

STRI newsletter

September 27, 1991

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panama

No. 39

TUPPER CENTER SEMINARS

Tuesday, October 1, noon seminar speaker will be John Christy, STRI.

*A sensory trap and the basis of mate choice in the fiddler crab *Uca beebei*.*

Abstract

Male courtship signals may be attractive because they manipulate female behavior that has evolved as an adaptive trait in a selective context outside of mating—the sensory trap hypothesis. I will show that mud pillars built by some courting male *Uca beebei* catch females in a sensory trap—they are attractive because they elicit landmark orientation, a behavior that promotes escape from predators. Other species in the genus exhibit landmark orientation and also are attracted by pillars even though males of these species do not build them. Females stay in the burrows and mate more often with males that build pillars, than with males that do not. Choice based on male size and burrow structure, putative cues of male and resource quality respectively, do not explain this difference. Hence, the attractiveness of pillars does not appear to have evolved due to selection of females or other evolutionary forces that may arise as a consequence of mating with males that build them.

Next Week

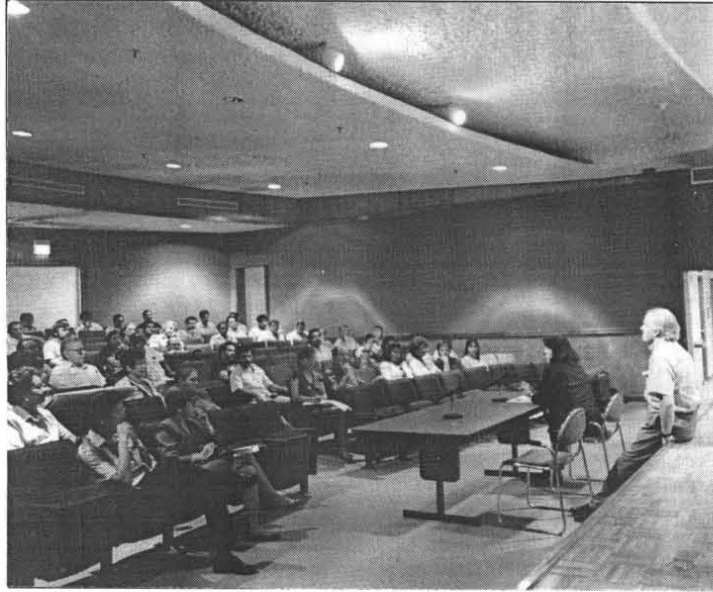
Tuesday, October 8, noon seminar speaker will be David Zeh, STRI.

Oscillating sexual selection in a beetle-riding pseudoscorpion: the ecological theater as the key to understanding the evolutionary play.

PEOPLE

Arrivals

- Gilles Seutin, University of Pennsylvania, Sep 28-Dec 1991 to do genetic analysis of the biogeography of lesser Antillean birds.



At an open meeting held on Tuesday, Sep 24 at the Tupper Center Auditorium, Anthony Coates and Leonor Motta informed employees about the STRI 2000 Commission. Employees had the opportunity to express suggestions and ask questions on issues that the Commission should consider. A similar meeting was held on BCI that afternoon ••• En una reunión abierta llevada a cabo el martes 24 de septiembre en el Auditorio del Centro Tupper, Anthony Coates y Leonor Motta informaron al personal sobre la Comisión STRI Año 2000. Los empleados tuvieron la oportunidad de hacer preguntas y ofrecer sugerencias sobre asuntos que la comisión deberá considerar. Una reunión similar se llevó a cabo en Barro Colorado esa tarde.

(Foto: C.C. Hansen)

- John Nason, University of Georgia, Sep 30-Nov 14, to work with James Hamrick on his project at BCI.
- Harvey Pough, short-term visitor from Cornell University, Oct 1-31, to study the environmental constraints on anuran vocalization at Gamboa.
- Gregory Gilbert, 3-year postdoctoral fellow, University of Wisconsin, Oct 1-Oct 1994, to study the role of tree diseases in recruitment and survival of samplings near conspecific adult trees on BCI.
- John Jones, postdoctoral fellow, Texas A & M, Oct 1-Sep 30, 1992, to work at the Tupper Center Laboratories on a study of the human ecology, vegetation and climate of Belize during the last quarternary and holocene.
- Justine Cruz, short-term fellow, Duke University, Oct 1-Dec 31, to work on the bird, beetle, paca and palm interaction on the small islands of Gatun Lake.
- Lisa Kealhofer, Mellon postdoctoral fellow, University of Pennsylvania, Oct 1-Oct 1992, to work at the Tupper Center Laboratories on a study of the prehistoric subsistence in Central Thailand.

- Maria Lesch, University of Wursburg, Germany, Oct 2-Nov 14, to work with Klaus Winter on the plant physiology project at BCI.

On Leave

Mercedes Arroyo, Oct 1-4.
Argelis Roman, Oct 7-28.
Marcos Guerra Oct 15-18.

UPCOMING EVENTS

OCTOBER 1991						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Monday, Oct 14, Columbus Day is a STRI holiday ••• *El lunes 14 de octubre se conmemora el día de la raza, y no hay trabajo en el STRI.*

Tuesday, Oct 8, Scientific Staff Meeting at the Tupper Center Auditorium at 9:30 am.

At Tupper Center

- Oct 1 *Colegio Internacional Sek*, 9am-12 noon, to visit Tupper Center Exhibit.
- Oct 2 *Amigos de la Biblioteca* meeting, Meeting Room, 9 am-12 noon.
- Oct 3 *II Foro Nacional de Información*, 9 am-5 pm, Auditorium.
Fundación Natura Meeting, Meeting Room, 4-6 pm.
- Oct 4 Construction Meeting, Meeting Room, 10 am-12 noon.

THINGS YOU SHOULD KNOW

To All Research Staff

Please remember to send the STRI Deputy Director one copy of all submitted manuscripts of scientific papers related to your research at STRI. This procedure helps us keep track of STRI research activities and also helps to prepare timely press releases on appropriate forthcoming work.

From the Library ••• *De la Biblioteca*

Thursday, Oct 3, the STRI Library will close at 4 pm ••• *El jueves 3 de octubre la Biblioteca del STRI cerrará a las 4pm.*

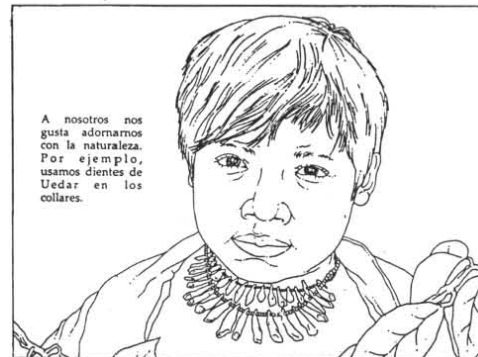
From the Accounting Office ••• *De la Oficina de Contabilidad*

The accounting staff will no longer keep copies of the personnel's Statements of Earnings and Leave. For questions and/or claims regarding these matters, you should use your own copy of the statement ••• *A partir de la fecha, el personal de contabilidad no mantendrá en archivo copia de los Estados de Remuneración y Vacaciones de los*

empleados. Para preguntas o reclamos que tenga sobre el particular, deberá presentar su propia copia de su Estado de Remuneración y Vacaciones.

ANNOUNCEMENTS

Coloring Book for the Kuna Children ••• *Libro de Colorear para los Niños Kunas*



STRI and the Panamanian Ministry of Education recently published a coloring book for Kuna children *Anmar Napguana Mimmiga (We, the Children of Mother Earth)*. This book, in Spanish and Kuna, resulted from the Master's thesis research on hunting and subsistence in the Kuna community of Cangandi, conducted by Jorge Ventocilla, environmental specialist with the STRI Office of Education and Conservation. The illustrations were produced by Ologuagdi, a well-known Kuna artist, and members of the Kuna community, including teachers, community leaders and hunters were consulted about the text.

The objective of this educational project was to convey to Kuna children the importance of wildlife in their lives and in their cultural heritage. As the prologue by Cacique Leonidas Valdez Kantula points out, "Today the majority of the children of Kuna Yala are not familiar with the lives of the animals. This book will help them to learn about and think about the lives of the *ibdurgan* and will thus contribute to maintain the cultural values of our people."

En coedición con el Ministerio de Educación de Panamá, el STRI ha publicado *Anmar Napguana Mimmiga (Nosotros, los Hijos de la Madre Tierra)*, libro de colorear dedicado a los niños Kunas. Este libro —escrito en Kuna y en español— es uno de los resultados de la investigación de tesis de maestría de Jorge Ventocilla, Especialista Ambiental de la Oficina de Educación y Conservación del STRI, hecha sobre el tema de la cacería y la subsis-

tencia en la comunidad Kuna de Cangandi. Las ilustraciones fueron realizadas por Ologuagdi, reconocido artista Kuna, y los textos fueron revisados por varios miembros de la comunidad Kuna entre cazadores, educadores, dirigentes y otros.

El objetivo de este material educativo del cual se repartirán más de 2,000 copias en las escuelas de San Blas, es mostrar a la niñez Kuna la importancia de la fauna silvestre en la vida material y espiritual de su pueblo. Como bien señala en el prólogo el Primer Cacique Leonidas Valdéz Kantule, "Ahora la mayoría de los niños de Kuna Yala desconocen la vida de los animales. Pero este libro ayudará a conocer e imaginar la vida de los *ibdurgan*, ayudando así a mantener los valores culturales de nuestro pueblo."

October Birthdays

Hector Guzman	2
David Roubik	3
Monica Alvarado	3
John Cubit	5
Celideth Mendoza	5
Jorge Ventocilla	12
Doris Martiz	22
Fernando Oglivie	22
Daniel Millan	26
Richard Cooke	28



Memorial Contributions for Robert Burke

Contributions in memory of Robert B. Burke Jr. may be made to: St. Paul United Methodist Building Fund, 6634 St. Barnabas Road, Oxon Hill, MD 20745.

Global Warming Conference

The Third International Conference on the Scientific and Policy Issues Facing All Governments will take place on April 6-9 1992 in Chicago. The objective of the conference is to provide an international forum on scientific and policy issues facing governments with regard to the greenhouse effect and similar **transnational environmental problems** including water shortage, floods, and acid rain. Deadline for abstracts: October 12, 1991. See your bulletin board for more information.

Grants Opportunities

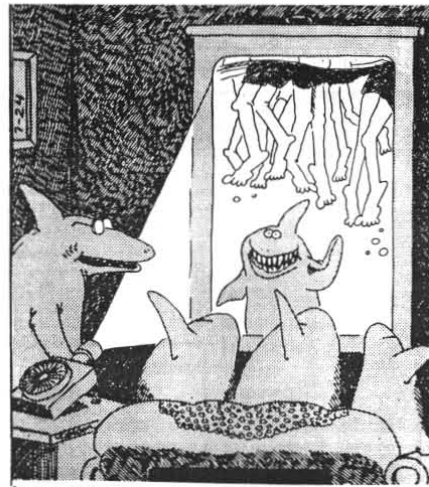
World Nature Association is offering grants of up to \$2,000 for education projects related to endangered flora and fauna field studies. For more information write to P.O. Box 673, Woodmore Station; Silver Spring, MD 20901, U.S.A.

For Sale ••• *Se vende*

Whole freeze flour at 20¢/lb and pastry flour at 22¢/lb. If interested, call Lizzy Leigh or bring a box to put it in ••• *Harina integrada a 20¢/lb y harina para hornear a 22¢/lb. Interesados llamar a Lizzy Leigh, o llevarle un contenedor para recoger la harina.*

STRI NEW PUBLICATIONS

- Carlson, D.A., Roubik, David W. and Milstrey, K. 1991. "Distinctive Hydrocarbons Among Giant Honey Bees, the *Apis dorsata* group (Hymenoptera: Apidae)." *Apidologie* 22: 169-181.
- Dudley, Robert. 1991. "Biomechanics of Flight in Neotropical Butterflies: Aerodynamics and Mechanical Power Requirements." *Journal of Experimental Biology* 159: 335-357.
- Dudley, Robert. 1991. "Thermoregulation in Unpalatable Danaine Butterflies." *Functional Ecology* 5: 503-506.
- Dudley, Robert and Gans, C. 1991. "A Critique of Symmorphosis and Optimality Models in Physiology." *Physiological Zoology* 64: 627-637.
- Guzmán, Héctor M. 1991. "Restoration of Coral Reefs in Pacific Costa Rica." *Conservation Biology* 5(2): 189-195.
- Moynihán, Martin H. 1991. "Structures in Animal Communication." In: *Man and Beast Revisited*: 193-202, edited by Michael H. Robinson and Lionel Tiger. Washington: Smithsonian Institution Press.
- Stern, D.L. and Dudley, Robert. 1991. "Wing Buzzing by Territorial Male Orchid Bees, *Eulaema eriana* (Hymenoptera: Apidae)." *Journal of the Kansas Entomological Society* 64: 88-94.



"And here we are last summer off the coast of . . . Helen, is this Hawaii or Florida?"

STRI's most valuable resource: its people. During September we celebrated Labor Day. Thanks to the efforts of all its workers, STRI is today a premier tropical research institution.

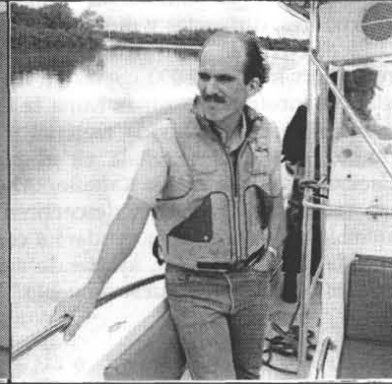
El recurso más valioso del STRI: su gente. En septiembre se celebró el día del trabajo. Gracias a los esfuerzos de todos sus trabajadores, STRI es hoy día, un instituto de investigación tropical de primera.



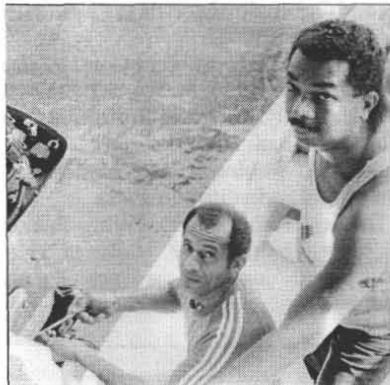
Abel Gomez and Moises Troya, BCI



Eleuterio Santos, Library



John Christy, Naos Marine Laboratory



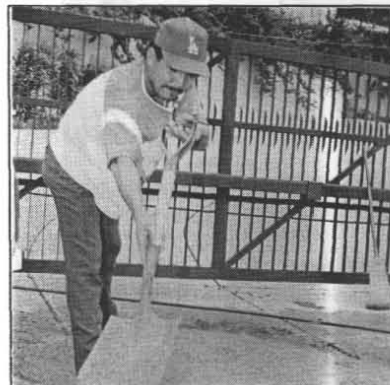
Rubén López and Gilberto Howell, Naos



Carmen Sucre, Personnel Office



Flor Carvallo, Tivoli



Agapito González, Tupper Center



Mireya Correa, Tupper Center



David Guardia, Contract worker