

Tupper seminar

Tuesday, September 2, noon seminar speaker will be Jessica L. Green, Macquarie University and University of Sydney, Australia
Sturt National Park, Australia as a model ecosystem: exploring spatial patterns of biodiversity from micro-organisms to macro-organisms

Bambi seminar

Thursday, September 4, Bambi seminar speaker will be Jessica L. Green, University of California at Davis
Spatial scaling of species richness, endemism and species-abundance: contrasting two fractal models

Conservation forum

Tuesday, September 2, the STRI Conservation Forum will hold an special meeting at 2pm in Large Meeting Room at Tupper. George Angehr will present the book *Directory of important bird areas in Panama*.

Arrivals

Marco Tschapka, University of Ulm, Germany, Sep 1-6, to work with Elisabeth Kalko, on BCI.

Kirk Zigler, postdoctoral fellow from Duke University, North Carolina, Sep 1 - Nov 1, to study the transition between indirect and direct development: early development of *Chybaesster rosaceus*, at Naos.



Smithsonian Tropical Research Institute, Panamá

www.stri.org

August 29, 2003



Major marine survey in Las Perlas

HWU, Edinburgh, UK—A major survey of the marine environment around Las Perlas Archipelago (LPA) in the Pacific side of Panama was completed this month, as part of a three-year study to gather information on the marine biodiversity and ecology of the area. The project, that includes scientists from STRI and Heriot-Watt University (HWU) in Edinburgh, receives funding from the UK government's Darwin Initiative Program. It aims to assist Panama's Authority for the Environment (ANAM) in the possible designation of selected areas for protected status and train at least three

Panamanian graduates to master of science level at HWU, to work on different aspects of the project in the future years. The survey was carried out during a 10-day cruise on STRI's *R.V. Urracá* by Héctor Guzmán who serves as Darwin Project coordinator at STRI, biologists Carlos Guevara and Beatriz Medina, STRI: and scientists James Mair, Sarah Benfield and Jade Berman, HWU. It included sediment grab sampling at 85 stations around the islands for analysis of macrobenthic faunal communities and preliminary work of the coastal coral communities to identify areas for future study. The project aims to produce educational material on the marine environment of Las Perlas in the coming years, to circulate among schools and appropriate local organizations. In the photo (from the left) are Beatriz, Sarah, James (standing), Carlos, Jade, STRI marine technician Alexis Lam, and Héctor (front row).

HWU, Edinburgo, Reino Unido— Un censo de grandes proporciones del ambiente marino en los alrededores del Archipiélago de Las Perlas, en el Pacífico de Panamá, se completó este mes, como parte de un estudio de tres años para recabar información detallada de la biodiversidad y ecología marina del área. El proyecto, conducido por científicos de STRI y la Universidad Heriot-Watt (HWU) en Edinburgo, recibe financiamiento de la Iniciativa Darwin del Reino Unido. Su objetivo es asistir a la ANAM (Autoridad Nacional del Ambiente de Panamá) a identificar las áreas que deben protegerse, y entrenar al menos tres panameños al nivel de maestría en la HWU, para trabajar en diferentes aspectos del proyecto en los próximos años. El estudio se llevó a cabo durante un viaje de 10 días en el *R.V. Urracá* de STRI, con el científico marino Héctor Guzmán (coordinador del Proyecto Darwin en STRI), los biólogos Carlos Guevara y Beatriz Medina, de STRI, y los científicos James Mair, Sarah Benfield y Jada Berman, HWU. Esta fase del proyecto incluyó obtención de sedimentos en 85 estaciones alrededor de las islas para análisis de comunidades de fauna macrobentónica, y estudios preliminares de comunidades de corales costeros para identificar áreas que deban ser estudiadas más adelante. Los investigadores esperan producir material educativo sobre el ambiente marino de Las Perlas en los próximos años, para circular entre escuelas y organizaciones locales interesadas. En la foto aparecen (desde la izquierda) Beatriz, Sarah, James (de pie), Carlos, Jade, Alexis Lam, técnico marino de STRI, y Héctor (en primer plano).



More arrivals

John Skillman, California State University, Sep 2 -12, to work on ecophysiology of tropical forest plants, at Tupper.

Bruno Pernet, University of Washington, Sep 2 -23, to study life histories of sabellid and serpulid annelids, on Bocas del Toro.

Departures

Richard Cooke, Aug 31 - Sep 4, to Tallahassee, FL, to consult with colleagues at the University of Florida and retrieve human skeletons from Cerro Juan Díaz.

Richard Condit, Sep 5 - Oct 4, to Petersham, MA, to attend the CTFS Analytical Workshop, then to San José, CA, to continue research on seals.

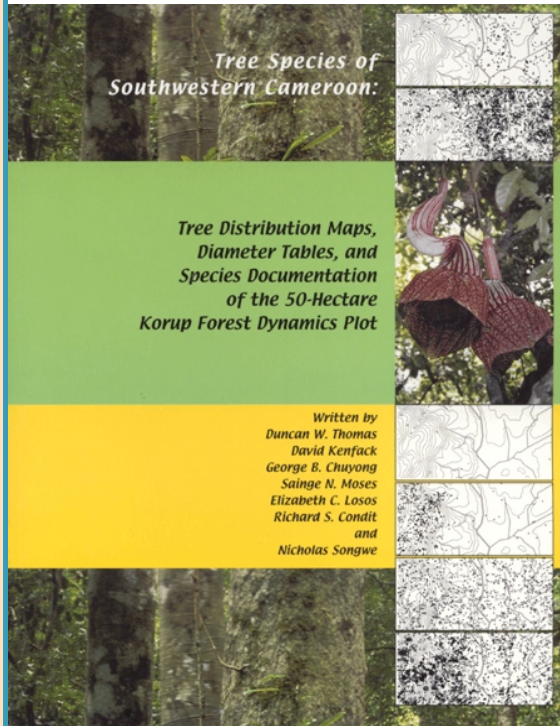
New publications

Crawford, A.J. 2003. "Huge populations and old species of Costa Rican and Panamanian dirt frogs inferred from mitochondrial and nuclear gene sequences." *Molecular Ecology* Online.

Dominy, Nathaniel J., Lucas, Peter W., and Wright, S. Joseph. 2003. "Mechanics and chemistry of rain forest leaves: canopy and understorey compared." *Journal of Experimental Botany* 54(390): 2007-2014.

Losi, Christopher, Siccamaa, Thomas G., Condit, Richard G., and Morales, Juan E. 2003. "Analysis of alternative methods for estimating carbon stock in young tropical plantations." *Forest Ecology and Management* Online.

New STRI book by the CTFS



STRI's Center for Tropical Forest Science and the Bioresources Development and Conservation Programme, Cameroon have published *Tree species of southwestern Cameroon: Tree distribution maps, diameter tables, and species documentation of the 50-hectare Korup Forest Dynamics Plot*, sponsored by the International Cooperative Biodiversity Groups (ICBG) and Central African Regional Program for the Environment (CARPE) of the U.S. Agency for International Development. The book is authored by Duncan W. Thomas, Oregon State University, David Kenfack, Missouri Botanical Garden, Goerge B. Chuyong, University of Buea, Cameroon, Sainge N. Noses, Korup National Park, Elizabeth Losos and Richard S. Condit, CTFS, and

Nicholas Songwe, Bioresources Development and Conservation Programme, Cameroon. The volume is the second in the CTFS Stand Table Book Series, with the objective of providing standardized demographic and floristic data from the global network of Forest Dynamic Plots..

El Centro de Ciencias Forestales del Trópico de STRI, y el Programa de Camerún para el Desarrollo y Conservación de Recursos Naturales han publicado el libro *Tree species of southwestern Cameroon: Tree distribution maps, diameter tables, and species documentation of the 50-hectare Korup Forest Dynamics Plot* [Especies de árboles del suroeste de Camerún: Mapas de distribución de árboles, tablas de diámetros y documentación de especies de la Parcela de 50 hectáreas de Dinámica de Bosques de Korup, financiado por los Grupos de Colaboración Internacional para la Biodiversidad (ICBG) y el Programa Regional de Africa Central para el Ambiente (CARPE) de la Agencia de los Estados Unidos para el Desarrollo Nacional (USAID). Los autores del libro son Duncan W. Thomas de la Universidad del Estado de Oregon, David Kenfack, del Jardín Botánico de Missouri, Goerge B. Chuyong, de la Universidad de Buea en Camerún, Sainge N. Noses del Parque Nacional Korup, Elizabeth Losos y Richard S. Condit del CTFS, y Nicholas Songwe del Programa de Desarrollo y Conservación de Recursos Naturales de Camerún. Este es el segundo volumen de la serie de libros Stand Table del CTFS, que tiene como objetivo suministrar información demográfica estandarizada desde el red global de las parcelas de dinámica de bosques.

Nuevo libro de STRI por el Centro de Ciencias Forestales del Trópico

Jacana passengers to STRI's new dock

Effective Monday, September 1st, BCI passengers must board the MB Jacana on STRI's new dock in Gamboa. The dock is located at the north end of Dredging Division, following Gaillard highway for about 3/4 of a mile past the community of Gamboa. Public transport to the dock will be provided by SACA bus company according to the following schedule: Monday - Friday:

Leaves Panama	Arrives in Gamboa	Leaves Panama	Arrives in Gamboa
6am.	6:30am	3:15pm	4:00pm
6:30am	7:05am	4:40pm	5:20pm

More publications

Thomas, D.W., Kenfack, D., Chuyong, G.B., Moses, Sainge N., Losos, Elizabeth C., Condit, Richard, and Songwe, N.C. 2003. *Tree species of southwestern Cameroon: Tree distribution maps, diameter tables, and species documentation of the 50-hectare Korup Forest Dynamics Plot*. Boston: Center for Tropical Forest Science, Smithsonian Tropical Research Institute.

Zeh, Jeanne A., Zeh, David W., and Bonilla, M. M. 2003. "Phylogeography of the harlequin beetle-riding pseudoscorpion and the rise of the Isthmus of Panama." *Molecular Ecology* online.

September birthdays

Audrey Smith	1
Biff Bermingham	2
Osvaldo Ortega	4
Ricardo Beteta	5
Antonio Reina	6
Rubén Lopez	7
María Stapf	8
Nayda Florez	8
Virgilio Sanchez	9
Carlos Tejada	9
Nicolás Sugasti	10
Suzanne Lao	11
Renate Sponer	12
Eric Salas	13
Liuris Herrera	14
Luis Turner	14
Mabelle Chong	15
Bill Eberhard	15
Tom Kursar	18
Jonas Jiménez	21
Xiomara Avila	22
George Anger	26
Edgardo Ochoa	26
José Herrera	27
José Deago	27
Lastenio Guzmán	28
Mirna Fernández	30
Marla Diaz	30

Pasajeros de Jacana al nuevo muelle de Gamboa

A partir del lunes 1ro de setiembre, los pasajeros de BCI deberán abordar la *Jacana* en el nuevo muelle de STRI en Gamboa. El muelle se encuentra en el extremo norte de la División de Dragado, siguiendo Ave. Gaillard for 3/4 de milla pasando Gamboa. La compañía de buses SACA ofrecerá el transporte público hasta el muelle, de acuerdo al siguiente horario, de lunes a viernes:

Sale de Panamá	Llega a Gamboa	Sale de Panama	Llega a Gamboa
6am.	6:30am	3:15pm	4:00pm
6:30am	7:05am	4:40pm	5:20pm



PRORENA hosts reforestation workshop

The Native Species Reforestation Project (PRORENA), a joint venture by STRI's Center for Tropical Forest Science and Yale School of Forestry and Environmental Studies, hosted a workshop for 18 staff from ANAM's Metropolitan Region, on Wednesday, August 27. PRORENA coordinator

Mark Wishnie and Panama Canal Authority official Arturo Cerezo presented the results of two years of research on strategies for restoring native forests in *Saccharum spontaneum* grasslands. The workshop participants administer reforestation projects in Panama's national parks executed by construction companies and others compensating for forests destroyed elsewhere in the Panama Canal Watershed. Research presented during the workshop aims to improve the results of such efforts. The photo shows Mark Wishnie, PRORENA and Jorge Matsufuji, Fundación Shin Matsu.

El Proyecto de Reforestación con Especies Nativas (PRORENA), un esfuerzo entre el Centro de Ciencias Forestales del Trópico de STRI y la Facultad de Forestería y Ciencias Ambientales de la Universidad de Yale, llevaron a cabo un taller de reforestación para 18 miembros del personal de la Región Metropolitana de ANAM, el miércoles, 27 de agosto. El coordinador de PRORENA Mark Wishnie y Arturo Cerezo, funcionario de la Autoridad del Canal de Panamá presentaron los resultados de dos años de estrategias de investigación para restaurar bosques nativos en herbazales de *Saccharum spontaneum*. Los participantes del taller administran proyectos de reforestación en los parques nacionales de Panamá que llevan a cabo compañías de construcción y otras agencias que deben compensar por los bosques que se destruyen en otros lugares de la Cuenca del Canal de Panamá. Las investigaciones que se presentaron durante el taller tienen como objetivo mejorar los resultados de estos esfuerzos. En la foto aparecen Mark Wishnie de PRORENA y Jorge Matsufuji, de Fundación Shin Matsu.

Neutral theory discussed in Nature

Nature (August 27) published the article

"Neutral theory and relative species abundance in ecology" by Igor Volkov and Jahanth R. Banavar from Pennsylvania State University, STRI scientist Stephen P. Hubbell (also with the University of Georgia) and Amos Maritan, from the International School for Advanced Studies (SISSA) and INFN and The Abdus Salam International Center for Theoretical Physics, in Italy. The neutral theory—Hubbell's brainchild—aims to understand the influence of speciation, migration, birth, death, dispersal and extinction on the composition of ecosystems. The same issue of *Nature* brings the article "Tail of death and resurrection" by John Harte from the University of California at Berkeley, reviewing the article by Volkov *et al.*

