Tupper seminar

Tuesday, August 5, noon seminar speaker will be Egbert G. Leigh, Jr., STRI **Sex allocation and evolutionary biology**

Bambi seminar

Please check GroupWise for information on the next Bambi.

Arrivals

Peter Delman, Pingry School, Martinsville, NJ, Aug 1-13, to shoot still photographs of tropical images and forms, on BCI.

Eleven participants of the Invertebrate Taxonomy Workshop to be coordinated by Rachel Collin, Aug 3-15, on Bocas del Toro.

Jennifer Rogers and Amanda Wilson, University of Kansas, Aug 3-31, to study soil microbial community structure and nutrient availability in tropical rainforest and adjacent anthropogenic grasslands, Central America, on BCI.

Stefan Laube, University of of Kaiserslautern, Germany, Aug 4 - Dec 31, to study long-term changes of epiphyte communities, on BCI.

Vera Lenerz, Freie University, Berlin, Aug 4 - Sep 20, to work with Stefan Lauve, on BCI.

Katja Wallmeyer and Markus van de San, University of Bonn, Germany, Aug 5 - Nov 5, to study activity patterns, habitat use and social organization in a neotropical gleaning bat (*Micronycteris nicrotis*), on BCI.

Smithsonian Tropical Research Institute, Panamá www.stri.org August 1, 2003

R.V. Urracá expedition returns from the Pacific

On Wed, July 23, *the R.V. Urracá* returned to Naos Island after a 6-day expedition to Coibita, Montuosa and Jicarita islands in the Gulf of Chiriqui, led by STRI researcher Luis D´Croz, with visiting scientists José and Maria Jose Darias from the Canary Islands. STRI research associate Juan Maté, assistants Juan B. Del Rosario, Carlos Vega, and Dayanara Macías, diving officer Edgardo Ochoa and photographer Marcos Guerra, also participated in the expedition, along with the *Urracá* crew. In the photos (left) Maria Jose and José Darias clean samples for further study and (right) D'Croz casts dragging plankton nets to obtain samples. In the third photo, D'Croz and Maté join crew members during an evacuation drill. The group reported humpback whales (*Megaptera novaeangliae*) near Montuosa Island (see below).

El miércoles 23 de julio, el *R.V. Urracá* regresó a Isla Naos luego de una expedición de seis días a las islas Coibita, Montuosa y Jicarita en el Golfo de Chiriquí, liderada por el investigador Luis D'Croz de STRI, junto con científicos visitantes José Darias y María José Darias, de las Islas Canarias. El investigador asociado a STRI Juan Maté, asistentes de investigación Juan Del Rosario, Carlos Vega y Dayanama Macías, el director de buceo Edgardo Ochoa, y el fotógrafo Marcos Guerra también

New publications

Eya, Bryan K., and Chemsak, John A. 2003. "Review of the genus *Amphelictus* Bates, part I (Coleoptera, Cerambycidae)." *Les cahiers Megellanes*(21): 1-24.

Eya, Bryan K., and Chemsak, John A. 2003. "Review of the genus *Amphelictus* Bates, part II (Coleoptera, Cerambycidae)." *Les cahiers Megellanes*(22): 1-21.

Fallon, Sylvia M., Bermingham, Eldredge P., and Ricklefs, Robert E. 2003. "Island and taxon effects in parasitism revisited: Avian malaria in the Lesser Antilles." *Evolution* 57(3): 606-615.

Gill, Sharon A. 2003. "Timing and duration of egg laying in duetting Buff-breasted Wrens." *Journal of Field Ornithology* 74(1): 31-36.

Huff, Peter M., Wilf, Peter, and Azumah, Ebere J. 2003. "Digital future for paleoclimate estimation from fossil leaves? Preliminary results." *Palaios* 18(3): 266-274.

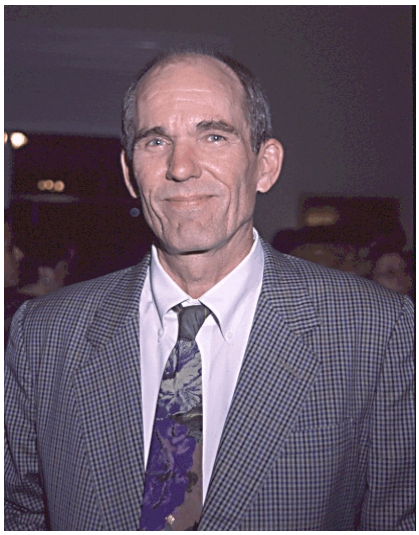
Lundmark, Cathy. 2003. "Night lights." *BioScience* 53(7): 688.

Norris, Scott. 2003. "Neutral theory: a new, unified model for ecology." *BioScience* 53(2): 124-129.

Ruber, Lukas, Van Tassell, James L., and Zardoya, Rafael. 2003. "Rapid speciation and ecological divergence in the American seven-spined gobies (Gobiidae, Gobiosomatini) inferred from a molecular phylogeny." *Evolution* 53(7): 1584–1598.

participaron de la expedición, junto con la tripulación del *Urracá*. En las fotos de la primera página, (izquierda), Maria José y José Darias limpian especímenes para estudios posteriores, y (derecha), D'Croz tiende redes de plancton de arrastre para recoger muestras. En la tercera foto, D'Croz y Maté se unen a la tripulación del *Urracá* en un ejercicio de evacuación. El grupo se encontró con ballenas jorobadas cerca de Isla Montuosa (fotos de abajo, en la página anterior).

Safe is sexy: Females prefer burrows



During animal courtship males use diverse and often strikingly beautiful signals as they compete intensely for the amorous attention of choosy females. Familiar examples include the bright feathers of male birds and the evening songs of male frogs or crickets. Why are some courtship signals more attractive than others? Females should be attracted to signals that honestly indicate the quality of a suitor as a mate and father. But STRI staff-scientist John Christy and colleagues have discovered a signal that is attractive for another reason. The signal is an arched wall of sand called a hood which courting males of the fiddler crab *Uca musica* build at the entrances to their burrows on sand flats in Panama. Males have one very large claw that they wave to attract females to their burrows and females visit several males before choosing a mate by staying with a male in his burrow. These small crabs are at great risk of predation from ever-present shore birds. When moving between burrows they reduce this risk in part by running to objects that provide cover. Christy, Julia Baum, an undergraduate at McGill University, and STRI researcher Pat Backwell thought that hoods might attract females because they look like objects that provide temporary hiding places. As reported recently in *Animal Behaviour* (66: 89-94) they found ample support for this idea. They showed that female fiddler crabs, including species that do and do not build structures, are equally attracted to hoods and other objects to escape predation. They then replaced males' hoods with stones, shells, pieces of wood and hood replicas and tested their attractiveness to females. Females found all males to be equally attractive regardless of what kind of object was at their burrow. The researchers conclude that some male courtship signals may be designed to keep females safe as they search for a mate, not to advertise the quality of the signaler and more generally, that a species' ecology can favor responses that in turn become incorporated into courtship.

Durante el cortejo animal, los machos usan diversas señales que frecuentemente son bellísimas, mientras compiten por la atención amorosa de las hembras. Ejemplos familiares incluyen las brillantes plumas de aves y cantos nocturnos de ranas y grillos machos. ¿Por qué algunas señales de cortejo son más atractivas que otras? Las hembras deberían ser atraídas por señales que indican honestamente la calidad del macho como pareja y padre. Pero el científico John Christy de STRI ha descubierto una señal que es atractiva por otra razón. La señal es una pared arqueada de arena o capucha que los machos del cangrejo violinista *Uca musica* construyen en la entrada de su madriguera sobre los bancos de arena en Panamá. Los machos tienen una larga tenaza que mueven para atraer a las hembras a sus madrigueras y éstas visitan varios machos antes de escoger uno y quedarse en su madriguera. Estos pequeños cangrejos se encuentran en gran riesgo de ser alcanzados por las aves marinas que siempre están allí. Cuando se mueven entre madrigueras, reducen el riesgo de ser depredados, en parte corriendo hacia objetos donde se esconden. Christy, Julia Baum de la Universidad de McGill, y la investigadora de STRI Pat Backwell piensan que las capuchas pueden atraer a las hembras, porque se parecen a los objetos que les proveen escondite temporal. Como se publicó recientemente en la revista *Animal Behavior* (66: 89-94) ellos tienen amplia evidencia que apoya esta idea. Mostraron que las hembras del cangrejo violinista, incluyendo especies que contruyen y no construyen capuchas, se sienten tan atraídas a ellas y a otros objetos, para escapar de sus depredadores. Entonces ellos reemplazaron las capuchas de los machos con piedras, conchas y pedazos de madera y réplicas de capuchas y probaron su atractivo para las hembras. Las hembras encontraron a todos los machos igual de atractivos sin importar qué clase de capucha hubiera en su madriguera. Los investigadores concluyen que algunas señales de cortejo de los machos pueden haber sido diseñadas para mantener a las hembras seguras mientras buscan su pareja, y no para anunciar la calidad del macho. De manera más general, la ecología de las especies puede favorecer respuestas que a su vez, se incorporan al cortejo.

New publications

Eya, Bryan K., and Chemsak, John A. 2003. "Review of the genus *Amphelictus* Bates, part I (Coleoptera, Cerambycidae)." *Les cahiers Megellanes*(21): 1-24.

Eya, Bryan K., and Chemsak, John A. 2003. "Review of the genus *Amphelictus* Bates, part II (Coleoptera, Cerambycidae)." *Les cahiers Megellanes*(22): 1-21.

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Eight new beetles

Ocho escarabajos nuevos

Scientists Bryan K. Eya from the Human and Ecological Risk Division in Sacramento and John A. Chemsak from the University of California at Berkeley conducted research at STRI on beetles of the genus *Amphelictus*. They just published their findings in "Review of the genus *Amphelictus* Bates, (Coleoptera, Cerambycidae), in two articles, part I and II as issues 21 and 22 of *Les cahiers Magellanes*, where they include the scientific description of eight new species: *Amphelictus aielloae*, Panama; *A. curoei*, Costa Rica and Panama; *A. fortunensis*, Costa Rica and Panama; *A. fuscipennis*, Colombia; *A. figgoglyi*, Panama; *A. scabrosus*, Panama, Colombia and Ecuador; *A. parvipunctus*, Peru; and *A. hovorei*, Costa Rica. One of the recently discovered species, *Amphelictus aielloae*, was named after STRI staff scientist Annette Aiello.

Amphelictus aielloae

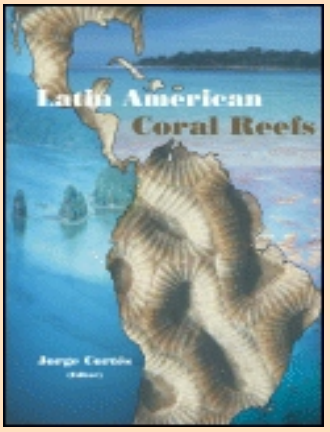
Los científicos Bryan K. Eya de la División de Riesgos Humanos y Ecológicos en Sacramento y John A. Chemsak de la Universidad de California en Berkeley llevaron a cabo estudios en STRI sobre escarabajos del género *Amphelictus*. Ellos acaban de publicar sus encuentros en "Review of the genus *Amphelictus* Bates, (Coleoptera, Cerambycidae), en dos artículos, partes I y II, como números 21 y 22 de *Les cahiers Magellanes*, donde incluyen la descripción científica de ocho especies nuevas: *Amphelictus aielloae*, Panama; *A. curoei*, Costa Rica y Panama; *A. fortunensis*, Costa Rica y Panama; *A. fuscipennis*, Colombia; *A. figgoglyi*, Panama; *A. scabrosus*, Panama, Colombia y Ecuador; *A. parvipunctus*, Peru; y *A. hovorei*, Costa Rica. Una de las nuevas especies, *Amphelictus aielloae*, fue bautizada en honor a la científica Annette Aiello de STRI.

T-shirt to support scholarship

STRI fellow Julia Velasquez-Runk and the Fundation for the Development of Wounaan People, with the support of the National Wounaan Congress established a college fund for Wounaan students, K'ïirjũg K'aug Ham K'ïir. The necessary funds will be raised by selling T-shirts. They can be purchased at the STRI bookstore, this weekend's Feria Nacional de Artesanías at Atlapa, and Wounaan vendors.

La becaria de STRI Julia Velásquez Runk y la Fundación para el Desarrollo de los Wounaan, con el apoyo del Congreso Nacional Wounaan establecieron una beca para estudiantes, K'ïirjũg K'aug Ham K'ïir. Los fondos necearios se obtendrán de la venta de camisetas. Pueden comprarse en la Librería de STRI, la Feria Nacional de Artesanías de este fin de semana en Atlapa, y vendedores Wounaan.

New book



The book *Latin American: Coral Reefs*, edited by Jorge Cortez, from the University of Costa Rica was just published by Elsevier. It includes "Caribbean coral reefs of Panama: present status and future perspectives" by staff scientist Héctor M.Guzmán; "Corals and coral reefs of the Pacific coast of Panamá" by Juan L. Maté; "Coral communities and coral reefs of Ecuador", by former staff scientist Peter W. Glynn; and "Reef-building coral communities of Eastern Island (Rapa Nui), Chile, by Glynn, Gerald M. Wellington et *al.* The book presents information on coral reefs from Mexico to Brazil and from Chile to Cuba.

Miscellaneous

Moving sale: BMW 525i 4 door, 1991 Silvery black cloth interior, ac, sunroof; former owner BMW mechanic, $5500, neg. Suzuki, 1988 4wd, Soft top, field vehicle, Lots of power $2500, neg. Rattan/wicker love seat and sofa, like new, $650 neg. Call or email Janet at js35@cornell.edu or call 314 9237.