

SEMINARS - ANCON CONFERENCE ROOM

Tuesday, **July 5**, noon seminar speaker will be JOHN WINGFIELD, University of Washington.

Testosterone Aggression Mating
Systems in Birds.

NEXT WEEK

Tuesday, **July 11**, noon seminar speaker will be LEO FLEISHMAN, University of Texas. Title to be announced.

ARRIVALS

ROBERT HOFFMAN's visit has been postponed; see July calendar for new dates.

June 30, JANNA ELLINGTON, to work with S. Rand and M. Ryan on the Tungara frog research project.

July 1 - 11, ROBIN FOSTER, to continue research on BCI.

July 2, JOHN WINGFIELD, University of Washington, to visit STRI facilities and explore future research possibilities.

July 3 - August 27, PAULA KOVER, Universidade Federal do Rio de Janeiro, to work with C. Craig on the influence of insect visual capability on the evolution of spider foraging strategies on BCI.

July 2 - August 31, ABRAHAM HEFETZ, Tel Aviv University, Israel, to study the rates and chemical contents of bee exocrine gland in mating and foraging.

July 4, GUSTAVO KATTAN, University of Florida, to consult with N. Smith and J. Wingfield regarding predoctoral research in Colombia.

July 3 - 31, WILLIAM EBERHARD and MARY JANE WEST-EBERHARD, to work at STRI.

July 6 - 15, LEO FLEISHMAN, University of Texas, to make preliminary observations for studies of animal conservation and sensory physiology in Gamboa.

CALENDAR

JULY 1989						
S	M	T	W	T	F	S
	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				

July 4 - U.S. Independence Day - STRI holiday.

July 10 - Edgardo Maravi, STRI Development Officer, arrives to work with STRI staff.

July 14 - Dr. Robert Hoffman, Smithsonian Assistant Secretary for Research to visit STRI.

July 16 - Anniversary of the establishment of the Canal Zone Biological Area in 1946, precursor of the Barro Colorado Nature Monument.

NEW PUBLICATIONS BY STRI STAFF, FELLOWS AND RESEARCH ASSOCIATES

Baumgartner, D.L. and D.W. Roubik. 1989. Ecology of necrophilous and filth-gathering stingless bees (Apidae: Meliponinae) of Peru. *Journal of the Kansas Entomological Society* 62(1): 11-22.

Guzman, H.M. and J. Cortes. 1989. Coral reef community structure at Cano Island, Pacific Costa Rica. *Marine Ecology*, 10(1): 23-41.

Karr, J.R. 1989. Birds. Chapter 22 IN *Tropical Rain Forest Ecosystems*, ed. H. Lieth and M.J.A. Werger. Elsevier Science Publishers B.V., Amsterdam.

ANNUAL LEAVE

Vielka Vergel, July 3 - 7

PERSONNEL NEWS

Mr. Delfin Tejada is the new cook on BCI, replacing Mr. Hale who has just retired. Mr. Tejada previously worked at the Marriott, Executive, Soloy and Continental Hotels and at the Pavo Real Restaurant. He begins work July 31.

Wide Variety Of Animals Found on BCI

Dr. Neal G. Smith, a staff zoologist who spent 2 years on the island, believes that in no other tropical region can scientists interested in animals find them so easily.

Creatures not native to the island are sometimes taken there in cages for observation but are not released. Those which are or have been indigenous to the area are, at times, restocked.

The layman fortunate enough to make a brief visit finds many animals and insects in cages, and hears their sounds, such as the ear-shattering call of the howler monkey. But he does not see them when strolling through the more than 40 miles of trails—each named after a scientist and each marked every 100 meters—which provide access to various parts of the island.

The animal population includes more than 250 species of birds, 65 species of mammals, 22 lizards, 37 snakes, 5 turtles, 2 crocodiles, 15 toads, 16 frogs, 2 salamanders, and 22 fishes. These figures do not take into account the spiders, insects, other arthropods, and mollusks common to the island.

Comprising the island staff are a manager, a full-time librarian, cook, cleaning woman, carpenter, mechanic, boatmen, woodsmen, and animal keepers. Two full-time staff scientists currently working on the island are Dr. Michael Robinson, a British animal behaviorist, and Dr. A. Stanley Rand, a herpetologist from the United States.

There are four interns, three from the United States and one from France, engaged in varied projects as part of pre-doctoral degree work. The Smithsonian Institution internship program allows selected budding scientists to work on the island, usually for 1 or 2 years, to prepare for their doctoral



Nicholas Smythe, who is doing pre-doctoral work on the island, cradles a paca, also known as a conejo pintado, in his arms. The paca is a large rodent common to the Isthmus and indigenous to the island.

dissertations. A similar program has been set up in cooperation with the Organization of American States under which some Latin American students already have participated.

Behavior of wasps, white-faced monkeys and rodents and the digestive track of monkeys are a few of the investigative areas being probed by the current group of interns.

The excellent facilities and working conditions are highly valued by visiting scientists, some of whom bring their wives and even children to the island while they carry on their experiments. At present, there are three children, all of pre-school age, living on BCI.

A fine air-conditioned library emphasizing ecology, behavior, and systematics, has more than 5,000 volumes and receives some 85 journals. Equipment includes photographic darkroom, typewriters, microscopes, canoes, binoculars, balances, flight cages in the forest, field

camping, and laboratory equipment.

Supplies of wood, wire, screen, glassware, preservative, photographic chemicals, and certain other supplies are available.

Air conditioned laboratory space has sinks, benches, electrical outlets, and shelving while animal houses provide cage and aquarium space.

The research station, usually crowded during the summer months but much less so during the winter, can accommodate approximately 20 research people at one time. Living quarters include a dormitory and three comfortable but unpretentious two-room cottages; meals are served in a common dining room.

POSICIONES ABIERTAS

Se están recibiendo solicitudes para dos posiciones:

-SECRETARIA EJECUTIVA en la oficina de la Sra. Leonor Motta (se aceptan solicitudes hasta el 14 de julio)

-COORDINADOR CIENTIFICO para el edificio Tupper.

Para mayor información ver los avisos completos en los tableros de las diferentes instalaciones de STRI.

FORTUNA FACILITY AVAILABLE

STRI has a facility available in Fortuna, Chiriqui, for use by researchers who wish to conduct studies in a tropical cloud forest.

This facility is located in the town of "Los Planes", which was constructed to house the employees of the Edwin Fabrega Dam. The house is a duplex; one side consisting of 2 bedrooms, bath, kitchen and dining/living room, the other having 2 bedrooms, bath and lab area. Persons will be charged \$5 per day.

All visits must be coordinated through the **Visitor's Office** at least two weeks in advance. Ms. Maggiori will make the necessary reservations, etc. All researchers interested in working in Fortuna are reminded that they will need INRENARE research and/or collecting permits. For additional information call the Visitor's Office at 62-3049.

A SINCERE THANK YOU

My brother and I would like to thank all the people who have been saving stamps for us over the past few months. The stamps you have sent so far have added greatly to our collections. I have been collecting stamps for 6 or 7 years now and my brother (Derek) has been collecting for about 2 or 3 years.

We would like to thank you again and we hope that you would be willing to continue to save stamps for us.

Sincerely,

Patrick and Derek Hansen

ARTESANIAS DARIENITAS / DARIEN KEEPSAKES

¿Quisiera un regalo distinto? La tienda de artesanias del Museo del Indio Darienita, patrocinado por la Sociedad Audubon de Panamá, ofrece una variedad de artículos, incluyendo figuras talladas en madera, canastas tejidas a mano, molas y afiches de aves tropicales. Ubicado en Gamboa, el museo, que usualmente está abierto los fines de semana, sólo podrá ser visitado por cita de junio a agosto. Los interesados en una visita pueden llamar a Ellie Gale (52-6614), Hortensia o Sofía Broce (56-6378) o Llori Gibson (56-6384).

Looking for a unique gift? Choose from a large selection of tropical plants and animals handcrafted in cocobolo hardwood or intricately handwoven baskets by Wounaan Indians from Panama's Darien Province. They are shown by appointment only during the summer months (June - August) at the Darien Indian Museum in Gamboa. This activity is sponsored by the Panama Audubon Society.

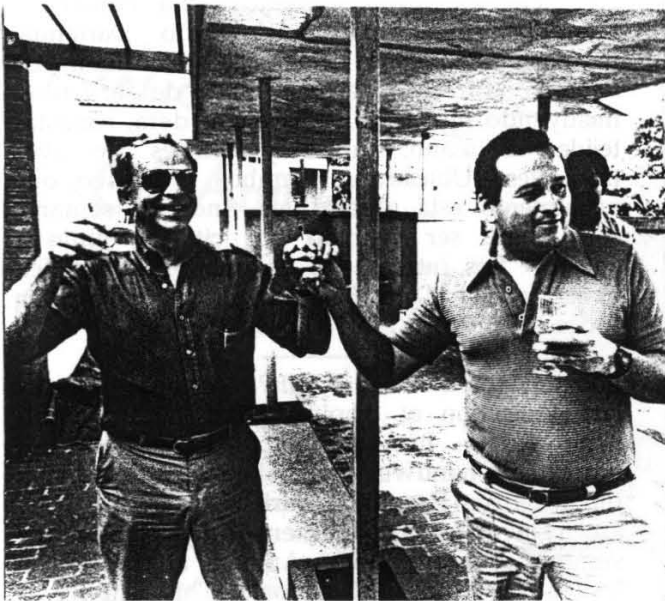
SUBVENCION DEL OSBORN CENTER FOR ECONOMIC DEVELOPMENT

El "Osborn Center for Economic Development" (un programa conjunto entre el World Wildlife Fund y The Conservation Foundation), con la cooperación del Rockefeller Foundation, ha establecido un programa de asistencia económica para estimular el diálogo y estudio de políticas sobre el manejo, consumo y control de recursos forestales en los países en vía de desarrollo.

Las donaciones varían entre \$5,000 y \$25,000 para (1) estudios de investigación sobre políticas forestales, y (2) foros de diálogo sobre políticas forestales. El Osborn Center invita a todos los silvicultores, planificadores, expertos en ciencias sociales, y otros especialistas que residen en países en vía de desarrollo a participar. Los interesados deben escribir presentado la idea de su posible proyecto a:

WWF & Conservation Foundation
Suite 500
Osborn Center Forestry Policy Grants
Attn: Matthew Perl
1250 24th St, NW
Washington, DC 20037
Tel: 202-778-9705
Telex: 64505 PANDA
Fax: 202-293-9211

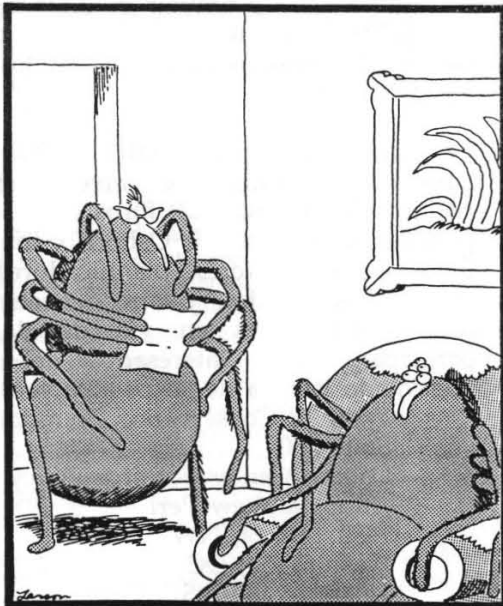
NEW ANIMAL CAGES AT TUPPER



Augusto César Arosemena, president of the construction company Don Ted, officially presented Ira Rubinoff the keys of the new animal-keeping facilities at Tupper on June 23rd. (Photo by C. Hansen)



Ten of the 15 animal cages, located at the south end of the Tupper Center, will be used by Nicholas Smythe for his paca experiments. Except for two cages, all of the rest are roofed. Two small rooms and a bathroom are also part of the complex. (Photo by C. Hansen)



"It's a letter from Julio in America. ... His banana bunch arrived safely and he's living in the back room of some grocery store."

