

# STRI newsletter

September 1, 1995

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panamá

No. 35

## TUPPER CENTER SEMINARS

Tuesday, September 5, noon seminar speaker will be Thomas Eltz, University of Würzburg, Germany

### *Fragrance Biology and Behavior of Male Orchid Bees*

#### Abstract

Pollination by fragrance-collecting male orchid bees (Apidae: Euglossini) is a widespread phenomenon in neotropical plant communities. The role that the fragrances play in bee biology is still poorly understood. Data from a recent study, involving mark-recapture and behavioral observation of caged bees, as well as gas chromatographic analysis of the male bees' fragrance supplies suggest that the latter may serve as an indicator of male age and foraging abilities and that male behavior evolved by sexual selection.

## NAOS LABS LUNCHEON

Friday, September 8, Naos Laboratories luncheon seminar speaker will be José López, George Mason University

### *Transportation and Amplification of mtDNA into the Nucleus of Cats*

## PEOPLE

### Arrivals

- Martin Wikeiski and Michaela Hau, University of Washington, Sep 2-17, to study the synchronization of breeding cycles in tropical birds, at Gamboa.
- Larry Lutz, University of Kansas, Sep 4-4 Oct, for a study of the biodiversity of insects of BCI and other sites, with Don Windsor, at BCI.
- Ralf Kaemmerer, Mellon visiting scientist from Frei University, Germany, Sep 6-31 Aug, 1997, to work with Hans Bohnert in the study of metabolic pathways for assimilation of carbon dioxide in vascular plants, at Tupper.
- Mairi Best, STRI Pre-doctoral fellow from the University of Chicago, Sep 8-7 Dec, to study the taphonomy of



Senior Scientist Martin H. Moynihan, STRI's first director from 1957 to 1973 cut the ribbon at the inauguration of the new BCI laboratories, after Ira Rubinoff dedicated the facilities to his wisdom and vision during STRI early times, on Friday, Aug 25 (\*) ••• El primer director de STRI, de 1957 a 1973 hizo el corte de cinta durante la inauguración de los nuevos laboratorios de la Isla de Barro Colorado, luego que Ira Rubinoff dedicara las nuevas instalaciones a su sabiduría y visión, durante los primeros tiempos de STRI. (Foto: M.A. Guerra)

tropical molluscan assemblages: comparative of carbonate and siliclastic marine environments of the San Blas Archipelago, Caribbean Coast of Panama, at San Blas.

- Members of the New Research Initiatives Workgroup, Olav Oftedal, NZP, David Correl, Helen Dalasky, SERC, Jim Davies, SAO, Anna Behrensmeyer, NMNH, Ted Maxwell, NASM, Sep 5-8, to hold round table discussions with the STRI scientific staff on the new SI initiative: Change and Sustainability of Earth Resources.
- Orantel Aquilera, Marie Aubrey, William Bergren, Pamela Bourne, Laurel Collins, Antoine Heitz, Peter Jung, Donald McNeill and Jon Tood, Sep 5-30, to participate in an expedition to Bocas del Toro organized by Deputy Director Anthony Coates.

### Reminder ••• Recorderis

Mon, Sep 4 is the celebration of the Labor Day in the United States, and a Holiday for STRI. The Library will remain closed on Sat, Sep 2, to allow its personnel to enjoy the long week-end ••• El lunes 4 de septiembre se celebra el Día del Trabajo en los Estados Unidos y es día feriado para STRI. El sábado 2 de septiembre la biblioteca se mantendrá cerrada, para permitir a su personal disfrutar del fin de semana largo.

(\*) Complete Dedication Remarks by Ira Rubinoff in GroupWise: BCI.NEW

- James W. Dyer, staff director of the U.S. House of Representatives Appropriations Committee and Don Hardy, chief of staff of Senator Simpson. With them, John Berry, director of the SI Office of Government relations, Sep 8-11, to visit STRI facilities and learn about our programs and projects.

#### Departures

- Ira Rubinoff, Sep 3-9, to Washington, D.C. and Charleston, SC, on official business.
- Elena Lombardo, Sep 3-9, to Washington D.C. on official business at SI.
- Llewellyn Hillis, Sep 3-11, to Newcastle, UK, to attend the International Society for Reef Studies Workshops: Biology and Geology of Coral Reefs.
- Harilaos Lessios, Sep 3-13, to Edinburgh, Scotland, to attend the 5th Congress of the European Society for Evolutionary Biology. Then to Washington D.C. to attend the "Molecular Retreat".
- Jose Espino, Sep 3-17, to Tegucigalpa, Honduras, to give a diving course for those who will be diving at the Cayos Cochinos Station. Then to the station to inspect and give maintenance to the diving equipment.

#### Congratulations

To Mike Ryan and Marsha Ryan, for the birth of their daughter Lucy Michaela Ryan, on Monday, August 28.

### THINGS YOU SHOULD KNOW

#### New Phone Numbers for Galeta

##### Números de Teléfono Nuevos en Galeta

The Galeta Laboratory staff had been notify that its phone numbers will change in the next few days. As soon as the numbers change, the Tupper Center and Naos receptionists will be notified ••• *El personal de los laboratorios de Galeta ha sido notificados que en los próximos días los números de teléfono del laboratorio van a cambiar. Tan pronto se cambien, se dará la información a la recepción del Centro Tupper y Naos.*

#### Moving ••• Mudanza

Luis D'Croz moved to the Surfside Laboratories at Naos. His phone number is 228-4049 ••• *Luis D'Croz se mudó a los Laboratorio de "Surfside" en Naos. Su número de teléfono es el 228-4049.*

#### IV Eco-Photographic National Contest Exhibition

##### Exhibición del IV Concurso Nacional Ecofotográfico

On Tuesday, September 5, an exhibition of the photos of the IV Eco-Photographic National Contest will open to the public at the Tupper Center Exhibit Hall, 1pm. This exhibition opened at the Nature Metropolitan Park last June during the winning ceremony, with the support of Canon de Panama, FotoZoom, and the Metropolitan

Park. The exhibit will open from 8am-5pm until Friday, September 15 ••• *La exhibición de las fotos del IV Concurso Nacional Ecofotográfico será presentada al público en el Salón de Exhibiciones del Centro Tupper desde el martes 5 de septiembre a la 1pm. Esta exhibición fue inaugurada en el Parque Natural Metropolitano en junio de este año durante la ceremonia de premiación, patrocinada por Canon de Panamá, FotoZoom y el Parque Natural Metropolitano. La exhibición estará abierta de 8am-5pm hasta el viernes 15 de septiembre.*

#### At the Tupper Center

- Tue, Sep 5 ■ Noon seminar by Thomas Eltz, AUD.
- Scientific Support Staff meeting, LMR, 2pm

#### At the Culebra Marine Reserve

- Tue, Sep 5 The Oxford School
- Wed, Sep 6 The Oxford School
- Thu, Sep 7 Instituto Cultural
- Sat, Sep 9 Military Family Support Group

#### At Barro Colorado Island Station

- Sat, Sep 2: Colegio Internacional SEK de Panamá and ASNOVI/Universidad Tecnológica
- Sun, Sep 3: USMA (Ingeniería Eléctrica)
- Sat, Sep 9: Sociedad Audubon de Panamá and visitors from Panama
- Sun, Sep 10: Colegio San Vicente de Paul

### ANNOUNCEMENTS

#### Roubik: the "Beeman" •• Roubik: "Hombre Abeja"

The film "Beeman" featuring David Roubik's research about the ecology, behavior and evolution of bees, won an award at an International Wildlife Film Festival in Japan, "for best educational wildlife film". *Beeman* was shown at the Tupper Center Auditorium for the STRI community, on Tuesday June 6 by Oxford Scientific Films ••• *El video "Beeman" que muestra las actividades de David Roubik en el estudio de la ecología, comportamiento y evolución de las abejas, ganó un premio en Japón, en el Festival Internacional de Cine de Vida Silvestre, "por ser la película más educativa sobre vida silvestre". "Beeman" fue presentada en el auditorio del Centro Tupper el martes 6 de junio para la comunidad de STRI, por la compañía productora "Oxford Scientific Films".*

#### Gran Limpieza de Playas

Los voluntarios de ANCON invitan a la comunidad de STRI a participar en la próxima "Gran Limpieza de Playas" el domingo 17 de septiembre en diferentes playas a lo largo del territorio panameño. El evento es coordinado a nivel mundial por el Centro Internacional para la Conservación Marina con sede en Washington, D.C. Interesados favor de llamar a ANCON, tel 264-8100.

### Research Awards

The Smithsonian Tropical Research Institute and the Organization for Tropical Studies announce five research awards, funded by a grant from the Andrew W. Mellon Foundation. Applications are invited from established investigators in all fields of ecological and evolutionary biology to conduct comparative research between STRI and OTS field sites in Panamá and Costa Rica. Awards include summer salary for up to three years and appropriate travel funds. Successful applicants are expected to apply other resources to support research. To be considered, applicants need to send a complete CV and a proposal of approximately five pages. The proposal should contain a concise description of the proposed comparative research, and how the award will facilitate subsequent comparative research, and how the award will facilitate subsequent comparative studies between STRI and OTS sites. Proposals should also include a brief description of current and prior funding relevant to the project, with details concerning how these other resources will be applied to the project. Applications will be accepted until December 1995, addressed to the Office of Fellowships and Education, Smithsonian Tropical Research Institute, Apartado 2072, Balboa, Panamá.

### Curso en la Universidad de Panamá

Como parte del acuerdo de colaboración científica que existe entre STRI y la Universidad de Panamá, Gregory Gilbert, becario postdoctoral de STRI, dictará un curso de la Introducción a las Relaciones entre Plantas y Hongos en el Departamento de Botánica de la Universidad de Panamá. El curso, de 4 créditos es de un semestre (septiembre-diciembre) con un horario de 6:20-9:35pm los martes y los jueves. Aunque cualquiera puede asistir a las conferencias del curso como oyente, es necesario ser estudiante registrado en el curso para obtener los créditos. Mayor información en el Departamento de Botánica de la Universidad de Panamá.



Un grupo escolar de la Ciudad del Niño de la Chorrera, acompañados de la popular "Soyla Lumbreira" visitaron la exhibición "Nuestros Bosques: Nuestra Herencia" el miércoles 23 de agosto, en el Salón de Exhibiciones del Centro Tupper. En la foto, algunos de ellos admiran la maqueta de la exhibición que simula una comunidad típica emberá. (Foto: A. Montaner)

### NEW STRI PUBLICATIONS



Schulz, William. 1995. "New Marine Station Benefits People and Environment." *Smithsonian Institution Research Reports* No. 81: 1.

Schwartz, Joshua J. 1995. "Male Advertisement and Female Choice in Frogs: Recent Findings and New Approaches to the Study of Communication in a Dynamic Acoustic Environment." *American Zoologist* 34: 616-624.

Skillman, John and Winter, Klaus. 1995. "Aechmea magdalenae, a Tropical Understory CAM plant, Utilizes Lighflecks more Effectively in Photosynthesis than Sympatric C3 Species." *Bulletin of the Ecological Society of America (Suppl)* 76: 389.

Ventocilla, Jorge, Herrera, Heraclio and Núñez, Valerio. 1995. *Plants and Animals in the Live of the Kuna*. Edited by Hans Roeder and translated by Elisabeth King. Austin: University of Texas Press.

**NEW STRI BOOKLIST**

- Alejandro de Humboldt: la naturaleza, idea y aventura.  
qQ143.H9A6714 1993X STRI.
- Animal behavior desk reference / EM Barrow.  
Ref QL750.3.B37 1995X STRI
- Bamboo in Asia and the Pacific: proceedings of the  
Fourth International Bamboo Workshop held in Chiang-  
mai, Thailand, November 27-39, 1991.  
qQK495.G74P96 1994 STRI.
- Biochemical and cellular mechanisms of stress tolerance  
in plants / edited by JH Cherry.  
SB112.5.B56 1994X STRI.
- Climate change: science, impacts and policy: proceedings  
of the Second World Climate Conference / edited by  
J.Jager & HL Ferguson. QC981.8.C5W68 1990X STRI.
- Conservation concerns: a guide for collectors and  
curators / K.Bachmann, editor.  
AM141.C65 1992X STRI.
- Darwin's laboratory: evolutionary theory and natural  
history in the Pacific / edited by R.MacLeod & PE  
Rehbock. QH198.A1D37 1994X STRI.
- Ecotourism: a sustainable option? / edited by E.Cater &  
G.Lowman. G155.A1E285 1994X STRI.
- Encyclopedia of fishes / JR Paxton & WN Eschmeyer,  
consultant editors. Ref qQL614.7.E56 1995 STRI.
- Ethnobotany: evolution of a discipline / edited by  
R.Evans-Schultes & S.von Reis.  
GN476.73.E84 1995X STRI.
- Etnohistoria de la alta amazonía, siglos XV-XVIII /  
F.Santos. F3451.L8S28 1992X STRI.
- Fisicoquímica y biología de las lagunas costeras mexica-  
nas / Ma. Guadalupe Figueroa Torres y otros., eds.  
QH541.5.L27F33 1991 STRI.
- Growing green: enhancing the economic and environ-  
mental performance of U.S. agriculture / P.Faeth.  
HD1761.F23 1995X STRI.
- Guidelines for protected area management categories /  
IUCN Commission on National Parks and Protected  
Areas. Ref qSB486.M35I835 1994X STRI.
- The High frontier: exploring the tropical rainforest  
canopy / MW Moffett. QH541.5.R27M64 1993X STRI.
- History of the Australian vegetation / edited by RS Hill.  
QE948.A1H57 1994X STRI.
- In the society of nature: a native ecology in Amazonia /  
P.Descola. F3430.1.A25D4713 1994X STRI.
- Index herbariorum. Part I: the herbaria of the world. 8th  
ed., 1990 / PK Holmgren et al., eds.  
Ref QK75.I38 1990 STRI.
- El Inventario biológico del canal de Panamá. I.El estudio  
marino / L.D'Croz y otros, eds.  
QH92.4.I62 1994 STRI.
- Names in current use for extant plant genera / compiled  
& edited by W.Greuter et al. Ref QK96.N172 1993 STRI.
- Opresión colonial y resistencia indígena en la alta  
amazonía / FSantos, compilador.  
F3721.3.G68O67 1992X STRI .
- Phanerozoic stromatolites II / edited by J.Bertrand-  
Sarfati & C.Monty. QE955.P47 1994X STRI.
- Re-reading cultural geography / edited by KE Foote.  
GF43.R4 1994X STRI.
- Searching for Panama: the U.S.-Panama relationship and  
democratization / M.Falcoff & RL Millett.  
E183.8.P2F35 1993X STRI.
- Swallowtail butterflies of the Americas: a study in  
biological dynamics, ecological diversity, biosystematics,  
and conservation. / HA.Tyler et al.  
QL561.P2T82 1994X STRI.
- Taxonomic literature: a selective guide to botanical  
publications and collections with dates, commentaries  
and types. Supplement III: Br-Ca / FA Stafleu & EA  
Mennega. Ref Z5351.S77 1976 Suppl.III STRI.
- Técnicas de producción y calidad del carbón vegetal en  
los robledales de altura de Costa Rica / R.aus der Beek  
& S.Navas. HD9999.C383C8b 1993 STRI.
- Tourism and politics: policy, power and place / CM  
Hall. G155.A1H347 1994X STRI.
- Tropical mangrove ecosystems / AI Robertson & DM  
Alongi, eds. QH541.5.M27T76 1992X STRI.