

STRI newsletter

April 30, 1993

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panamá

No. 18

TUPPER CENTER SEMINARS

Tue, May 4, noon seminar speaker will be Paul Morris, STRI postdoctoral fellow.

Chance and Causality in Paleozoic Molluscan Evolution

Abstract

The twin poles of Chance and Necessity have long been sources of tension in biology. Recently, it has been claimed that the Paleozoic fossil record displays a pattern of high early diversity with winnowing through time, and that this speaks of chance as predominant in evolution. Using biomechanical tests I support this pattern of winnowed diversity in molluscan history, but argue for the importance of ecological causality in evolution.

Next Week

Tue, May 11, noon seminar speaker will be Stephen Mulkey, University of Missouri.

Acclimation Potential in Understory Plants of a Seasonally Dry Forest

PEOPLE

Arrivals

- Robert Dressler, May 1-8, to visit STRI and do taxonomic studies on orchids.
- Ralf Meier, Kantonsschule Stadelhofen, Switzerland, May 3-30, to study the interference behaviour of *Wasmannia auropunctata* (Hymenoptera: Formicidae) in a tropical rainforest, on BCI.
- Damond Killo, University of Missouri, May 3 to Feb 1994, to conduct studies on the nutrient translocation through VA Mycorrhizae and the effects on plant performance and early succession under different light, on BCI.
- David Ellsworth, Mellon postdoctoral fellow, May 3-30, to continue research with Melvin Tyree, on BCI.
- Manuel Depuy, Universidad de Los Andes, Colombia, May 4-4 Aug to work with Klaus Winter on a Latin American Internship, on BCI.



University of Panama students who participated in the Field Course on Ecological Methods held from Apr 18-25 at Gigante Peninsula pose for a group picture with course coordinators: Greg Gilbert, Beth King and Milton Garcia ••• Estudiantes de la Universidad de Panamá que participaron en el Curso de Campo sobre Métodos Ecológicos posan para la foto de grupo con Greg Gilbert, Beth King y Milton García, coordinadores del curso. (Foto: A. Montaner)

Departures

- Vielka Chang-Yau, May 1-23, to Habana, Cuba, to attend the 1993 International Information Conference and then to Washington D.C. to participate at the SI Libraries Spring meetings.
- Georgina de Alba, May 2-15, to Washington D.C. on official business at SI, and to New York for a short vacation.
- Ira Rubinoff, May 6-14, to Washington D.C. on official business at SI.

THINGS YOU SHOULD KNOW

From the Visitor Services Office ••• De la Oficina de Visitantes

For scientific studies or collection inside the Finca Melo in Cerro Azul, a permit from Altos de Cerro Azul Company is necessary. The request must be submitted in writing through Maria Morello, accompanied by the INRENARE permit. The permit takes five working days to be processed ••• Para llevar a cabo investigaciones científicas o colectas dentro de la Finca Melo en Cerro Azul, es necesario obtener un permiso de Altos de Cerro Azul, S.A. La solicitud deberá hacerse por escrito, acompañada por el permiso de INRENARE, a través de María Morello de la Oficina de Visitantes. La tramitación toma cinco días laborables.

At Tupper Center

- Mon, May 3 ■ Directors, scientific council and scientific support staff meeting, Large Meeting Room, 9am.
- STRI-Kuna Commission Meeting, Small Meeting Room, 2pm.
- Tue, May 4 ■ Seminar by Paul Morris, STRI postdoctoral fellow, Auditorium, 12 noon.
- Thu, May 6 ■ Meeting to discuss the Flora Neotropica Congress, Small Meeting Room, 2pm.
- Procurement Meeting, Large Meeting Room, 3pm.

ANNOUNCEMENTS**From the Library ••• De la Biblioteca**

The STRI Library invites everyone to visit an exhibit on *Sea Shells from the Pacific Coast of Panama, Part I* (of 3), produced by Marcos Alvarez, University of Panama, as part of his B.S. thesis in biology ••• *La Biblioteca del STRI invita a visitar la exhibición de Conchas de la Costa del Pacífico de Panamá, Parte I (de tres), producida por Marcos Alvarez, como parte de su tesis en biología en la Universidad de Panamá.*

Dendrobates Wins Photo-Contest

Rana Dendrobates Gana en Concurso Fotográfico
Photographer Marcos Guerra was given an award by the 1992 *GeoMundo's II International Photographic Contest* for his photo of a *Dendrobates* frog from Bocas del Toro. Marcos submitted his photograph with 8,500 others that participated in this competition, his was among the 13 winning photographs. Donald Carroll received the first prize with a photo taken in the Sultanate of Oman, while second and third place photos were taken in Mexico. Photographers Paulina Lavista and Enrique Bostelmann, painter José Luis Cuevas, Andrés de Luna, art critic and writer, and an editor from *GeoMundo* were the jury. The *Dendrobates* frog photograph will be published in the June issue of *GeoMundo* ••• *Marcos Guerra, fotógrafo de STRI, obtuvo un premio en el II Concurso Fotográfico Internacional de GeoMundo 1992, con una foto de la rana Dendrobates de Bocas del Toro. Marcos compitió con otras 8,500 fotografías, obteniendo un premio entre las 13 fotos ganadoras. Donald Carroll obtuvo el primer premio con una foto tomada en el Sultanato de Omán, mientras que el 2do y 3er premio fueron de tomas en México. El jurado estuvo compuesto por los fotógrafos Paulina Lavista y Enrique Bostelmann, el pintor José Luis Cuevas, Andrés de Luna, escritor y crítico de arte, y un editor de GeoMundo. La fotografía de la rana será publicada en junio, próximo número de GeoMundo.*

Research Highlight

Dolores Piperno's research on the history of maize was featured in the April 17 issue of *Science News*. In the cover article "Corn's Slow Path to Stardom", Piperno's findings were said to be "...forcing anthropologists to revise long held assumptions..." about corn's origins and role in the New World.

From the Photo Lab

During the week of May 9-16 the photographic department will be a one-man operation. Antonio Montaner will be in Washington on official business and Alejandro Caballero is on vacation since Apr 26. No I.D. regular service will be provided that week. Please schedule your requests accordingly.



Casa de Ventocilla en Cangandí durante sus investigaciones. Atrás la "Ommakket Nega" (Casa del Congreso)

Cacería y Subsistencia

El nuevo libro de Jorge Ventocilla, *Cacería y Subsistencia: en Cangandí, Una Comunidad de los Indígenas Kunas*, trata el tema indigenista con un interés especial en divulgar el punto de vista indígena en los asuntos ecológicos. El libro fue publicado por la Editorial Abya Yala de Quito, única en Latinoamérica por el tipo de actividades que realiza y por la divulgación internacional de sus publicaciones. La monografía fue la tesis de maestría de Ventocilla y es la primera investigación publicada sobre cacería entre los kunas de San Blas. Contribuye a conocer el papel de la fauna silvestre en la vida de los kunas tanto en su dieta como en sus manifestaciones culturales. Muestra que el proceso de regeneración del bosque y la recuperación de poblaciones de animales silvestres —incluyendo los de cacería— son posibles cuando no hay ganadería. También demuestra que la "cacería en huertas" (*Garden Hunting*), descrita por Olga Linares en base a un trabajo arqueológico en Bocas del Toro en 1976, se mantiene en la actualidad. De acuerdo con Linares, la publicación "contribuye significativamente a una comprensión mejor de los procesos humanos de selección y adaptación a los recursos de una selva tropical americana".

Cacería y Subsistencia puede adquirirse en la librería del STRI por \$5.00. También hay una copia en la biblioteca.

In Recognition of STRI

SMITHSONIAN INSTITUTION
Washington, D.C. 20560
U.S.A.

April 27, 1993

Dear Ira:

Today, I received the STRI Newsletter covering the visit of the Smithsonian National Board to STRI. That newsletter reminded me of the extraordinary effort put forth by you and Tony and the STRI staff to make the visit meaningful and pleasant. You accomplished both. To say it another way: What you accomplished was an increased understanding of the Institution's role in research in an unforgettable way. This will have the ripple effect of increasing the Board's commitment to the Fund for the Future. I know that the entire Institution thanks you for that accomplishment.

On a personal note, thank all of you for the time spent with me. Contrary to your assumptions, I had already been convinced of the quality of the research and education at STRI through your various presentations and by talking with Bob Hoffmann and Bob Adams. However, there is no substitute for hearing directly from the scientists about their research. Please thank all who met with me—I learned a great deal from them.

See you in Washington or on my next trip to Panama.

Sincerely,

Constance Berry Newman
Under Secretary

From the Director

The Smithsonian National Board Meeting at STRI was a great success particularly in terms of showing the Smithsonian staff and the National Board leadership the quality of the work at STRI. During those three days we heard over and over again how members were impressed with the quality of science at STRI, the extensive facilities and the outstanding performance of our staff. Everyone at STRI should feel proud of what we were able to accomplish.

A visit such as this would not have been possible without the concerted effort of many, many persons, and our thanks go to all who participated in any way to make this visit a success.

En Reconocimiento a STRI

SMITHSONIAN INSTITUTION
Washington, D.C. 20560
U.S.A.

27 de abril de 1993

Estimado Ira:

Hoy recibí el "Newsletter" de STRI que documenta la visita de la Junta de Síndicos del Smithsonian a STRI. Ese "Newsletter" me recordó el extraordinario esfuerzo puesto por tí, Tony y el personal de STRI para que la visita fuera a la vez significativa y placentera. Ustedes lograron ambas cosas. En otras palabras, lo que ustedes lograron fue aumentar la comprensión del papel de la Institución en la investigación, de manera inolvidable. Esto tendrá un efecto de repercusión, al aumentar el compromiso de los Síndicos hacia el Fondo para el Futuro. Sé que toda la Institución les agradece este logro.

A nota personal, les agradezco a todos por el tiempo que pasaron conmigo. Contrario a lo que pensabas, ya estaba convencida de la calidad de la investigación y educación en STRI, a través de varias de tus presentaciones y por conversaciones con Bob Hoffmann y Bob Adams. Sin embargo, no hay sustituto para escuchar directamente de los científicos sobre sus estudios. Te pido que agradezcas a todos los que se reunieron conmigo—aprendí mucho de ellos.

Nos veremos en Washington o en mi próximo viaje a Panamá.

Asentamente,

Constance Berry Newman
Subsecretaria

Del Director

La reunión de la Junta de Síndicos del Smithsonian en STRI fue un gran éxito especialmente para demostrar el del trabajo de STRI al personal del Smithsonian y a un grupo líder de la Junta de Síndicos. Durante los días de la reunión, escuchamos una y otra vez de parte de los síndicos, lo impresionados que estaban con la calidad de la ciencia en STRI, la extensión de nuestras instalaciones y la gran eficiencia de nuestro personal. Todos en STRI debemos sentirnos orgullosos de lo que logramos durante esos días.

Una visita como ésta no habría sido posible sin el esfuerzo conjunto de muchas personas, y queremos agradecer a todos los que participaron de cualquier forma a que esta visita fuera un éxito.

STRI NEW PUBLICATIONS

- Aide, T. Mitchell. 1993. "Patterns of Leaf Development and Herbivory in a Tropical Understory Community." *Ecology* 74(2): 455-466.
- Gupta, Mahabir P., Jones, A., Solis, P. and Correa, Mireya D. 1992. "Ethnopharmacognostic Study of Kuna-Yala." In: *Sustainable Harvest and Marketing of Rain Forest Products*: 201-211, edited by M. Plotkin and L. Famolare. Washington, D.C.: Island Press.
- Mulkey, Stephen S. and Percy, R.W. 1992. "Interactions Between Acclimation and Photoinhibition of Photosynthesis of a Tropical Forest Understory Herb, *Alocasia macrorrhiza*, During Simulated Canopy Gap Formation." *Functional Ecology* 6(6): 719-729.
- Srygley, Robert B. and Dudley, Robert. 1993. "Correlations of the Position of Center of Body Mass with Butterfly Escape Tactics." *Journal of Experimental Biology* 174: 155-166.
- Wolda, Henk, Spitzer, K. and Leps, J. 1992. "Stability of Environment and of Insect Populations." *Researches on Population Ecology* 34(2): 213-225.
- Wolda, Henk and Wright, S. Joseph. 1992. "Artificial Dry Season Rain and Its Effects on Tropical Insect Abundance and Seasonality." *Proceedings of the Koninklijke Nederlandse Akademie Van Wetenschappen* 95(4): 535-548.
- Yamamoto, S. 1992. "Gap Characteristics and Gap Regeneration in Primary Evergreen Broad-Leaved Forest of Western Japan." *Botanical Magazine (Tokyo)* 105(1077): 29-45.

FROM OTHER SOURCES

Las Alturas Biological Station



Located at an elevation of 1,500m, the *Las Alturas* Biological Station, property of the *Centro para la Biología de la Conservación*, Costa Rica (CBC), is the first research station designed specifically to facilitate research in tropical conservation biology. The *Las Alturas* Station is on private property, adjacent to the *Las Tablas* protected zone, a forested buffer for La Amistad National Park. The station has reliable year-round access to large tracts of primary montane forest, ranging from 1,100 to 3,100m in elevation.

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A unique aspect of the station is its proximity and access to a variety of semi-natural and disturbed habitats on adjacent private lands, offering opportunities for the study of agricultural and silvicultural practices and their effects on biological diversity. Cattle pastures, coffee fields, and logged forest, all of known ages, abut both primary and secondary forests near the station. Reforestation of nearby degraded lands, using both native and exotic tree species, has been underway for almost 20 years, and a diverse array of edges and transitional habitats can be found. With its access to both natural and anthropogenic habitats, *Las Alturas* constitutes an ideal site for research in conservation biology and a "real world" challenge for conservation planning.

The CBC's efforts to generate a widely applicable model for the conservation of tropical biodiversity entails the collection, analysis, and presentation of scientific data in a form that is useful to planners and reserve managers. A central aspect of this work is the development of a practical system for long-term monitoring of ecological indicators that will serve to evaluate and improve the effectiveness of conservation plants. All researchers using the facility are required to cooperate in some aspect of biological or biophysical inventory and monitoring of the region, thereby advancing the CBC's long-term goal of developing useful techniques for the design and management conservation areas in the tropics.

It is the policy of the CBC to serve only researchers and advanced students and to encourage use of the *Las Alturas* facility by Latin Americans. Requests from field courses will be reviewed on a case-by-case basis; use of the facility for any type of tourism is expressly prohibited. All persons visiting *Las Alturas* pay a daily usage fee that provides for the upkeep of the station and trail system, and helps support Latin American researchers, for whom funding is often difficult to obtain.

For more information about *Las Alturas* and *Centro para la Biología de la Conservación*, Costa Rica, write to: CBC, Costa Rica, Apartado 208, San Vito, Coto Brus, Costa Rica. Fax (506) 77-3130, Costa Rica. (415) 723-5920, USA.

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• Page-a-Day Calendar •

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