

Special seminar

Monday, February 28, at 6pm, James A. Duke, world authority in Ethnobotany will present the seminar
Ethnobotanical reflections: From Mexico to Panama

Tupper 4pm seminar

Tuesday, March 1, 4pm seminar speaker will be Scott A. Muller, STRI
MEAs and the meta-science of sustainable use

At Culebra

Wednesday, March 2 at 6pm, several speakers from STRI, MarViva and Ancon will contribute the conference:
Celebrando a los humedales [Celebrating humid soils]

Bambi seminar

Please see GroupWise for information on the next Bambi.

Arrivals

Susan Renn, Bauer Laboratory, Massachusetts, Feb 27, to study the comparative functional genomic study of sex differentiation in wrasses, on Bocas.

Jennifer Roberts, University of Kansas and David Fowle, Great Lake Institute, Canada, Feb 28 - Mar 5, to study water, energy and biochemical budgets in the humid tropics, on BCI.

Rosina Grimm, University of Potsdam, Germany, Feb 28 - Sep 1, to work with Bob Stallard, on BCI.



Smithsonian Tropical Research Institute, Panamá

www.stri.org

February 25, 2005

Congressional visit to STRI

STRI and the US Embassy in Panama hosted a visit of 12 members of the US Congress, on Saturday, February 18, at STRI's Marine Exhibition Center at Culebra. The visit to Panama was their first stop in a 10-day tour to six countries to review conservation and environmental issues. They also had the opportunity to visit STRI's Canopy Crane Access System, at the Metropolitan Natural Park.

The House representatives were Richard Pombo, Wally Herger, Dennis Cardoza, Grace Napolitano and Devin Nunez, from California, Neil Abercrombie, Hawaii, Donna Christensen, US Virgin Islands, Ruben Hinojosa, Texas, Thomas Tancredo, Colorado, Jeff Flake, Arizona, Dennis Rehberg from Montana, and Madeleine Bordallo, from Guam. The photo (above) shows



representatives Dennis Rehberg (left) from Montana and group leader Richard Pombo and wife Annette, from California; and (below) STRI director Ira Rubinoff and Neil Abercrombie from Hawaii.

STRI y la Embajada de EU en Panamá recibieron la visita de 12 congresistas de los EU el sábado 18 de febrero, en el Centro de Exhibiciones Marinas en

Culebra. La visita a Panamá fue su primera parada en un viaje de diez días a seis países para revisar asuntos ambientales y de conservación. Los congresistas también tuvieron la oportunidad de visitar la Grúa de Acceso al Dosal de STRI en el Parque Natural Metropolitano.

Los representantes del Congreso fueron Richard Pombo, Wally Herger, Dennis Cardoza, Grace Napolitano y Devin Nunez, de California, Nel Abercrombie, Hawaii, Donna Christensen, Islas vírgenes de EU, Rubén Hinojosa, Texas, Thomas Tancredo, Colorado, Jeff Flake, Arizona, Dennis Rehberg de Montana, y Madeleine Bordallo, de Guam.

Las fotos muestran (arriba) a los congresistas Dennis Rehberg (izquierda) de Montana y el líder del grupo Richard Pombo y su esposa Annette, de California, a la derecha; y al director de STRI Ira Rubinoff con Neil Abercrombie, Hawaii.



More arrivals

Lucas Cernusak, postdoctoral fellow from Australian National University, Mar 1 - Feb 28, 2006, to study water use efficiency of tropical trees derived from stable isotopes, at Tupper and Gamboa.

Berit Oser, intern from the University of Freiburg, Germany, Mar 1 - May 20, to work with Elisabeth Kalko and Charles Meyers, on BCI.

Ramesh Selvaraj, University of California-Davis, Mar 1-15, to work with Charles Klasing, in Gamboa.

Carrie Webber, volunteer from the University of Texas, Austin, Mar 1, to work with Rachel Page, on BCI.

Lisa Kohler, University of California-Davis, Mar 1-25, to work with Charles Klasing, in Gamboa.

New publications

Bruna, Emilio M., Kainer, Karen A., Fearnside, Philip M., Laurance, William F., Albernaz, Ana K.L.M., Vasconcelos, Heraldo L., and Ferreira, Leandro V. 2005. "A delicate balance in Amazonia." *Science* 397(5712): 1044-1045.

Camara, Gilberto, Dutraaguiar, Ana Paula, Escada, Maria Isabel, Amaral, Silvana, Carneiro, Tiago, Viera Monteiro, Antonio Miguel, Araujo, Roberto, Viera, Ima, Beckers, Bertha, Laurance, William F., Fearnside, Philip M., Albernaz, Ana K.L.M., Vasconcelos, Heraldo L., and Ferreira, Leandro V. 2005. "Amazonian Deforestation Models." *Science* 307(5712): 1043-1044.

Science revisit debate on Laurance's deforestation predictions for Amazonia

Using 25 years of research conducted by the Biological Dynamics of Forest Fragments Project, now under the STRI umbrella, William F. Laurance and colleagues predicted that as much as 42% of forests in Brazilian Amazonia would be severely degraded or destroyed by the year 2020, if Brazil's initiatives to massively expand highways and other infrastructure projects in the Amazon proceed as planned, in the January 2001 issue of *Science* (vol. 291, pages 438-439). Reactions to this study were heard from around the world, including a *Science* electronic "dEBate". As a result of these international pressures, the Brazilian government announced they would conduct more environmental impact studies on the roads, and consider ways to help offset the infrastructure projects.

Three new letters revisiting the predictions of Laurance et al. (2001) were published last week in *Science* (February 18): "Amazonian deforestation models", "A delicate balance in Amazonia", and "Underlying

causes of deforestation". These letters challenged some of the conclusions of Laurance *et al.*, but in their responses Laurance and his colleagues steadfastly maintained that new highway expansion is one of the greatest of all threats to Amazonian forests. They argued, moreover, that the new road networks will mostly benefit large corporations and landholders, with minimal benefits for Brazilian society.

Laurance, who is president-elect of the Association for Tropical Biology and Conservation (ATBC), also was recently interviewed by *The New York Times* for the article "Biologists oppose road planned by oil company in Ecuador Park" (February 17). This article described the efforts of international scientists, including the ATBC, to oppose the construction of a major road into the heart of Yasuni National Park in far western Amazonia. The road is being planned to allow oil-drilling and pipeline projects inside the park. Yasuni is known to be one of the most biologically diverse areas



on the planet, and sustains many endangered species of plants and animals. According to Laurance, "There clearly are viable alternatives, such as directional drilling or roadless methods, that can allow one to access remote oil reserves without severely degrading one of the great jewels of the Amazon."

Special visitor

Dick Matgen, senior program officer of Peninsula Community Foundation, visited STRI to participate in last week's symposium on smallholder reforestation in the tropics, as well as PRORENA's advisory-committee meetings. Matgen has been involved with several programs at STRI through the support of Frank Levinson and Wynnette LaBrosse, two donor advisors at Peninsula Community Foundation.

Dick Matgen, director de proyectos de la Fundación Peninsula Community, visitó STRI para participar en el simposio de pequeños reforestadores del trópico, al igual que a reuniones del comité asesor de PRORENA la semana pasada. Matgen ha participado en varios programas en STRI, mediante el apoyo de Frank Levinson y Wynnette LaBrosse, donantes de la Fundación Peninsula Community.



VII meeting of Mesoamerican and Caribbean herbaria

The VII meeting of the Mesoamerican and Caribbean herbaria will be held from February 28-March 2, at the University of Panama. Please read the program distributed by Audrey M. Smith today Friday, February 25th, through GroupWise.

Princeton students visit Chagres River with Iriarte

Twenty-three students from Princeton University's Field Semester Program in Tropical Ecology at STRI, visited Chagres National Park with instructor José Iriarte (far right), STRI researcher at the CTPA, as part of the course "Pre-Columbian Peoples of Tropical America and their Environments", on Tuesday, February 15. Iriarte is teaching an introduction to Paleoethnobotany, focused on the study of human relations with plants in the past. Also with the group was botanist Rafael Aizprúa, from STRI's International Collaborative Biodiversity Groups (ICBG).

Students and instructors were guided by "shaman" (medicine man) Elías Ruiz (center, photo above) from Embera Drua Rio Chagres Arriba community, on a 5-hour Economic Botany Walk in the forest.

The Economic Botany Walk is a hands-on experience to familiarize the students with the economic, medical and ritual importance of plants used by the Embera nowadays, and found in the archaeologic and paleoecologic record. "They ate from a recipient made of "bijao" leaves (*Calathea* sp.), drank coconut water (*Cocos nucifera*) in a traditional house made with bamboo (*Guada* sp.) and "gira" palm (*Socratea exorrhiza*), and had tattoos with "jagua" (*Genipa americana*) Iriarte explains.

The Field Semester Program also includes field trips to Ft.



Sherman, Fortuna, BCI and other STRI facilities. They are based in Gamboa.



Veintitrés estudiantes del Semestre de Campo en Ecología Tropical de la Universidad de Princeton en STRI, visitaron el Parque Nacional Chagres con el instructor José Iriarte, (a la derecha en la foto de arriba) investigador de STRI en el CTPA, como parte del curso "Gentes Pre-Colombinas en América Tropical y sus Ambientes" el martes, 15 de febrero. Iriarte ofrece una

introducción a la Paleoetnobotánica, enfocándose en el estudio de las relaciones humanas con las plantas en el pasado. En el grupo también se encontraba el botánico Rafael Aizprúa, de los Grupos de Colaboración Internacional para la Biodiversidad (ICBG) de STRI

Estudiantes e instructores fueron guiados por el "shaman" (curandero) Elías Ruiz (en el centro de la foto de arriba), de la Comunidad Embera Drua de Río Chagres Arriba, durante una Caminata de Economía Botánica de cinco horas en el bosque.

La Caminata de Economía Botánica es una experiencia práctica para que los estudiantes se familiaricen con la importancia económica, médica y ritual de las plantas para los Emberá de hoy día, y que se encuentran en el registro arqueológico y paleoecológico. "Comieron de un recipiente hecho de hojas de "bijao" (*Calathea* sp.), tomaron agua de pipa (*Cocos nucifera*) en una casa tradicional hecha de bambú (*Guada* sp.) y de la palma "gira" (*Socratea exorrhiza*), y se hicieron tatuajes con "jagua" (*Genipa americana*) explica Iriarte.

El Programa de Semestre de Campo también incluirá viajes a Sherman, Fortuna, BCI y otras instalaciones de STRI.

More publications

Schaeffer, Roberto, Vianna Rodrigues, Ricardo Leonardo, Laurance, William F., Albernaz, Ana K.L.M., Fearnside, Philip M., Vasconcelos, Heraldo L., and Ferreira, Leandro V. 2005. "Underlying causes of deforestation." *Science* 397(5712): 1046-1047.

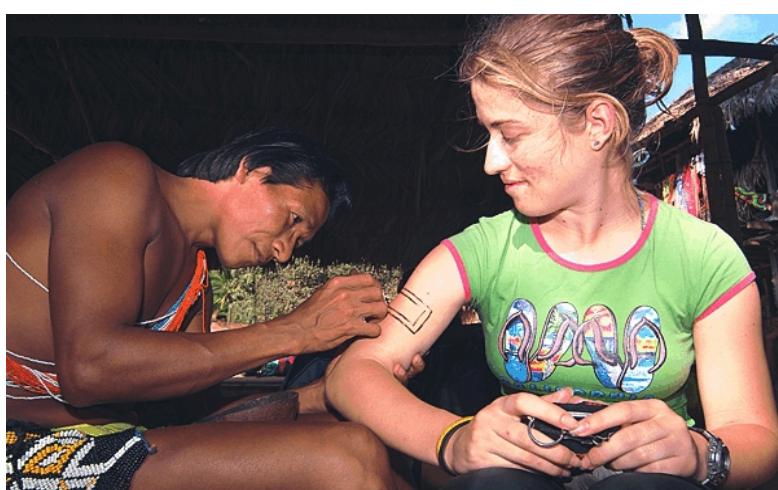
March b' days

Marlon Smith	1
Alexander O. Perez	1
Rivieth De Liones	1
Harilaos Lessios	4
Jesús A. Valdes	5
Pedro Escudero	6
Benjamín Ordoñez	6
Carla Chizmar	10
Johant Lakey	14
Mauricio Pineda	19
Víctor Castillo	23
Richard Condit	29
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Congratulations



To Alejandro Hernández from STRI's Security Office, for obtaining his master's degree in Mathematics, with the highest honors, at Panamá's Universidad del Istmo. Hernández is the supervisor of STRI's Game Warden force.



Seed dispersal in tropical forests

Using seed traps designed and constructed by STRI's Milton García, Helene Muller Landau conducts an inter-disciplinary investigation across multiple scales of seed dispersal by wind and plant recruitment in tropical forests, on Barro Colorado Island.

Muller-Landau and collaborators will develop and validate mechanistic models of seed dispersal for 50 wind dispersed tree and liana species, and use the mechanistic models to explain patterns of seed deposition and investigate the consequences of dispersal for recruitment at the individual, population, and community levels.



Utilizando trampas para semillas diseñadas y construidas por Milton García, de STRI, Helene Muller Landau lleva a cabo un estudio inter-disciplinario con múltiples escalas de dispersión de semillas de bosques tropicales, en BCI.

Muller-Landau y colaboradores desarrollarán y probarán modelos mecánicos de dispersión de semillas en 50 especies de árboles y lianas que se dispersan con el viento, y utilizarán los modelos mecánicos para explicar patrones de deposición de semillas e investigar las consecuencias de la dispersión en el reclutamiento, a nivel de individuos, poblaciones y comunidades.