STRI newsletter

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panama

No. 51

SEMINARS

Tupper Center Auditorium

No noon seminar scheduled for Tuesday, Dec 25.

PEOPLE

On leave:

Ira Rubinoff, Dec 11 - Jan 8 Hely Andrade, Dec 17 - 24 Luis Polanco, Dec 18 - 24 Elena Lombardo, Dec 17 - Jan 4 John Christy, Dec 3 - 24 Nélida Gómez, Dec 22 - 31 Argelis Román, Dec 17 - 31 Nicolás Almanza, Dec 17 - Jan 7

Move

Brian Keller and Fiona moved to a new place at Altos de Santa Maria (off Tumba Muerto behind the VISAT office). Their phone number is 30-0981.

Condolences ••• Nuestras Condolencias

Our deepest sympathy to Dr. John Cubit on the death of his mother Ruth on Dec 14. ••• Nuestras sentidas condolencias al Dr. John Cubit por la pérdida de su madre, Ruth el pasado 14 de diciembre.

UPCOMING EVENTS

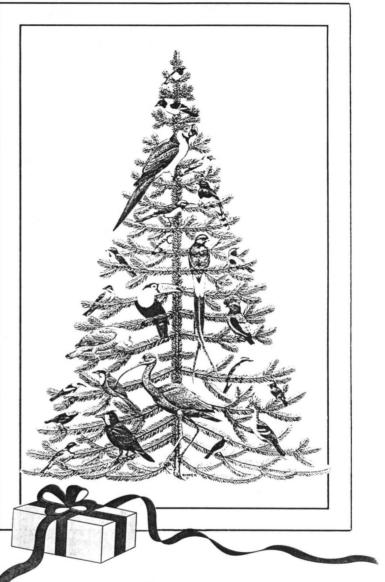
Dec 24: STRI offices will be open until 12:00 noon. STRI employees have the afternoon off.

> Las oficinas del STRI laborarán hasta las 12 del día solamente. Los empleados tienen la tarde libre.

Dec 25: Christmas Day is a STRI holiday.

Published weekly by the STRI Office of Education and Conservation

Supervisor: Georgina de Alba General Editor: Argelis Román Associate Editor: Maria Luz Calderón Editorial Assistant: Marissa Crespo



May your Christmas and New Year be filled with joy and peace.

Que estas Navidades y Año Nuevo estén llenos de alegría y paz.

No. 51

SMITHSONIAN TROPICAL RESEARCH INSTITUTE, Apartado 2072, Balboa, Panamá

THINGS YOU SHOULD KNOW

Inspection of privately owned vehicles with "MI" license plates

Yearly inspection for vehicles began Dec 17 and will continue through Feb 28. STRI staff members are advised to use La Casa del Descuento, Via España (near intersection with Via Argentina) and Calle 50 (near intersection with Calle Belen), but all authorized agencies will take MI cars.

Documents required: • Last inspection papers (*Certificado de Inspección Vehicular*) • 1990 License plate receipt (*Recibo de Placa*) • 1990 Application for MI license plate (*Ministerio de Relaciones Exteriores - Solicitud de Placa*) • Driver's license • Cedula or Passport. If the vehicle requires alignment and/or adjusting of lights, the cost is usually under \$20. There is a fee of \$6.00 for the inspection sticker.

Internal Guidelines for Use of Tupper Conference Center and Meeting Rooms

All requests must be channeled in writing through Vielka Vergel or Ana Maria Ford at least **3 working days** before the meeting/event, to allow sufficient time for internal coordination of activities.

Reservations will be confirmed upon completion and processing of application form (application forms available from Ana Maria Ford).

A responsible person must be appointed for the event in question. The responsible person must arrive early enough to verify that the assigned room and the requested services are ready. This person is also responsible for remaining at the closing of the meeting/event and verifying that the electricity is turned off and the facilities are properly closed and secured. Food and beverages must be secured in the refrigerator and/or locked, as appropriate.

In the event that food is to be served, these arrangements should be made directly by the responsible person, obtaining the approval of funding for costs well in advance of the event.

We recognize that occasional, last minute requests are inevitable, but hope that these can be minimized.

Maintenance at Tupper Center

All requests for maintenance, repairs or other than routine cleaning must be channelled through Mrs. Vielka Vergel. Appropriate forms are available in a box outside her office. Please do not make requests to the janitorial nor maintenance crew directly, as this makes it hard for them to complete their assigned work.

Reminder from the Administration

The deadline to send in any required shifts in allotment budget for FY 1991 has been changed to Thursday, Dec 27, 1990. This change is necessary to comply with required reporting deadlines from Washington. As indicated in your allotment, send your requests for changes to Leopoldo Leon, Tívoli.

ANNOUNCEMENTS

Assistant Available

Louis Squire is interested in working with any researcher as a volunteer or assistant from April to September 1991. Ms. Squire is a BSAC Novice diver member of the Oxford branch. She has experience as a laboratory technician at the Department of Zoology at Oxford University. If interested, you can write to this address: 3 The Slade, Headington, Oxford OX3 7HL, United Kingdom.

Courses at the Panama Canal Commission

The courses listed below will be among the ones offered by Panama Canal Commission during the month of January:

The Supervisor and the Planning Function Jan 28-29.

The Supervisor and the Organizing Function Jan 30-31.

These courses are especially directed to supervisors and the Prerequisite is to have taken "Basic Supervisory Development I and II" or equivalent. Supervisors who comply with this prerequisite are requested to attend. Please coordinate with the Personnel Office. SMITHSONIAN TROPICAL RESEARCH INSTITUTE, Apartado 2072, Balboa, Panamá No. 51

Recent meeting held at the Tupper Center to discuss cooperation by the Panamanian business community in STRI's agroforestry initiative directed by Gilberto Ocaña. Participación de la empresa privada panameña en la inciativa del STRI para la rehabilitación de los suelos devastados del país (Programa Agrosilvopastoril). Centro de Investigaciones y Conferencias Earl S. Tupper.



(Foto: M.A. Guerra)

STRI NEW PUBLICATIONS

- Adams, Eldridge S. "Interaction Between the Ants *Zacryptocerus maculatus* and *Azteca trigona*: Interspecific Parasitization of Information." *Biotropica* 22(2): 200-206 (1990).
- Adams, Eldridge S. and Caldwell, Roy L. "Deceptive Communication in Asymmetric Fights of the Stomatopod Crustacean *Gonodactylus bredini*" *Animal Behaviour* 39: 706-716 (1990).
- Aide, T. Mitchell and Zimmerman, Jess K. "Patterns of Insect Herbivory, Growth, and Survivorship in Juveniles of a Neotropical Liana." *Ecology* 71(4): 1412-1421 (1990).
- Becker, P. and Castillo, A. "Root Architecture of Shrubs and Saplings in the Understory of a Tropical Moist Forest in Lowland Panama." *Biotropica* 22(3): 242-249 (1990).
- Becker, Peter and Smith, Alan P. "Spatial Autocorrelation of Solar Radiation in a Tropical Moist Forest Understory." *Agricultural and Forest Meteorology* 52: 373-379 (1990).

- Dudley, Robert. "Thanatosis in the Neotropical Butterfly Caligo illioneus (Nymphalidae: Brassolinae)." Journal of Research on the Lepidoptera 28(1-2): 125-126 (1990).
- Gadagkar, Raghavendra "Evolution of Insect Societies: Some Insights from Studying Tropical Wasps." In: *Social Insects: An Indian Perspective*, edited by G.K. Veeresh, A.R.V. Kumar and T. Shivashankar. Bangalore, 1990.
- Garrity, Stephen D. and Levings, Sally C. "Effects of an Oil-Spill on the Gastropods of a Tropical Intertidal Reef Flat." *Marine Environmental Research* 30(2): 119-153. (1990).
- Hayes, Joshua A. "Distribution, Movement and Impact of the Corallivorous Gastropod Coralliophila abbreviata (Lamarch) on a Panamanian Patch Reef." Journal of Experimental Marine Biology and Ecology 142: 25-42. (1990).
- Howe, Henry F. "Scatter- and clump-dispersal and seedling Demography: Hypothesis and Implications." *Oecologia* 79: 417-426 (1989).

December 21, 1990

SMITHSONIAN TROPICAL RESEARCH INSTITUTE, Apartado 2072, Balboa, Panamá No. 51

- Howe, Henry F. "Survival and Growth of Juvenile Virola surinamensis in Panama: Effects of Herbivory and Canopy Closure." Journal of Tropical Ecology 6: 259-280 (1990).
- King, D.A. "Allometry of Saplings and Understory Trees of a Panamanian Forest." Functional Ecology 4: 27-32 (1990).
- Leigh Jr., Egbert Giles. "Community Diversity and Environmental Stability: A Re-Examination." *Tree* 5(10): 340-344 (1990).
- Lessios, Harilaos A. "Adaptation and Phylogeny as Determinants of Egg Size in Echinoderms from the Two Sides of the Isthmus of Panama." *The American Naturalist* 135(1): 1-13 (1990).
- Lessios, Harilaos A. and Cunningham, C. W. "Gametic Incompatibility Between Species of the Sea Urchin *Echinometra* on the Two Sides of the Isthmus of Panama." *Evolution* 44(4): 933-941 (1990).
- Ochi, Harumi and Salazar Allen, Noris. "Bryum incrassatolimbatum New to Panama, with First Description of Its Sporophyte." The Bryologist 93(3): 286-287 (1990).
- Pearsall, Deborah M. and Piperno, Dolores R. "Antiquity of Maize Cultivation in Ecuador: Summary and Reevaluation of the Evidence." *American Antiquity* 55(2): 324-337 (1990).
- Piperno, Dolores and Ciochon, Russell. "Scratching the Surface of Evolution." *New Scientist* November 10, 1990.
- Piperno, Dolores. "Aboriginal Agriculture and Land Usage in the Amazon Basin, Ecuador." *Journal of Archaeological Science* 17: 665-677 (1990).
- Rich, Paul M. A Manual for Analysis of Hemispherical Canopy, Los Alamos 11733-M Manual (1989).
- Rich, Paul M., Ranken Douglas M. and George, John S. A Manual for Microcomputers. Los Alamos 11732-M Manual (1989).
- Robertson, D. Ross, Petersen, C. W. and Brawn, J. D. "Lunar Reproductive Cycles of Benthic-Brooding Reef Fishes: Reflections of Larval Biology or Adult Biology? *Ecological Mono*graphs 60(3): 311-329 (1990).
- Roubik, David W. "How real are Temperate-Tropical Honey Bee Differences? *II International Congress-UISSI 1990, India*: 111-112.
- Russell Ciochon, Piperno, Dolores and Thompson, Robert. "Opal Phytoliths Found on the Teeth of the Extinct Ape *Gigantopithecus blacki*: Implications for Paleodietary Studies." *Proceedings of the National Academy of Sciences* 87: 8120-8124 (1990).
- Schultz, William. "Growth of STRI Contributes to Quality of Research in Panama." *Research Reports* 61: 2, 6 (Summer 1990).

- Sikkel, Paul C. "Social Organization and Spawning in the Atlantic Sharpnose Puffer, Canthigaster rostrata (Tetraodontidae)." Environmental Biology of Fishes 27: 243-254 (1990).
- Smith, Neal. "Soaring Raptor Migration Through the Isthmus of Panama." In: *Birds of Prey* (Weldon Owen Ld. 1990).
- Sternberg, L.S.L., Mulkey, S.S. and Wright, S. Joseph. "Oxygen Isotope Ratio Stratification in a Tropical Moist Forest." *Oecologia* 81: 51-56 (1989).
- Wcislo, W.T. "Olfactory Cues in Nest Recognition by Solitary Bees (Lasioglossum figueresi; Halictidae) as a Preadaptation for the Evolution of Kin Associations." II International Congress-UISSI 1990, India: 412.
- West-Eberhard, Mary Jane. "Parallel size-related Alternatives in Males and Females and the Question of Sympatric Speciation in Hymenopteran Social Parasites." *II International Congress-IUSSI 1990, India*: 162-163.
- West-Eberhard, Mary Jane. "Primitively Eusocial Insects: Why they Play a Special Role in Studies of Social Evolution?" *IIth International Congress-IUSSI* 1990, *India*: 63-64.
- West-Eberhard, Mary Jane. "The Genetic and Social Structure of Polygynous Social Wasp Colonies (Vespidae: Polistinae)." II International Congress-UISSI 1990, India: 254-255.
- West-Eberhard, Mary Jane. "The Relation Between Behavioral Development Switches and Major Steps in Social Insect Evolution." *II International Congress-IUSSI, India, 1990*: 12-14.
- Wheeler, Diana E. "The Developmental Basis and Evolution of Worker Polymorphism in Ants. II International Congress-UISSI 1990, India: 169-170.
- Williams-Linera, G. "Origin and Early Development of Forest Edge Vegetation in Panama." *Biotropica* 22(3): 235-241. (1990).
- Zeh, Jeanne A. and Zeh, David W. "Cooperative Foraging for Large Prey by *Paratemnus elongatus* (Pseudoscorpionida, Atemnidae)." *Journal of Arachnology* 18: 307-311 (1990).

From: 365 Ways to save your planet • Page-a-day Calendar

Where outdoor lights are a necessity, stay away from energy-thirsty incandescents. Low-wattage sodium and mercury-vapor lamps consume less energy to provide the same amount of light, and they can last 20 times longer.