Tupper seminar

Tuesday, June 17, noon seminar speaker will be Julie Linton, Duke University **Protection of the Coiba National Park: working with the resource users from the community of Bahía Honda**
With an introduction by Todd Capson, STRI

Bambi seminar

Thursday, June 19, Bambi seminar speaker will be Liza Comita, University of Georgia **Title to be announced**

Bocas seminar

Tuesday, June 17, Bocas seminar speakers will be Anne and Peter Meylan **Ecology and migration of marine turtles in Bocas del Toro**

Arrivals

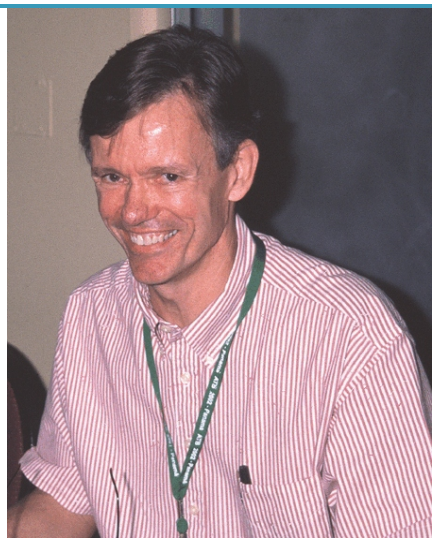
Penny Barnes, STRI and Bodega Marine Laboratories, Canada, Ilka Feller, Smithsonian Environmental Research Center, and ten students, Jun 15 - Jul 19, to participate in STRI/OTS Tropical Marine Ecology Course, on Bocas del Toro and Achiotines.

Karen McFee, Princeton University, Jun 15, to replace James Mandel as system manager of the Automated Telemetry System, on BCI.

Manuel Bernal, Universidad del Tolima, Colombia, Jun 15 - Jul 15, to work in the female Túngara frog project, in Gamboa.

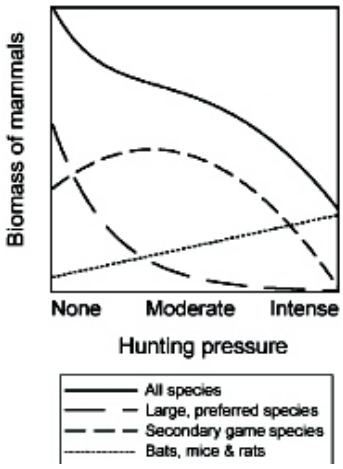
Smithsonian Tropical Research Institute, Panamá www.stri.org June 13, 2003

Consequences of hunting for vertebrates and plants in tropical forests: Wright



STRI staff scientist S. Joseph Wright just published the article "The myriad consequences of hunting for vertebrates and plants in tropical forests" in the May issue of *Perspectives in Plant Ecology, Evolution and Systematics* (9: 73-86). Human extraction of forest vertebrates from the tropics has reached alarming levels. Many preferred game species consume flowers, fruit, seeds and/or leaves, and these interactions will cause their harvest to ramify through forests. Three related issues determines how severely the harvest of forest vertebrates influences the plant community. First, the species selected by hunters and the intensity of the hunt determines which species are removed and which remain. Second, the possible presence of ecologically similar, non-game species able to expand their activities to fulfill the role of heavily exploited species determines how severely the harvest disrupts ecological relationships between vertebrates and the plant community. Finally, hunters will alter plant species composition if the harvest of vertebrates differentially affects mutualists or pests of particular plants. Hunters also alter plant diversity if the harvest of vertebrates disrupts ecological mechanisms that permit plant species to coexist. Wright examines hunter selectivity, the intensity of the hunt, possible compensation by non-game species, and the types and strengths of interactions among game species and plants for tropical forests to determine when and where these outcomes occur. (.pdf available).

El científico S. Joseph Wright de STRI, publicó un artículo sobre las consecuencias de la cacería para vertebrados y plantas en los bosques tropicales, en *Perspectives in Plant Ecology, Evolution and Systematics* (9: 73-86). La extracción de vertebrados por la cacería en bosques tropicales ha llegado a niveles alarmantes. Muchas de las especies que los cazadores prefieren comen flores, frutas y/u hojas, y estas interacciones conducirían a la ramificación de cosechas en los bosques. Tres asuntos inter-relacionados determinarán qué tan severamente la cacería de vertebrados afecta la comunidad de plantas. Primero, las especies que los cazadores prefieren y qué tan intensamente las cazan determinará qué vertebrados desaparecen y cuáles se quedan. Segundo, la posible presencia de especies ecológicamente similares, pero que no son de cacería, que puedan expandir sus actividades y llenar el papel ecológico de las especies muy explotadas determinará que tan severamente la cacería romperá las relaciones ecológicas entre los vertebrados y las plantas del bosque. Finalmente, los cazadores alterarán la composición de las especies de plantas, si la cacería de vertebrados afecta específicamente los mutualismos o pestes de especies particulares de plantas. Los cazadores también alterarán la diversidad de plantas si rompen mecanismos ecológicos que permiten que diferentes especies de plantas coexistan. Wright examina la selectividad de la cacería, la intensidad, la posible compensación por parte de especies que no son de cacería, y los tipos y fortalezas de las interacciones entre especies de cacería y plantas en bosques tropicales, para determinar cuándo y donde se dan estos resultados.



More arrivals

Robert Ricklefs, STRI research associate from the University of Missouri, Jun 15-30, to study the life history-physiology nexus: constraints on the evolutionary diversification on avian life histories, in Gamboa.

Andrew Bouwma, short-term fellow from the University of Wisconsin-Madison, Jun 17 - Jul 25, to study the effect of parasite infection on foraging rates in a social wasp: a test of the parasitic castration hypothesis, on BCI and Gamboa.

James Nieh and Erin Smith, University of California in San Diego, Jun 19 - Jul 12, to study the food recruitment communication of stingless bees, on BCI.

Adam Tinklepaugh, intern from Lynchburg College, Virginia, Jun 20 - Aug 8, to work with Bill Wcislo, on nocturnal vision and landmark orientation in a tropical sweat bee, at Tupper and BCI.

Departures

Eldredge Bermingham, Jun 17 - 19, to Washington DC, on official business at SI.

David Roubik, Jun 17 - Aug 8, to Washington DC, to work at the NMNH on bee research, and to Aberdeen, to attend the Association for Tropical Biology meetings and the meetings of the British Ecological Society.

STRI in the news

Coiba: el Galápagos de Panamá, by Ovidio Díaz Espino. 2003. *La Prensa*, June 7: 28A

Inspecting Bocas

Derek Ross, SI construction chief at the Office of Facilities, Engineering and Operations (OFEO) visited STRI from Monday, June 2, through Thursday, June 5, to participate in the final inspection of the new Bocas del Toro Marine Research Station, scheduled to be dedicated in October. In the photo, Ross checks a laboratory with Denis Allen, OFEO-STRI resident inspector, at Bocas.

Derek Ross, jefe de construcciones de la Oficina de Instalaciones, Ingeniería y Operaciones (OFEO) de Smithsonian visitó STRI del lunes 2 al jueves 5 de junio para participar en la inspección final de la nueva Estación Marina de Investigaciones en Bocas del Toro, la cual será inaugurada en octubre. En la foto, Ross revisa un laboratorio con Denis Allen, inspector residente de OFEO-STRI, en Bocas.

WebCan camera from the canopy

STRI's Office of Information Technology completed the installation of a WebCan camera on STRI's canopy access crane at the Metropolitan Natural Park (PNM). This device allows Internet users to watch the dry forest of the Park from the camera, move the camera 360 degrees, and take an instant photograph from the crane with the possibility of close-ups. See it at: **www.stri.org** under the PNM icon. The photo shows a zoom view of the lower canopy and part of the crane.

La Oficina de Informática de STRI culminó la instalación de una cámara WebCan en la grúa de acceso al dosel de STRI en el Parque Natural Metropolitano (PNM). Este instrumento permite a los usuarios de Internet observar el bosque seco del Parque desde la cámara, mover la cámara hasta 360 grados y tomar fotografías instantáneas con la posibilidad de acercamientos. Visite la nueva cámara en **www.stri.org** bajo el ícono del PNM. La foto muestra una vista hacia la parte inferior del dosel y parte de la grúa.

STRI in the news

Quiero mostrarle al mundo lo maravilloso que es Panamá, by Gladys Navarro de Gerbaud. 2003. *En Exclusiva*, Jun 11: 14-18.

Coiba y los retos por alcanzar, by Mónica Palm. 2003. La Prensa, Jun 12: 42A.

El herbario universitario, la biblioteca de las plantas en Panamá, by Darsy Santamaria Vega. Tiempos del Mundo de Panamá, Hyne 5: 7.

New publications

Krause, G. Heinrich, Galle, Alexander, Gademan, Rolf, and Winter, Klaus. 2003. "Capacity of protection against ultraviolet radiation in sun and shade leaves of tropical forest plants." *Functional Plant Biology* 30(5): 533-542.

Linares, Olga F. 2003. "Long-term changes revisited." *Cambridge Archaeological Journal* 12(2): 277-279.

Linares, Olga F. 2003. "Going to the city... and coming back? Turnaround migration among the Jola of Senegal." *Africa* 73(1): 113-132.

Miscellaneous

For sale: brand new EPSON Stylus CX3200 color inkjet printer (USB). Prints and scans. 1/year warranty. Please contact: Renate Sponer at **sponerr@naos.si.edu.**

Children stuff for sale: Bath tub with dresser and drawers car sit, carrier, high chair, tricycle, beauty saloon, girl shoes, etc. Interested please call Marlene Flores at 612-8562 e-mail **floresm@tivoli.si.edu**

Center for Tropical Forest Science

Research Grants Program

The Research Grants Program of the Center for Tropical Forest Science (CTFS) of the Smithsonian Tropical Research Institute supports research associated with CTFS' network of Forest Dynamics Plots. This grants program is intended to provide opportunities for senior researchers and graduate, predoctoral, and postdoctoral students to utilize existing Forest Dynamics Plots and to conduct research with scientists associated with these plots.

What is the Center for Tropical Forest Science?

The Center for Tropical Forest Science is a program within the Smithsonian Tropical Research Institute that coordinates a pan-tropical network of large-scale Forest Dynamics Plots, each using a standardized protocol. Within each census plot, all trees greater than 1 cm at diameter breast height are measured, tagged, identified, and monitored through time. Since the first Forest Dynamics Plot was initiated on Panama's Barro Colorado Island in 1980, the network has grown to include 17 sites in 13 countries, and is currently monitoring more than 3 million trees of about 6000 species. (See the map and list of Forest Dynamics Plots of the CTFS). For more information on the CTFS network or Forest Dynamics Plot methodology, see the CTFS website (www.ctfs.si.edu).

What types of projects will the CTFS Grants Program support?

Anyone working directly in a Forest Dynamics Plot, analyzing data from a plot, identifying plants or animals in a plot, or generating complementary data that strengthens Forest Dynamics Plot research programs is eligible to apply. Projects can be field-oriented, herbarium- or laboratory-based, or analytical. Research projects can be either basic or applied in nature. Social scientists as well as natural scientists are encouraged to apply.

Who is eligible to apply?

The CTFS Grant Program is open to all researchers, from graduate students to senior scientists. In some cases, advanced undergraduates will also be considered. Preference will be given to scientists in the countries with CTFS sites and to all graduate students and post-doctoral researchers. Applicants are welcome from all nationalities.

How much funding can one request and for how long?

The majority of the CTFS Research Grants will be in the $3,000-$15,000 range. One or two larger grants up to a total of $40,000, especially for post-doctoral awards, are likely to be funded. The CTFS Grants Program will make awards for projects three months to three years in length.

What expenses can be included in the grant proposal?

The funding is restricted to expenses directly related to field research, laboratory research, and data analysis. Examples of eligible expenses include travel, living expenses during fieldwork, supplies, research assistance, and resulting publications. Funds are not available for salary and/or fringe benefits of applicant (except post-doctoral stipends), tuition, non-project personnel, or travel to meetings.

Does the CTFS Grants Program support undergraduate and graduate study costs?

No, funding cannot be applied to undergraduate and graduate expenses such as tuition, books, and fees. In addition, the grant project will not support indirect costs for institutional support.

CTFS Forest Dynamics Plots

LATIN AMERICA

- Barro Colorado Island Nature Monument, Panama
- Luquillo Experimental Forest, Puerto Rico
- Yasuní National Park, Ecuador
- La Planada Nature Reserve, Colombia

AFRICA

- Ituri Forest, Democratic Republic of Congo
- Korup National Park, Cameroon

ASIA

- Mudumalai Wildlife Sanctuary, India
- Sinharaja World Heritage Site, Sri Lanka
- Pasoh Forest Reserve, Peninsular Malaysia
- Lambir Hills National Park, Sarawak, Malaysia
- Bukit Timah Nature Reserve, Singapore
- Palanan Wilderness Area, Philippines
- Khao Chong Wildlife Refuge, Thailand
- Huai Kha Khaeng Wildlife Sanctuary, Thailand
- Doi Inthanon National Park, Thailand
- Nanjenshan Nature Reserve, Taiwan
- Fushan Nature Reserve, Taiwan

Fall 2003 CTFS Research Grants Recipients

- The *Brownea grandiceps* species complex used to study modes of speciation in understory rain forest trees
- Comparative Community-wide Studies of Forest Reproduction and Pollinators in Old and New World Tropical Forests
- Comparison of fruit characteristics, dispersal syndromes and seed dispersal in lowland rain forests of the Western Ghats and Sri Lanka
- Herbaceous and Epiphytic Flora of the Korup Forest Dynamics Plot in Cameroon patterns, causes, and consequences for forest dynamics
- Investigation of oomycete fungi believed to be involved in Janzen-Connell effects observed on Barro Colorado Island, Panama
- Linking Seedling Drought Resistance with Species Habitat Associations: Dry Season Mortality
- A Mechanistic Understanding of the Responses of Soil Carbon Pools in Tropical Forests to Increasing Global Temperatures
- Pollen dispersal limitation in tropical rainforests: A comparative study in BCI and Yasuni
- Preliminary Study to Evaluate the Arboreal Species Composition, Abundance and Diversity in the Panamanian Forests
- Reconstructing historical disturbance regimes and forest stand dynamics in the forest mosaic of the Huai Kha Khaeng Wildlife Sanctuary, western Thailand
- Seedling Dynamics in Yasuní National Park, Ecuador

What should be included in the application? Grant proposals should include the following:

- *Cover Sheet*. Include title, name, and contact information.
- *Research Proposal* (not to exceed 1500 words). The proposal must describe the proposed research, indicate its relevance to one or more Forest Dynamics Plots, and explain the significance of the work to a broader discipline.
- *List of collaborators*. Provide a list of collaborators on the project. For graduate students and postdoctoral researchers, an advisor is also necessary. In-country collaborators are strongly recommended.
- *Curriculum vitae*. A CV of the applicant should include contact information, educational background, current and previous fellowships and grants, and research interests.
- *Proposed referees*. Please provide a list of three people that could review the proposed research but who are not current collaborators or advisors.
- *Detailed Budget.* A budget should include all costs related to carrying out proposed research. Please see above for expenses that can be included in the proposal. A budget justification is also suggested.

How will applications be evaluated?

Applicants are evaluated by a panel of scientists associated with the CTFS network. Larger grant proposals will also be reviewed by outside scholars. Awards are made on the basis of the proposal's merit, the applicant's ability to carry out the proposed research, the likelihood that the research can be carried out in the proposed time frame, and the extent to which Forest Dynamics Plots contribute to the proposed research.

How should proposals be submitted?

Proposals can be sent electronically (preferred method) or by mail to the addresses listed below.

CTFS Grants Program
Center for Tropical Forest Science
Smithsonian Tropical Research Institute
P.O. Box 37012
Suite 3123, MRC 705
Washington, DC 20013-7012 USA
E-mail: ctfslist@stridc.si.edu
http://www.ctfs.si.edu

When are applications due?

Deadlines for the CTFS Research Grants Program are August 29, 2003 and February 27, 2004. Decisions will be made approximately two months after the deadline.