

# STRI newsletter

February 22, 1991

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panama

No. 8

## SEMINARS

### Tupper Center Auditorium

Tuesday, Feb 26, noon seminar speaker will be Ian Woiwod, Rothamsted Experimental Station.

*The Rothamsted insect survey - a synoptic approach to population dynamics.*

#### Abstract

For the last 25 years aerial insect populations have been monitored over the island of Great Britain using networks of light and suction traps. The resulting databases are extensive and unique and have been used for studies ranging from fundamental questions in population dynamics to applied problems in forecasting and pest control. The historical and scientific background to this project will be outlined with some examples of the problems to which the data has been applied.

The importance and difficulties of long term data collection and the experimentation versus monitoring controversy will be emphasized.

### Next Week

Tuesday, Mar 5, noon seminar speaker will be Augusto César Franco, Instituto Venezolano de Investigaciones Científicas

*Physiological ecology of tropical plants.*

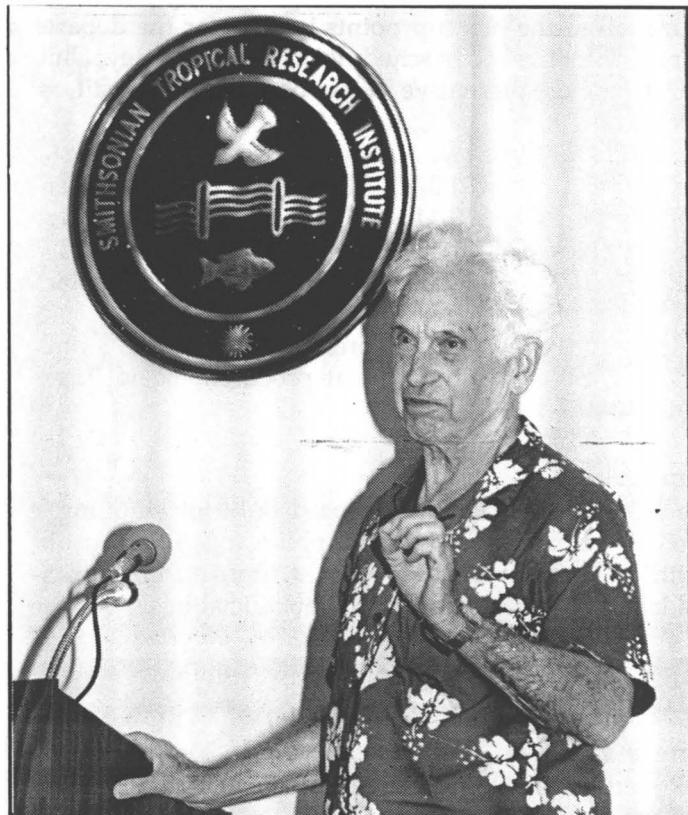
## PEOPLE

### Arrivals

- Feb 22-Mar 5, Roberta Rubinoff, Office of Fellowships and Grants, for fellowship review meeting and other official business.
- Feb 23, Fermin Rada, to work with G. Goldstein in BCI.
- Feb 24, Edgardo Maravi, Development Officer, to participate in the Course on Conservation and Management of Natural Areas in Panama.
- Feb 24, Mary Harrison and Frederick Alexander to work on their project of *Saguinus geoffroyi* on BCI.
- Feb 24, Michael Braun and Judith Blake to work with Charles Handley in Bocas del Toro.
- Mar 1-6, Augusto Franco, Instituto Venezolano de Investigaciones Científicas to visit STRI facilities, consult with colleagues and give seminar.
- Feb 28, Mark Bush, to collaborate with Dolores Piperno. He will be at STRI for two weeks.

### Departures

- Feb 25-Mar 1, Fernando Pascal, ODC and Carlos Tejada, Facilities Manager on official business to Washington. C. Tejada will be back in STRI Mar 20 after some days of annual leave.



*Prof. Ernst Mayr of Harvard University giving his views on Cladistic Classification at a seminar on Feb 19, 1991. In his introductory remarks, Dr. Rubinoff referred to Prof. Mayr as the scientist who, in this century, has contributed most to the understanding of the evolutionary process ... El Profesor Ernst Mayr de la Universidad de Harvard durante un seminario que ofreció el día 19 de febrero de 1991. Al presentar al Prof. Mayr, el Dr. Rubinoff se refirió a él como el investigador que, en este siglo, ha contribuido más al entendimiento del proceso evolutivo.*

(Foto: C.C. Hansen)

## THINGS YOU SHOULD KNOW

### Reminder

Tropical Biology Committee Review Meeting, Thursday Feb 28 at 9:30 am in the Tupper Center Meeting Room.

### News from APO Post Office

The following new hours were established by APO post office for unit mail clerks to pick-up and deliver mail each day: Mornings: 10 am - 1 pm. Evenings: 3 pm - 5:30 pm.

The Registry Section will operate from 7:30 am - 12 noon and 1 - 3 pm Monday through Friday. Registered mail for local post offices will be delivered to the registry section for dispatch not later than 12 noon daily.

STRI Procurement department request that you deliver your mail to the pick up points in time for the department to meet the above schedule. Everaldo Curney, Unit Mail Clerk or alternative clerk, picks/deliver mail as follows:

Pick up	8:00	Tivoli and Tupper Center
Delivery	10-11:30	Tivoli and Tupper Center
Delivery/Pick up	11:45-12:15	Naos Complex
Pick up	2-2:30	Tivoli and Tupper Center

Delivery to the APO, for Express Mail will be at 3 pm. Packages/envelopes must be at procurement not later than 2:30 pm.

### Reminder

The APO address should be used only for shipping/receiving research equipment, supplies, and official mail. Smithsonian stamps, postage paid, franked envelopes and labels should be used only for official business.

## ANNOUNCEMENTS

### Congratulations!

To Robert Dudley, STRI Three Year Postdoctoral fellow who has accepted a faculty position in the Department of Zoology at the University of Texas at Austin effective September 1992.

### From BCI

T.R.A.S.H. will meet on BCI Thursday, Feb 28 at 7:30 pm to continue the series "Conceptual constraints in biology; when theory becomes dogma." The group will open the discussion with the final chapter from Buss, L.W. 1987, *The Evolution of Individuality*, N.J.: Princeton Press. A launch will leave the Gamboa dock at 5:35 pm and return from BCI at 9 pm. Please make a dinner reservation with Maritza Cárdenas at 52-2124.

### Curso de Defensa Personal

Carmelina Morelo Leone, cinturón negro, Segundo Dan, Taekwondo, ganadora de medallas de bronce en los Juegos Panamericanos del Taekwondo en Puerto Rico y en los Juegos Centroamericanos y del Caribe en México, ofrecerá curso de defensa personal por 6 semanas en el estacionamiento del Centro Tupper.

**Fecha de inicio:** Sábado, 2 de marzo de 1991, de 8 a 10 am.

Para inscripción llamar a María Morello en el Centro Tupper.

### Needed

Please send empty HP Deskjet ink cartridges to Alejandro Caballero, Photographic Department, for university project.

### Concerts in El Valle

Sunday, Feb 24 and March 3 at 11 am the Youth Symphony will be playing at the El Valle Church.

## STRI NEW PUBLICATIONS

- Belwood, Jacqueline J. 1990. "Anti-Predator Defenses and Ecology of Neotropical Forest Katydid, Especially the Pseudophyllinae." In: *The Tettigoniidae: Biology, Systematics and Evolution*: 8-26, edited by W.J. Bailey and D.C.F. Rentz. Bathurst: Crawford House.
- Cooke, Richard G. 1990. "Anurans as Human Food in Tropical America: Ethnographic, Ethnohistoric and Archaeological Evidence." *ArchaeoZoologia* 3(1.2): 123-142.
- Craig, Catherine L. 1990. "Effects of Background Pattern on Insect Perception of Webs Spun by Orb-Weaving Spiders." *Animal Behaviour* 39: 135-144.
- Craig, Catherine L. and Bernard, Gary D. 1990. "Insect Attraction to Ultraviolet-Reflecting Spider Webs and Web Decorations." *Ecology* 71(2): 616-623.
- Howe, Henry F. 1990. "Habitat Implications of Gap Geometry in Tropical Forests." *Oikos* 59(1): 141-144.
- Inoue, Tamiji. 1990. "A Trip in Yucatan —Milipoculture of Maya." *Honeybee Science* 11(2): 49-58.
- Inoue, Tamiji. 1990. "Studies of Natural History in STRI." *Seibutu-Kagaku* 42: 27-36.
- Summers, Kyle. 1990. *Paternal Investment and Sexual Selection in Dart-Poison Frogs (genus Dendrobates)*. Ph.D. dissertation, Biological Sciences, University of Michigan, Ann Arbor.
- Tanaka, Seiji, Guardia, Modesto, Denlinger, David L. and Wolda, Henk. 1990. "Relationships Between Body Size, Reproductive Traits, and Food Resource in Three Species of Tropical Flesh Flies." *Res. Popul. Ecol.* 32: 303-317.
- Warner, Robert R. 1990. "Male versus Female Influences on Mating-Site Determination in a Coral Reef Fish." *Animal Behaviour* 39: 540-548.
- Wolda, Henk. 1991. "The Czechoslovak-Vietnamese Expedition to the Nam Cat Tien Reserve: A Comment." In: *Nam Cat Tien. Czechoslovak Vietnamese Expedition. November 1989. Research Report*: 44-45, edited by K. Spitzer, J. Lepš and M. Zacharda. České, Budějovice: Institute of Entomology, Czechoslovak Academy of Sciences.

## UPDATE • SEGUIMIENTO

ON THE FOREST DYNAMICS PROJECT  
DEL PROYECTO DE DINAMICA DEL BOSQUE

The field work for the recensus of the 50 hectare plot on Barro Colorado Island is now in its clean-up phase. The bulk of the recensus of the approximately 1/4 million woody plants was completed in 1990. The recensus was supervised by Robin Foster and coordinated by Zenith Batista and Eduardo Sierra. The other 20 team workers were botanists, foresters, ecologists and agronomists from Panama, Peru, Ecuador, Cuba, Mexico and Poland.

In January and February of this year, several hundred trees with large buttresses or other unusual shape stems received special attention —using ladders or other techniques to get a better measure of the basal area. Measuring the giant *Ceiba* trees was saved for last and will begin this week with a team of 4 trying to get above the buttresses to measure the enormous stems.

The rest of the team will continue the census checking in the field, entering data, cross-checking and correcting errors. The next phase of organization and data analysis has already begun with the arrival of Dr. Richard Condit, who will manage the data base and with Bill Harp as programming consultant. (While in Balboa High School, Harp was a student assistant working with Robin on BCI 20 years ago in what was to become the 50 hectare plot.)

The Forest Dynamics Project started by Stephen Hubbell, now at Princeton University, and Robin Foster, STRI, is in its tenth year of operation. The recensus just completed represents the third complete inventory of the status and growth of plants on the 50 hectare plot on BCI. Newer 50 hectare plots in Malaysia and India, also set up with STRI assistance, have also been recensused this past year. Additional 50 hectare plots are now being set up in Sarawak and Thailand, and plans are underway to establish several more plots in other tropical forests around the world.

(Information courtesy of Robin Foster)

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El trabajo de campo del nuevo censo del lote de 50 hectáreas en Barro Colorado se encuentra actualmente en su fase de limpieza. La mayor parte del censo de un aproximado de un cuarto de millón de plantas leñosas se completó en 1990. Robin Foster supervisó el censo, y la coordinación estuvo a cargo de Zenith Batista y



*In the BCI 50 hectare plot Lenin Prado (Exxon fellow from Charles Darwin Research Station, Ecuador) measures the diameter of a Quararibea stem while Salomón Aguilar and Milagro Ruiz (both from the University of Panama) assist on the ground • • • En el lote de 50 hectáreas de Barro Colorado Lenin Prado (becario de la Exxon de la Estación de Investigación Charles Darwin en Ecuador) mide el diámetro del tronco de un Quararibea, mientras que Salomón Aguilar y Milagro Ruiz (ambos de la Universidad de Panamá) lo asisten desde abajo.*

*(Foto: M.A. Guerra)*

Eduardo Sierra. El resto del equipo contó con 20 personas, entre ellos botánicos, ingenieros forestales, ecólogos y agrónomos de Panamá, Perú, Ecuador, Cuba, México y Polonia.

En enero y febrero de este año, varios cientos de árboles de grandes contrafuertes o de otras formas poco comunes de troncos recibieron especial atención —usando

escaleras u otras técnicas para lograr mejores mediciones de su área basal. La medición de los gigantescos árboles de *Ceiba* se dejó para el final, lo que comenzará esta semana con un equipo de 4 que tratarán de meterse debajo de los contrafuertes para medir los enormes troncos.

El resto del equipo continuará el censo examinando el área, almacenando datos, confirmando información y corrigiendo errores. La siguiente fase de organización y análisis de datos dió comienzo con la llegada del Dr. Richard Condit, quien manejará la base de datos, y con Bill Harp, consultor de programación. (Harp fue asistente estudiantil mientras estaba en el Colegio Secundario de Balboa, y trabajó con Robin hace 20 años en lo que habría de convertirse en el lote de 50 hectáreas).

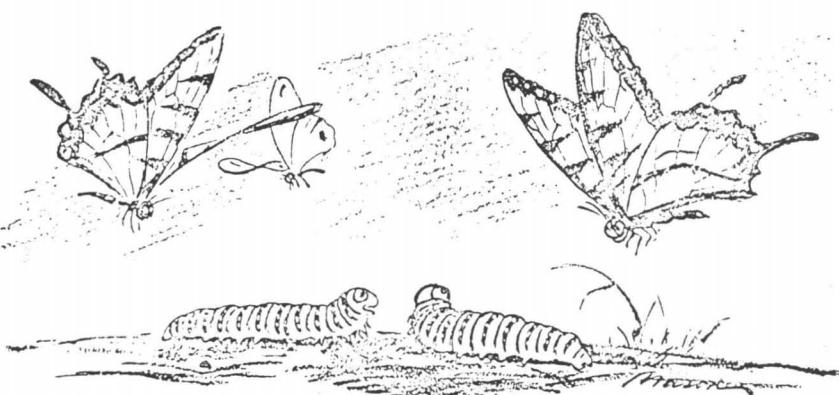
El Proyecto de Dinámica del Bosque, iniciado por Stephen Hubbell, hoy día en la Universidad de Princeton, y con Robin Foster del STRI, tiene diez años de estar operando. El censo recién terminado representa el tercer inventario completo del estado y el crecimiento de las plantas del lote de 50 hectáreas en Barro Colorado. Lotes más nuevos de 50 hectáreas que también se han establecido en Malasia e India con la asistencia del STRI también fueron nuevamente censados el año pasado. Lotes adicionales de 50 hectáreas se están estableciendo actualmente en Sarawak y en Tailandia, y hay planes en progreso para establecer varios lotes adicionales en otros bosques tropicales alrededor del mundo.

(Información cortesía de Robin Foster).

**From: 365 ways to save our planet • Page-a-day calendar**  
 Wash your clothes with plain laundry soap instead of synthetic detergents. Unlike soap, detergent leaves residue in the fabric, and it generally comes in a hard-to-recycle plastic bottle. Soap, which is highly biodegradable, causes less pollution in our lakes and streams.



*The construction of the Ancon apartments moves now into the final stages of the project with an anticipated final completion date of 30 March 1991. The two (2) level structure includes 6 efficiency apartments plus two 2 bedroom suites. This dormitory will provide housing for visiting scientists and students at the Naos Marine Laboratory and at the Tupper Center . . .*  
*La construcción de los dormitorios de Ancón progresó hacia su etapa final, calculándose la fecha de entrega para el 30 de marzo de los corrientes. La estructura de dos niveles incluye 6 apartamentos tipo estudio, y otros dos apartamentos de dos recámaras. Este dormitorio brindará alojamiento a académicos visitantes y a estudiantes del Laboratorio Marino de Naos y del Centro Tupper. (Foto: C.C. Hansen)*



"You'll never get me up in one of those dern things."