architecture, an analysis of transport efficiency and mechanical constraints, on BCI.

Conservation International, el Instituto de Investigaciones Joint Global, la Universidad de Harvard y Mars también contribuyeron al simposio. Lea toda la historia en la dirección de internet que aparece en azul en la primera página.

La foto en la primera página muestra (desde la izquierda) a Lisa Barnett de STRI, Harold Schmitz, director en jefe de Ciencias de Mars, Inc. y a Norm Hollengerg, de Harvard University.



Marine Reserves In Latin America and the Caribbean

The Science of Marine Reserves in Latin American and the Caribbean scientific advisory committee is holding a meeting in Panama from February 8-11 at the Country Inn and Suites Hotel - Amador. STRI marine scientists Héctor Guzmán is one of the organizers of the event.

One of the main goals of this meeting is to choose case studies to publish a booklet on marine reserves. Each case study will focus on a single reserve and clearly illustrate a principle of marine reserve protection, such as trophic cascades, adult spillover, larval export, or changes in density, biomass, size, or diversity in marine reserves.

More information and photo:
http://ucsb.piscoweb.org/~ruttenberg/Science_of_Mari

More arrivals

Charlotte Jander, Cornell University, to study plant sanctions and wasp pollination behavior in the fig tree-fig wasp mutualism, on BCI.

Sofie Sjogersten and Jodie Hartill, University of Nottingham, to study the nutrient controls on carbon dynamics in tropical wetlands, at Bocas.

Nadja Ruger, CTFS fellow, to study form tree species characteristics to population and community dynamics with the individual based forest model FORMID, on BCI and Gamboa.

Jose Luis Andrade, Centro de Investigación Científica de Yucatán, to collaborate with Klaus Winter, at Tupper.

Matteo Dettò, San Francisco, CA and Ran Nattan, Jerusalem, Israel, to do research work on the Seed Dispersal II Project, on BCI.

Departures

Fernando Pascal to Washington DC on official business at SI.

Nelida Gomez to Germany, to do chemical analysis of scarab at the Max Planck Institute for Chemistry Ecology.

David Roubik to Cancún, Mexico, to meet with colleagues in Exosur. Then to Belize, to visit a nature reserve.

Wendy Almillategui de Vasquez to Pto. Maldonado, Peru, to attend course on Interpretation of Naturalist Guides.

Luz Latorraca, to Washington DC, to attend training by SI OHR in PeopleSoft program and Federal & Trust position recruitment.

New publications

Aiello, Annette. 2006. "Adelpha erotia erotia form 'lerna'" (Nymphalidae): exploring a corner of the puzzle." *Journal of the Lepidoptera Society* 60(4): 181-188.

Niven, Jeremy E. 2007. "Invertebrate memory: Wide-eyed ants retrieve visual snapshots." *Dispatch Online*.

Queenborough, Simon A., Burslem, David F.R.P., Garwood, Nancy C., and Valencia, Renato. 2007. "Determinants of biased sex ratios and inter-sex costs of reproduction in dioecious tropical forest trees." *American Journal of Botany* 94(1): 67-78.

Santos-Granero, Fernando. 2007. "Of fear and friendship: Amazonian sociality beyond kinship and affinity." *Journal of the Royal Anthropological Institute* 13(1):1-18.

STRI in the news

"Crichton, Laurance, Lomborg, and their agendas." 2007. *Biopolitical*: January 27.

"Croc awaits repatriation" by Cliodhna McGowan. 2007. *Caiman National Newspaper*: January 8.

"The dragon and the rainforest" by William F. Laurance. 2007. *Tropinet* 18(1): 1-2.

"Former Arboretum director Ashton wins Japan Prize: Prize honors work in tropical forestry" by Alvin Powell. 2007. *Harvard University Gazette*: February 1.

Welcome to Javier Mateo Vega

The Center for Tropical Forest Science (CTFS) held an informal get together to welcome Javier Mateo Vega, director for the Environmental Leadership Training Initiative (ELTI) on Wednesday, February 7, at the Tupper Laboratories.

ELTI is a new STRI program to be conducted in collaboration with Yale University, to train environmental decision-makers in Latin America and the Asian tropics. The photo shows staff scientist Carlos Jaramillo, Vega, and associate director Georgina de Alba.

El Centro de Ciencias Forestales del Trópico (CTFS) celebró una reunión informal para ofrecer la bienvenida a Jose Mateo Vega,



Photo: Adriana Sautu

director de la Iniciativa de Liderazgo y Capacitación Ambiental (ELTI, por sus siglas en inglés), el miércoles, 7 de febrero, en las oficinas del CTFS en el Centro Tupper.

ELTI es un nuevo programa que STRI llevará a cabo con la Universidad de Yale, para entrenar administradores de recursos naturales en América Latina y en los trópicos de Asia. La foto muestra al científico Carlos Jaramillo, Vega y la directora asociada Georgina de Alba.

STRI-McGill NEO program has new director

STRI and McGill University offer a Neotropical Environment Option (NEO) for graduate programs in Agricultural and Biosystems Engineering, Biology, Geography, Natural Resource Science, Plant Science, Political Science and Sociology. This interdisciplinary option encourages and promotes ethically sound and socially significant scholarship valuable in the global context of environmental problems.

NEO is the brainchild of Catherine Potvin, professor at McGill and since 2001, director of the program.

Andrew Hendry, also a professor in Biology and McGill replaced Potvin early this year. A welcome/farewell ceremony was held at STRI on January 11 at the old Corotú Plaza, in honor of Catherine and Andrew. More information about Hendry at: <http://biology.mcgill.ca/faculty/hendry/>

STRI in the news

"Just how bad is the biodiversity extinction crisis?" by Rhett A. Butler. 2007. *Mongabay.com*: February 6.

"Large Amazon forest reserves crucial for species survival." 2007. *Environmental News Services*: January 15.

"Magic Web's exhibit a rainforest escape" by Emily Yocco. 2007. *The Red and Black*: February 1.

"Multi-agency effort to safeguard injured crocodile." 2007. *Caiman Net News*: January 8.

"New maps reveal causes of Amazon deforestation." 2007. *Mongabay.com*: January 26.

"Towards forest community and ecosystem genomics" by Christian Lexer, Marcela Van Loo and Thelma Barbará. 2007. *New Phytologist* 173: 661–663.

"Web Extra: Take a walk on the wild side: a slice of the rainforest in the District" by Nina Beckhardt, Hatchet Reporter. 2007. *GW Hatchet*: February 1.

"STRI: el plan de manejo," con la colaboración de Juan L. Maté y Darío Tovar. 2007. *Icaro 9*: 2006-2007.

"Una relación ecológica", by Tamara Del Moral. 2007. *La Prensa (Innova)*: February 3, 11A. Panamá.

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Information:

Mongabay.com

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Many scientists and conservationists foresee an species extinction crisis similar to historical extinctions in the past due to catastrophic events by the hand of mother nature.

For years we have heard the environment will collapse to the pressure of deforestation, and tropical forests may even reverse their services.

In his presidential address to the Association for Tropical Biology and Conservation, S. Joseph Wright, of the Smithsonian Tropical Research Institute, presented an interestingly different panorama.

The key points of the studies by Wright and Helene Muller-Landau, from the University of Minnesota presented last year are that:

- rural population density and total population are linked to the remaining forest cover;
- rural population will fall in the tropics by 2030, while total population growth will level off;
- deforestation will decrease in abandoned areas;
- primary forest will be replaced by secondary forest;
- total forest cover will have little change;
- tropical species will be spared.

Read a comprehensive review by Rhett A. Butler in:
<http://news.mongabay.com/2007/0206-biodiversity.html>

In-house debate:

Are we in the verge of a massive die-off of tropical species?

Muchos científicos y conservacionistas prevén una crisis de extinción de especies similar a extinciones históricas del pasado debido a eventos catastróficos por la mano de la madre naturaleza.

Por años hemos escuchado que el ambiente podría colapsar debido a la presión de la deforestación y que los bosques tropicales podrían incluso revertir sus servicios.

En su discurso presidencial ante la Asociación para la Conservación y Biología Tropical, S. Joseph Wright, del Instituto Smithsonian de Investigaciones Tropicales, presentó un panorama interesantemente diferente.

Los puntos clave de los estudios de Wright y Muller-Landau, de la Universidad de Minnesota, que se presentaron el año pasado son que:

- la densidad de la población rural y la población total están relacionadas a lo que queda de la cobertura boscosa;
- la población rural bajará en los trópicos para el 2030, mientras que el crecimiento de la población total se estabilizará;
- la deforestación disminuirá en las áreas abandonadas;
- los bosques primarios serán reemplazados por bosques secundarios;
- la totalidad de la cobertura boscosa sufrirá un cambio leve;
- las especies tropicales se salvarán.

Lea una reseña comprensiva por Rhett A. Buttler

<http://news.mongabay.com/2007/0206-biodiversity.html>