

Tupper 4pm seminar

Tuesday, June 28, 4pm seminar speaker will be Michael Kaspari, University of Oklahoma
On the macroecology of ant communities

Bambi seminar

Thursday, June 30, Bambi seminar speaker will be Jessica Stapley, STRI
Male contest competition in lizards and the role of the ultraviolet signal.

Arriving next week

Gregory Gilbert, University of California in Santa Cruz, to study the phylogenetic structure of plant pathogen host ranges, in Gamboa.

Ingrid Parker, University of California in Santa Cruz, to study the geographic origin and recruitment patterns in *Chrysophyllum*, in Gamboa.

Participants of University of California-Davis field course, in Gamboa.

Juan Pablo Giraldo, Harvard University, to assess the impacts of habitat fragmentation on Amazonian plant communities, biomass, and forest dynamics, at Tupper.

Chris Jiggins, University of Edinburgh, UK, to study the ecology and genetics of the species boundary in a neotropical butterfly, in Gamboa.

Jennifer Powers, University of Minnesota, to work on a mechanistic understanding of the responses of soil carbon pools in tropical forests to increasing global temperatures, on BCI.



Smithsonian Tropical Research Institute, Panamá

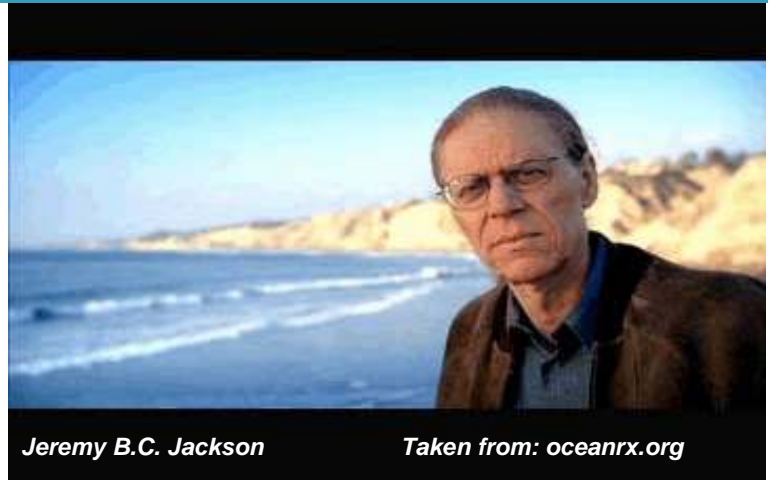
www.stri.org

June 24, 2005

Coral reefs debate in Science

Science (June 17) published a series of letters questioning aspects of the recent paper "Are U.S. coral reefs on the slippery slope to slime?" also published by *Science* (March 18), by a group of scientists including STRI scientists Jeremy B.C. Jackson and Héctor M. Guzmán (1).

In their response, Jackson *et al.* explain that the decline of US coral reefs is a crisis that scientists have failed to communicate effectively to the public. "For over 40 years, research has implicated four major human causes of coral reef decline—fishing, land-based pollution, coastal development, and global



Jeremy B.C. Jackson

Taken from: oceanrx.org

climate change—and has identified their debilitating effects, such as coral disease and coral bleaching..."

Jackson *et al.* agree that different factors vary from place to place, and that this is sometimes not obvious and may be important to resolve. "The precautionary principle clearly dictates that we should not wait for conclusive evidence as to which of the four human disturbances has

the biggest impact before action is taken. We will not obtain that evidence for many years or even decades. Nevertheless, we can immediately reduce fishing, land-based pollution, and coastal development; coping with climate change will require global action at the highest levels of government." Read the article at:

www.sciencemag.org/cgi/content/full/308/5729/1740c

(1) Pandolfi, John M., Jackson, Jeremy B.C., Baron, Nancy, Bradbury, Roger H., Guzman, Hector M., Hughes, Terence P., Kappel, Carrie V., Micheli, Fiorenza, Ogden, John C., Possingham, Hugh P., and Sala, Enric. 2005. "Are U.S. coral reefs on the slippery slope to slime?" *Science* 307(5716): 1725-1726.

La revista *Science* (17 de junio) publicó una serie de cartas cuestionando algunos aspectos del reciente artículo "Are U.S. coral reefs on the slippery slope to slime?" [¿Se deslizan los arrecifes coralinos de EU hacia la lama?] también publicado por *Science* por un grupo de científicos incluyendo a Jeremy

B.C. Jackson y Héctor M. Guzmán, de STRI (1).

En su respuesta, Jackson *et al.* explican que el empobrecimiento de los arrecifes coralinos de EU es una crisis que los científicos no han logrado comunicar efectivamente al público "Por más de 40 años, las investiga-

ciones han implicado cuatro grandes causales antropogénicas en el empobrecimiento de los arrecifes coralinos, la pesca, contaminación producto de actividad en tierra firme, desarrollo costero y el cambio climático global, y ha identificado sus efectos perjudiciales, como las enfermedades y el

Also arriving

Rebeca Rosengaus and Marielle Postava-Davignon, Northeastern University, Massachusetts, to study parasites, pathogens and the breeding strategies of social insects, on BCI.

Kenneth Hayes, University of Hawaii, to study the phylogeography and systematics of *Pomacea* spp., at Naos.

Pamela Thompson and Melissa Senf, to study the spatial foraging patterns at ranging behavior of the mantles howler monkey work with Mariah Hopkin, on BCI.

Thomas Atwater, Princeton University, to study the alkaloid abundance and herbivory in legume-associated and non-associated Rubiaceae, on BCI.

Julie Velasquez-Runk, Yale University, to study the Historical ecology of Wonaan Forest use in eastern Panama, at Tupper.



Congratulations!

To Neal Smith and all his family, for the birth of his fourth grandson Ryan Patrick Smith, on June 16. He weighed 7 lbs 12 oz, with 19" long. His parents are Roger Francis Smith and Michelle Baguio Smith.

blanqueo de corales..."

Jackson *et al.* están de acuerdo en que los diferentes factores varían de lugar en lugar, y que algunas veces esto no es obvio, lo que importante resolver. "El principio de precaución dicta claramente que no debemos esperar por evidencia concluyente en cuanto a cuál de los disturbios antropogénicos tiene un mayor impacto, antes de tomar acciones. No obtendremos esa evidencia

en muchos años o incluso décadas. Sin embargo, podemos reducir la pesca inmediatamente, la contaminación proveniente de tierra firme y el desarrollo costero; lidiar con el cambio climático requerirá acción global a los niveles gubernamentales más altos. Lea el artículo en:

www.sciencemag.org/cgi/content/full/308/5729/1740



STRI 2005 Science Symposium

STRI will hold the STRI 2005 Science Symposium from Tuesday, July 12 to Wednesday, July 13 starting at 9am, at the Tupper Center Auditorium. There will be breaks for morning coffee, lunch, afternoon coffee, followed by a buffet dinner early evening

The aim of the symposium is to share a broad cross section of ongoing research and the researchers who conduct it.

If you are interested in attending the buffet dinners, please make a reservation by sending your name to Audrey Smith, Special Events coordinator. If you have questions about the content of the scientific program, please contact E. Allen Herre at: herrea@si.edu

STRI llevará a cabo el Simposio Científico 2005 del martes 12 al miércoles 13 de julio en el Centro Tupper, a partir de las 9am. Habrá recesos para café en la mañanas y tardes, tiempo para almuerzo, seguido de cena buffet temprano en la noches.

El objetivo del simposio es compartir las investigaciones que se llevan a cabo y los científicos que las realizan.

Si usted está interesado en asistir a las cenas buffet, favor hacer una reservación con Audrey Smith, coordinadora de eventos especiales. Si tiene preguntas sobre el contenido del programa científico, póngase en contacto con E. Allen Herre, en: herrea@si.edu

Leaving next week

Olga F. Linares to England, to participate in the panel "Comparative Research on Rice Farming Societies in the Upper Guinea Coast", at the University of London.

Haris Lessios to Thessaloniki, Greece on vacation, to consult with colleagues, and collect land snails.

D. Ross Robertson to Costa Rica, to join the *RV Urraca* for a research cruise.

Mark Torchin to Santa Barbara, to work with colleagues at the University of California, then to San Francisco, to work with scientists from SI's Environmental Research Center.

Joe Wright to Brisbane, Australia, to attend the Fourth Frugivory and Seed Dispersal meetings.

New publications

Breedy, Odalisca, and Guzman, Hector M. 2005. "A new species of alcyonacean octocoral from the Galapagos Archipelago." *Journal of the Marine Biological Association of the United Kingdom* 85: 801-807.

Torchin, Mark E., Hechinger, Ryan F., Huspeni, Todd C., Whitney, Kathleen L., and Lafferty, Kevin D. 2005. "The introduced ribbed mussel (*Geukensia demissa*) in Estero de Punta Banda, Mexico: interactions with the native cord grass, *Spartina foliosa*." *Biological Invasions* 7: 607-614.

Vasconcelos, Heraldo L., and Laurance, William F. 2005. "Influence of habitat, litter type, and soil invertebrates on leaf-litter decomposition in a fragmented Amazonian landscape." *Oecologia* Online.



STRI's Center for Tropical Forest Science-Arnold Arboretum (CTFS-AA) Asia program's annual International Field Biology Course was opened by Surapon Wichaidit, deputy governor of Trang Province at Khao Chong in peninsular Thailand on Wed, June 16. Twenty one students will receive instruction in plant and animal taxonomy, population biology, soil science, plant-animal interactions, molecular ecology and evolutionary biology. Twenty specialists, including CTFS and STRI researchers, will serve as instructors. The course, organized by STRI postdoctoral fellow Rhett D. Harrison, is hosted by National Parks,

Wildlife & Plant Conservation Department Thailand. The program includes field trips to mangrove forests and swamp forests near Khao Chong and an extended trip to dry deciduous forests in the north of Thailand.

El Curso Internacional de Biología de Campo del programa de Asia del Centro de Ciencias Forestales del Trópico de STRI-Arnold Arboretum (CTFS-AA) fue inaugurado por Surapon Wichaidit, vice-gobernador de la Provincia de Trang en Khao Chong en Tailandia peninsular el miércoles 16 de junio. Veintiún estudiantes recibirán clases sobre taxonomía de plantas y

animales, biología de poblaciones, ciencias de suelos, interacciones entre plantas y animales, ecología molecular y biología evolutiva. Veinte especialistas incluyendo investigadores del CTFS y STRI servirán como instructores. El curso, organizado por el becario posdoctoral de STRI, Rhett D. Harrison, se lleva a cabo en el Departamento de Parques Nacionales, Vida Silvestre y Conservación Vegetal de Tailandia. El programa incluye visitas al campo a bosques de manglar, bosques pantanosos cerca de Khao Chong, así como un viaje a los bosques secos deciduos al norte de Tailandia.

Great tropical hospitality!

If you go to Culebra, it is very probable that this male Yellow ("Mangrove") Warbler would welcome you at the entrance gate, taking a riding with you on your rear view mirror!

Si usted va a Culebra, es muy probable que este canario manglatero lo reciba en la entrada, y pasee con usted en su espejo retrovisor!



More publications

Villanueva-G., Roger, Roubik, David Ward, and Colli Ucan, Wilberto. 2005. "Extinction of *Melipona beecheii* and traditional beekeeping in the Yucatán peninsula." *Bee World* 86(2): 35-41.

STRI in the news

Las Perlas, futuro incierto. At <http://www.albatrosmedia.net/web/>

July birthdays

Enith Rojas	2
Mark Brady	2
Andres Hernández	3
Orelis Arosemena	4
Nilka Tejeira	6
Eduardo Ortega	6
Renier Vargas	8
Dora Justo	10
Rufino González	10
Meylin Hernández	12
Sotero Campos	12
Ruben D. Hernández	12
Phyllis Coley	13
Loireth Bethancourt	14
Raineldo Urriola	16
Robert Joyce	17
Abdiel Osés	19
Arcenio A. Pérez	20
Daniel Pérez	21
Oris Acevedo	22
Javier Jara	22
Andres Lee	22
Rachel Collin	22
Irina Casal	23
Olga Barrio	25
Santiago Bonilla	25
Ana L. De La Espada	26
Carlos Grael	26
Jennifer Campuzano	26
Andrea Pérez	26
Egbert Giles Leigh, Jr.	27
María Lorena Cabrera	27
Alejandro Ureña	28
Ricardo Thompson	30
Luis Castillo	30
David Guardia	31
José I. Sánchez Abrego	31
Fernando Caballero	31
Félix Rodríguez	31

science in
progress:

Is Barro Colorado really made of red clay?

The Isthmus of Panama was created by volcanic action and uplifting of sea sediments some four million years ago. Since then, the Isthmus has been shaped by weathering and other factors including human land use. Barro Colorado Island, the best studied Neotropical reserve on Earth, owes its name to red clay.

Wendel P. Woodring, who published a soil map of the island in 1958, identified two soil types: one with kaolinite, a mineral clay used to produce paper and rubber, and another with montmorillonite, with absorbent properties.

Today, graduate students Frauke Barthold and Rosina Grimm from Postdam University, Germany, prepare a new soil map of BCI using classical and modern survey methods, in collaboration with STRI hydrologist Bob Stallard,

and Postdam professors Helmut Elsenbeer and Ian Baillei.

Using stratigraphy pits and soil cores, they sampled different layers of the pits to analyze. Soil color varies from red, brownish, reddish brown, yellowish, light and dark grey and even green. A color (Munsell) chart book makes it easy for soil scientists to classify soils by color.

This new soil map will help to explain how Central Panama was formed, why plants grow where they do, how rainfall and land use affect the soil, and what determines erosion and runoff into the Panama Canal.

Information: Beth King

El Istmo de Panamá se creó por acción volcánica y levantamiento de sedimento marino, hace cerca de cuatro millones de años. Desde entonces el Istmo ha cambiado por causas naturales y otros factores incluyendo el uso que el hombre le ha dado. La Isla de Barro Colorado, la reserva Neotropical mejor estudiada del mundo, debe su nombre a la arcilla roja.

Wendel P. Woodring, quien publicó un mapa de suelos de BCI en 1958, identificó dos tipos de suelos: uno con caolinita, mineral arcilloso usado para producir papel y caucho, y otro con montmorillonita, que tiene propiedades absorbentes.

Hoy, Frauke Barthold y Rosina Grimm de la Universidad de Postdam en Alemania, preparan un nuevo mapa de suelos de BCI usando métodos clásicos y modernos, en colaboración con el hidrólogo de STRI Bob Stallard, y los profesores de Postdam Helmut Elsenbeer y Ian Baillei.

Con excavaciones estratigráficas y muestras medulares, colectaron muestras en diferentes capas de las excavaciones para analizarlas. El color de los suelos varían de rojo a parduzco, chocolate rojizo, amarilloso, gris claro y oscuro y aún verdoso. Una guía de colores de suelos (Munsell) hace más fácil el trabajo de clasificación de suelos por color, a los científicos.

El nuevo mapa de suelos ayudará a explicar cómo se formó el centro de Panamá, por qué las plantas crecen donde crecen, cómo la lluvia y el uso de la tierra determina la erosión y la sedimentación en el Canal de Panamá.