

STRI news

January 5, 1996

Smithsonian Tropical Research Institute • Apartado 2072, Balboa, Panamá • Tel. 227-6022 • Fax 232-5978

TUPPER CENTER SEMINARS

Tuesday, January 9, noon seminar speaker will be Michael Greenfield, University of Kansas

Choirs and Madrigals. Evolution of Chorus: Precedence, Relativity, and Selective Attention

Abstract

The synchronous and alternating choruses produced by males in many acoustic species are epiphenomena resulting from individuals competing to jam each other's signals. This arises when females disregard all but the leading signal in a sequence, and males who lead are selectively favored. Given this preceptual bias, modeling shows that a resetting of signal rhythm, which generates either synchrony or alternation, is evolutionarily stable, provided that resetting included a relativity adjustment for the velocity of signal transmission and selective attention toward only a subset of competitors. Signaling strategies in chorusing insects and ignorance incorporate these predicted features.

PEOPLE

Arrivals

- Dina Roberts, University of Memphis, Jan 3-1 Aug, to work with Lisa Petit on the impacts of land use on neotropical migratory birds wintering in Panama.
- Wiebke Thies, University of Tübingen, Jan 4-15 Nov, to work with Elisabeth Kalko in the project of the echolocation and foraging behavior of neotropical bats, at BCI.
- Tania Dos Santos, STRI's short-term visitor from the University of Sao Paulo, Brazil, Jan 6-31 Mar, to work with Mireya Correa in the revision of neotropical *Drosera*, at Tupper.
- Michael McCartney, Sloan fellow from Scripps Institute of Oceanography, Jan 7-Dec '97, to study the molecular evolution of reproductive isolation among Panamanian sea urchins, at Naos.
- Peter Wrege, Cornell University, Jan 7-31 Mar, to work with Steve Emlen in social behavior and breeding biology of the wattled jacana, at Gamboa.
- David Adler and Cynthia Stutts, Washington D.C., Jan 8-1 Mar, to work with Ross Robertson and Kenneth Clifton, in San Blas.
- Mitch Allen, University of California, Jan 8-8 Mar, to work with Robert Pearcy in integrative studies of photosynthesis and whole plant performance in the understory, on BCI.
- Kimona Ward, University of Washington, Jan 8-18, to visit sites for future research and do volunteer work, at BCI.
- Janie Wulff, Williams College, and one assistant, Jan 8-25, to work on coral reef sponge ecology, in San Blas.
- Todd Capson, University of Utah, Jan 9-8 Feb, to make preliminary studies on the stability of secondary metabolites in Panamanian rainforests, at BCI.
- Steve Mulkey, University of Missouri, Jan 9-15 Aug, to work with Joe Wright on *Psychotria* and Marantaceae species, at Tupper.
- Kaoru Kitajima, Mellon Postdoctoral Fellow from the University of Missouri, Jan 9-15 Aug, to study the canopy plant allocation responses to seasonal and spatial variation in light and water availability, at Tupper.
- Eugene Morton, SI National Zoological Park and Brigitte Stuckbury, York University, Jan 12-31 Apr, to study the individual territoriality in two tropical birds, at Gamboa.
- Owen Moore, York University, Jan 12-31 Aug, to work with Eugene Morton at Gamboa. Moore and Brigitte Stuckbury will also participate in a York University field course from Feb 17-2 Mar.
- Richard Eibach, Jessica Lewis and Brian Kurznel, Cornell University, to work with Steve Emlen in the wattled jacana project, at Gamboa.
- Members of the SI Women's Committee and their spouses, Jan 14-20, to visit STRI facilities and meet with members of the staff to get first-hand experiences of the projects that STRI conducts in Panama.
- Jennifer Davidson, University of California, Jan 15-15 Sep, to study the impact of frequency-dependent selection by pathogens and herbivores on the genetic structure of tropical tree population, at BCI.
- Rick Meinzer, University of Hawaii, Jan 15-31, to study the environmental and physiological regulation of water flux through a tropical forest ecosystem, at BCI.
- Ghislain Rompre, Canada, Jan 15-Mar 31, to work with Jeffrey Brawn in the project of the stability of tropical forests and tropical forest fauna on military installations of the Panama Canal area, in Gamboa.
- Alejandra Celis, Argentina, Jan 15-15 Mar, to work with Richard Meinzer at BCI.
- Jacobus Boosma, Dorte Bekkevold, Jeanette Bot and Jan Drachmann, University of Aarhus, Jan 16-6 Feb, to study the evolutionary ecology of fungus growing ants, in Gamboa.

- Heinrich Schatz, University of Innsbruck, Jan 16-3 Mar, to conduct an ecological and taxonomical investigation on soil living mites (Acari, Oribatida) in Panama, at Gamboa.
- John Werren, STRI's senior postdoctoral fellow from the University of Rochester, Jan 17-15 Mar, to work on a project on the parthenogeneses and incompatibility microorganisms in neotropical insects, at Tupper.
- Carol Horvitz, Bruce Young and Michael Keller, to participate at a OTS-STRI meetings with Joe Wright, Bill Wcislo and Allen Herre, at BCI.

Departures

- Héctor Guzmán and Gabriel Jácome, Jan 10-21, to Honduras, at the Cayos Cochinos Station.

THINGS YOU SHOULD KNOW

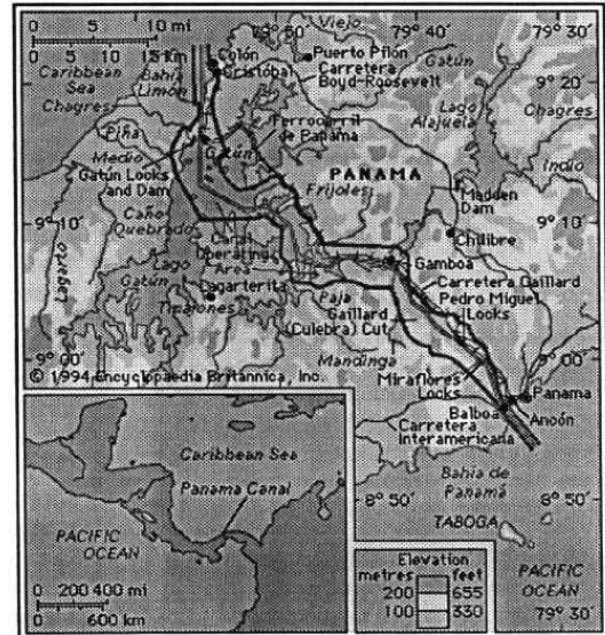
Reminder to Visitors • Recorderis a los Visitantes
 Please check the expiration date on your immigration permit. If your permit has expired you must contact Celideth de León at the Office of External Affairs at Tivoli to process any additional extension to your permit or for consultation on the matter ••• *Verifiquen la fecha de expiración de su permiso de inmigración. Si éste ha vencido debe comunicarse con Celideth de León de la Oficina de Asuntos Externos en Tivoli, para procesar su extensión o para consultas al respecto.*

NEW STRI PUBLICATIONS

- Condit, Richard. 1995. "Defining and Mapping Vegetation Types in Mega-Diverse Tropical Forests." *Tree* 11(1): 4-5.
- Heckadon-Moreno, Stanley. 1995. "Estudios Zoológicos de E.A. Goldman en Cerro Azul y Portobelo 1910-1911" [Segunda parte]. *Epocas* Segunda Era 10(12): 9.
- Königer, Martina, Harris, Gary C., Virgo, Aurelio and Winter, Klaus. 1995. "Xanthophyll-Cycle Pigments and Photosynthetic Capacity in Tropical Forest Species: A Comparative Field Study on Canopy, Gap and Understory Plants." *Oecologia* 104: 280-290.
- Tissue, David T., Skillman, John B., McDonald, Evan P. and Strain, Boyd R. 1995. "Photosynthesis and Carbon allocation in *Tipularia discolor* (Orchidaceae), a Wintergreen Understory Herb." *American Journal of Botany* 82(10): 1249-1256.
- Zotz, Gerhard. 1995. "How Fast Does an Epiphyte Grow?" *Selbyana* 16(2): 150-154.

ANNOUNCEMENTS

For Internet Users ••• Para Usuarios de Internet
 Screen-prints of maps, illustrations and photographs can be easily obtained through internet with a laser printer. This map of the Panama Canal is one of the many available of the region ••• *Tramas de mapas, ilustraciones y fotografías se pueden obtener fácilmente a través de internet con una impresora láser. Este mapa del Canal de Panamá es uno de los tantos que se encuentran sobre la región.*



MISCELLANEOUS

Aerobics ••• Aeróbicos

Aerobic practices started again at the Tupper Hall on Tuesday, January 2nd, from 5-6pm, Monday through Friday. Those interested may contact Nereida Hernández or María Leone. Inscription fee is \$20 a month. Instructor: Diana Centeno ••• *Las prácticas de aeróbicos se reanudaron el martes 2 de enero, de 5-6pm de lunes a viernes en el salón de exhibiciones del Centro Tupper. Interesados pueden comunicarse con Nereida Hernández o María Leone para inscribirse. El precio de las prácticas es de \$20 mensuales. Instructora: Diana Centeno.*

Se Compra

Silla de bebé para carro usada. Llamar a Celideth de León después de horas de trabajo al 235-9196.