

STRI newsletter

June 14, 1991

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panama

No. 24

TUPPER CENTER SEMINARS

Tuesday, Jun 18, noon seminar speaker will be John M. Lawrence, Univ. of Southern Florida.

The Effects of Stress and Disturbance on Echinoderms

We will have simultaneous translation into Spanish. Please advise all interested Spanish-speaking persons.

Next Week

Tuesday, Jun 25, noon seminar speaker will be Michael Ryan, University of Texas.

Sensory Systems and Sexual Selection

Meeting Room

Monday, Jun 24, noon seminar speaker will be John Lawrence.

Arm Variability in Starfish —Constraints in Function and Design

PEOPLE

Arrivals

- Ghisselle Alvarado, Exxon Assistant, Universidad de Costa Rica, Jun 15-Aug 31, to work with Stanley Rand in Gamboa.
- Pablo Monsivais, University of Texas, Jun 15-Aug 30, to work on communication in tungara frogs with M. Ryan in Gamboa.
- Joshua Schwartz, University of Connecticut, Jun 16-Jul 22, to work on anuran communication in the chorus environment in Gamboa.
- Stephen Shuster, Northern Arizona Univ., Jun 16-30, to conduct preliminary observations on population structure and sexuality in bryozoans at Naos.
- Betsy Mitchell & Wayne Sousa, University of California, Berkeley, Jun 16-Jul 28, to conduct studies on demography of white-faced capuchin monkeys (*Cebus capucinus*) on BCI.
- Dwayne Meadows & assistant Lisa Pace, Oregon State Univ., Jun 24-Aug 31, to work on eyespots as anti-predator structures, a test with the four-eye butterflyfish *Chaetodon capistratus* at San Blas.
- Stephen Ressel, University of Connecticut, Jun 21-Jul 12, to work on the design of anuran vocalization muscles in Gamboa.

Departures

- Jorge Ventocilla, to La Habana, Cuba, Jun 17-24, to attend the II International Symposium of Zoology.

SPECIAL ANNOUNCEMENT



(Photo: M.A. Guerra)

Elena Lombardo, STRI assistant director for external affairs, will receive the Robert Brooks Award from Secretary Adams and the Executive Management Committee at the Smithsonian Castle today, June 14th, during a ceremony at the Commons Lounge.

The Robert A. Brooks Award for Excellence in Administration is granted each year to the person(s) selected by the Judges, who in their opinion have made an outstanding contribution to the administration of the Smithsonian or one of its bureaus or offices. Ms. Lombardo was chosen for the important contributions made to the Smithsonian's programs by her outstanding management of external affairs at the Smithsonian Tropical Research Institute.

The other recipient this year is Judith Petroski, director, Smithsonian Institution Travel Services Office.

At this event the new ambassador of Panama to Washington, Jaime Ford, and the Panamanian ambassador to the OAS, Lawrence Chewing Fabrega, will also be present as guests of the recipient. Ms. Lombardo and her husband have travelled to Washington for this ceremony. *Congratulations!*

THINGS YOU SHOULD KNOW

Wanted - Algarrobo Trees

Location of 'algarrobo' trees urgently needed for experiments. Anybody who has information on where to find these trees, especially with resin oozing from their trunks, please contact Alison Henwood at Tupper Center.

Evento del Parque Natural Metropolitano



Coopere con el Parque Natural Metropolitano adquiriendo su boleto para la *Tarde Ecológica*, a realizarse el día 28 de junio de 1991 en el Hotel Panamá a las 5 pm. Las actividades incluyen al Dr. Stanley Heckadon como orador invitado y al Sr. Carlos Dutari como solista al piano, premios de entrada y muchas sorpresas más. Para adquirir sus boletos favor llamar a Mónica Alvarado (ext. 231) o Celideth Mendoza (ext. 222) al 27-6022. Donación \$10.

AT TUPPER CENTER

- Monday, June 17: International Expeditions: Panama Familiarization Trip, ECOTOURS.
- Tuesday, June 18: *Colegio Episcopal* visit to Exhibit. CPR course.
- Thursday, June 19: Inventory Matters Seminar - Procurement. Extension Program for Interns and Exxon Fellows.
- Friday, June 21: *Asociaciones Cívicas Unidas*: Presentation of essay contest on reforestation by 6th graders.

For Tupper Center Users • Para los usuarios del Tupper
On Saturday, June 15, there will no air conditioning working at Tupper Center due to maintenance requirements ••• *El sábado 15 de junio no funcionará el aire acondicionado debido a requisitos de mantenimiento.*

ANNOUNCEMENTS

From the STRI Mini-Bookstore

Just received attractive coloring books of tropical flowers, birds, wildlife, reptiles and amphibians, and tropical fishes. Also, for those interested in the study of ants, E. O. Wilson's book is selling for \$65.

Breckenridge Chair in Ornithology

The University of Minnesota invites nominations and applications for a person to fill a newly established Endowed Chair in Ornithology. This chair has been established to provide leadership in research, teaching, and public service to perpetuate and enhance the Bell Museum's program in comparative avian biology and conservation. The person will not be expected to curate

the Museum's bird collection. The appointment will be at the level of Associate or Full Professor.

Applications should include *Curriculum vitae*, reprints, a statement of research interests, and names of at least three references. Send to: Breckenridge Chair Search Committee, Bell Museum of Natural History, University of Minnesota, 10 Church St. S.E., Minneapolis, MN 55455. Applications will be accepted until 1 October 1991.

Foreign Field Trip - La Selva, Ecuador

The Panama Audubon Society is sponsoring a field trip for members to Ecuador to the La Selva Jungle Lodge in the Amazonian forest east of the Andes. The tour leaves on August 2 and returns August 11. The cost of the trip is \$953 and it includes round trip to Quito and La Selva and all expenses at La Selva except for beverages.

Wooden Animals and Baskets

The Darien natives who live in Gamboa make wooden animals and baskets that they sell for their livelihood. Prices range from \$3 to \$20. If you would like to buy or order any contact Lizzie Leigh.

STRI NEW PUBLICATIONS

- Brawn, Jeffrey D. 1991. "Environmental Effects on Variation and Covariation in Reproductive Traits of Western Bluebirds." *Oecologia* 96: 193-201.
- Correa, Mireya D. 1991. "Bosques Tropicales: Nuestra Herencia Biológica." *Revista del IV Congreso Nacional y I Centroamérica Sur de Productores de Seguros*, 11, 12, 13 de Octubre de 1990: 41.
- Piperno, Dolores. 1991. "The Status of Phytolith Analysis in the American Tropics." *Journal of World Prehistory* 5(2): 155-191.

TRAINING

Wisconsin Short Course

An eight-week course, "Development and Operation of Agricultural Extension Programs," will be presented by the University of Wisconsin-Madison, August 26 - October 18. Subjects covered will include the roles and methods of administration, subject-matter specialists, field officers, and other staff. Contact International Agricultural Programs, Tel: (202)245-5836.

Seminario-Taller Prácticas Agrícolas Tradicionales

El seminario taller pretende reunir a especialistas en la temática de prácticas agrícolas tradicionales como un medio alterno para el desarrollo rural en Centroamérica, organizaciones campesinas y productores independientes que apliquen o hayan investigado acerca de las

prácticas agrícolas tradicionales con el objeto de generalizarlas a otras organizaciones campesinas de la Región.

Fecha y lugar del seminario: San José, Costa Rica, Feb. 1992. Para mayor información escribir a: Lic. M. Sanchez, Sec. de Arqueología, Univ. de Costa Rica, Tel: 25-5555, Fax: 506-34-2723.

Cursos de Postgrado en la Comunidad Europea

La Comunidad Europea se encuentra a la vanguardia de los avances tecnológicos y mantiene redes complejas de instituciones dedicadas a la enseñanza superior y a la investigación. Varios programas ofrecen los conocimientos disponibles dentro de estas instituciones a aquellos fuera de la CEE. Así es como países individuales organizan cursos especializados intensivos. Su duración es corta —entre dos semanas y 18 meses— y suelen ser realizados en inglés, español, francés o portugués. Los requerimientos de admisión incluyen, por lo general, un grado de licenciado o bien un diploma equivalente así como experiencias profesionales en un sector relacionado. Para más información póngase en contacto con: Directorado General - Relaciones Exteriores, División I - J 3, Rue de la Loi 200, 1049 Bruselas, Bélgica.

Tel: 2-35-1722, Fax: 2-36-0423.

Programa de Maestría en Areas Costeras

Un programa de estudios de posgrado en ecología, conservación y manejo de recursos naturales en la Universidad de Guaymas fue iniciado en agosto pasado. La universidad está localizada en el nordeste de México en la ciudad portañera de Guaymas.

El programa recibe financiamiento y apoyo técnico de Conservation International y está asociado con el Centro para la Conservación y Utilización de Recursos Naturales, que se encuentra actualmente bajo construcción.

El programa está enfocado a entrenar estudiantes de maestría en ecología, conservación y utilización de recursos, principalmente en temas marinos y costeros. Los estudios e investigaciones enfocan los problemas de desarrollo costero y marino en el Golfo de California. Las investigaciones realizadas por los estudiantes contribuirán a la elaboración de estrategias para mantener el equilibrio ecológico en el golfo.

La unidad tiene un sistema de información geológica que permite el análisis e integración de la información. El objetivo del programa es preparar especialistas en los siguientes campos: 1. Conservación, ecología y manejo de recursos naturales. 2. Acuicultura. 3. Reconocimiento de impactos ambientales. 4. Patología acuática y sanidad. 5. Utilización de recursos marinos como alimentos.

El esfuerzo conjunto de ITSM-Guaymas y Conservación International ha hecho posible la realización de estos programas y traerá como resultado la capacitación de recursos humanos para confrontar los problemas del desarrollo.

RESEARCH UPDATE



(Foto: C. C. Hansen)

For 1991 Dr. David Roubik has taken on many more taxonomic projects, including being a visiting curator at INBio in Heredia, Costa Rica, and instructor (with Ian Gauld of the British Museum and John Longino of Allwyn Museum) of the Costa Rican paratoxonomists' advanced Hymenoptera field course, in Volcan Orosi, at the Costa Rican-Nicaraguan border. He also spent nearly a month at the University of Kansas, curating their worldwide collection of stingless bees and giving three invited lectures on ecology and tropical research.

Since October 1990, Dr. Roubik has been sampling euglossine bees at two sites, one 20-30 meters above ground and the other 5 meters above ground, using the canopy crane. The traps are chemically baited and their position is changed every couple of weeks to get at the idea that there may be differences in the position above ground at which pollination occurs and bees forage. Indeed, it depends a lot on the position of flowering orchids, but bees abound, in general, lower down. Also,

setting up bee traps high and low in the forest, Roubik has analyzed 14 continuous years of light trap data for Barro Colorado Island, or about 25,000 bees that fly into the traps. What is of most interest is that there are seven years with Africanized honey bees. But, guess what? There are more native bees now than ever, so that the arrival of Africanized honey bees on BCI, which occurred in the beginning of 1983, could not possibly have had a negative impact on the native bees that he studied—in particular the stingless bees. Bee communities are not food limited, at least in the short run. Henk Wolda is completing the analysis using a unique form of "redundancy analysis" as an alternative to time-series intervention analysis for long-term data series.

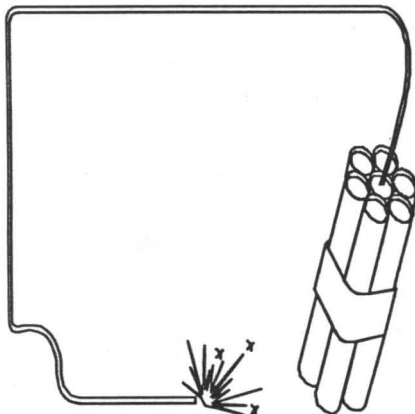
In February, two new students arrived, one new to the tropics, and both new to Panama. T'Shaka Toure studied necrophagy (feeding on dead bodies) with Dr. Roubik—a subject of, believe it or not, great relevance in stingless bee communities. They found a wealth of comparative behavioral and ecological data among the carrion bee community, including the famous vulture

bee (now called *Trigona necrophaga*, a new species endemic, so far, to Panama). The vulture bees studied seemed to "like" katydids. Another study was initiated with Argenis Bonilla of Colombia, the first population genetics work with euglossine bees—finding them a surprisingly easy and productive group to approach using standard gel electrophoresis.

All this has been interposed with regular monthly field trips to Campana, along Pipeline Road, and the Santa Rita Ridge, where he continues to learn more about the stingless bees of Panama and the population dynamics and orchid visitation of euglossine bees. With a data set approaching 12 years on this group, Dr. Roubik expects to develop some "big pictures" in euglossine biology and publish these results. Meanwhile he continues to send samples of odd insects and plants to people abroad, and received in exchange the loan of a scale on which to place a hived colony of stingless bees to see how their weight varies during the next few months. This is indeed one approach, but he prefers the mud and blood of real field work!

Security Alert
Aviso de Seguridad

From Monday, June 17 until Tuesday, June 25, 1991, U.S. Army personnel will clear and mark some vessel channels around the Gigante area. Explosives will be used to demolish the submerged trees. For security reasons, all scientists and visitors carrying out



work in the field, during this period, should consult with the scientific coordinator, Nélica Gómez, before transiting the lake.

Del lunes 17 al martes 25 de junio, 1991, personal del ejército de los Estados Unidos limpiará y marcará en el Lago Gatún, algunos canales de acceso en el área de Gigante. Se usarán explosivos para demoler los troncos sumergidos. Por razones de seguridad, durante este período, todos los investigadores y visitantes que realicen trabajos en el campo, deberán consultar con la coordinadora científica, Nélica Gómez, antes de transitar por el lago.

From: *365 Ways to save our planet • Page-a-day calendar*

Use unbleached paper products when possible. Chlorine bleaching of paper pulp produces highly toxic dioxins and furans. Other bleaching methods are safer but hard to identify on the shelf. You'll recognize unbleached goods at a glance—they are brown.



LAST MINUTE

• **AL CIERRE** •

The John D. and Catherine T. MacArthur Foundation has approved a grant in the amount of \$1,100,000. to support at STRI, the new Center for Tropical Forest Science.