

# STRI news

May 16, 1997

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

## TUPPER CENTER SEMINARS

Tuesday, May 20, noon seminar speaker will be Michelle Waycott, University of Western Australia

### *Genetic Diversity and Evolution in the Seagrasses: Convergence, Divergence and Homogeneity*

#### Abstract

The seagrasses are a unique group of monocotyledons in the subclass Alismatidae who have found a niche in the marine environment. There are 12 genera of seagrasses and around 60-70 species, with this diversity being spread relatively evenly between temperate and tropical habitats. These flowering plants are often the foundation of diverse and productive ecosystems on all continents except Antarctica. Studies of seagrass genetic systems and evolution must overcome several hurdles

which make this group somewhat problematic, but also interesting. The first is that seagrasses have a high propensity for clonal growth through rhizome extension and other forms of vegetative fragmentation, therefore studies of genetic diversity and reproductive systems must first consider levels of clonality. In addition, a paucity of useful morphological characters, vegetative or floral, which are not potentially convergent due to the strong selective constraints of the marine environment, have clouded issues of phylogenetic origins in this group.

In this seminar I will describe the genetic systems of two Australian seagrasses for which a considerable amount of genetic data is now available and which gave surprising results. In addition, I will present the current molecular phylogenies available for the seagrasses and related groups. These studies demonstrate the interesting and informative work which can be conducted on seagrasses, of interest not only to seagrass biologists but anyone with an interest in clonal biology, the evolution of dioecy and genetic systems, and in angiosperm evolution.



On May 9, President Ernesto Pérez Balladares (left) and members of his cabinet visited STRI's new crane on the Atlantic side, and were briefed by Joe Wright (right), scientist in charge of the Canopy Biology Research Program. This visit was part of a one-day seminar on the canal watershed, organized by CEASPA, as part of the series of environmental seminars aimed at decision-makers and funded by AID.

(Foto: M.A. Guerra)

## BAMBI SEMINAR AT BCI

Thursday, May 22, Bambi seminar speaker will be Kyle Harms, Princeton University

### *Pervasive Effects of Seed-Dispersal Limitation and Negative Density-Dependence in a Neotropical Forest*

Transportation and dinner reservations are essential. Please call BCI at 272-2124.

## PEOPLE

### Arrivals

- Eleven students from the University of Pennsylvania, May 19 - June 5, for the Tropical Field Course, at Gamboa.
- Dara Parker, University of Pennsylvania, May 19 - July 30, to participate in the Tropical Ecology Field Course, and study a new insight into the foraging behavior of *Atta colombica* in the context of interspecific interactions with other insects.
- David Marsh, Pre-doctoral fellow from the University of California,

¡FELIZ DÍA DEL CONTADOR!

- May 19 - Aug 20, to study the effects of breeding density on oviposition calling site selection and male congregation in the Túngara frog, at BCI.
- Shellene Hurley, University of Buffalo, May 19 - Sep 6, to work with Mary Coffroth on the ontogeny and dynamics of cnidarian-algal symbiosis, in San Blas.
  - Hilary Dove, University of Pennsylvania, May 19 - July 3, to participate in the University of Pennsylvania Tropical Ecology Field Course, and to study the color changes in three species of anurans as an adaptation to environmental changes, at Gamboa.
  - Rachel Levin and Diane Neudorf, Pomona College, May 20 - June 7, to study the social and hormonal influences on the development of sex differences in a duetting wren, at Gamboa.
  - Astrid Ferrer, State University of New York, May 20 - June, 1998, to study the diversity of wood decaying fungi in tropical rainforest, at BCI and Galeta.
  - Juan Posada, University of Missouri, May 21 - June 15, to study vertical patterns of leaf functional traits and light in a dry tropical forest.
  - William Martin, University of Texas, May 22 - July 30, to examine the contributions of morphological and activational components to vocalization in a clade of Neotropical frogs, on a short-term visitor award, at BCI.
  - Michael Dillon, Short-term fellow from the University of Texas, May 22 - July 30, to study the load lifting and maximum flight performance of euglossine bees, at BCI.
  - Robert Dudley and Min Lu, University of Texas, May 23 - June 23, to study the ecophysiology of butterfly migrations in Central Panama, at BCI.

### Congratulations

To Corina Hinkle, STRI volunteer worker, who received a special award from the Panama Canal Commission in recognition to her volunteer public services at the Canal Zone Red Cross, the Gorgas Hospital and the Smithsonian Tropical Research Institute.

### FROM THE OFFICE OF EDUCATION

#### What's going on at STRI...

STRI has so many facilities and research directions that one can easily lose track of "What's going on at STRI". Therefore, we thought the simplest way to enhance communication and interaction between people would

be to meet informally for maybe 20 minutes to half an hour after the Tuesday Tupper Seminars. We will provide soft drinks and some crackers at the Exhibit Hall or under the Corotu tree, depending on the weather. Researchers from Gamboa will start Tuesday, May 20, to introduce the ongoing projects, each with about 5 sentences for not longer than 2 minutes. Therefore, people might like to talk to those people they know least. If people find this procedure rewarding, it could be done on a more or less regular basis. Please feel free to suggest changes.

Martin Wikelski  
STRI Postdoctoral Fellow • E-mail: GAM183H

### At the Office of Education #340

You will find information that is too long to publish on:

- Perfeccionamiento profesional en Alemania: Programa alemán de becas para jóvenes ejecutivos: *Protección ecológica de las costas marinas*.
- Invitación a la cuarta reunión de información forestal para América Latina y el Caribe.
- Cursos diplomados internacionales EPOMEX de la Universidad Autónoma de Campeche, 1997.
- Inter-American Institute for Global Change Research: Initial Science Program - Round III.
- OFWIM 1997: Call for papers and registration to *Connecting People with Resources through Digital Information Systems*.

### NEW STRI PUBLICATIONS

Heckadon-Moreno, Stanley. 1997. "Notas de Berthold Seeman Sobre la Fauna de Panamá, 1848." *Epocas Segunda Era* 12(5): 2-3.

Winter, Klaus, Richter, Andreas, Engelbrecht, Bettina, Posada, Juan, Virgo, Aurelio, Popp, Marianne. 1997. "Effect of Elevated CO<sub>2</sub> on Growth and Crassulacean-Acid-Metabolism Activity of *Kalanchoe pinnata* Under Tropical Conditions." *Planta* 201: 389-396.

We regret to inform the STRI community that Leslie Hubbell, Steve Hubbell's wife died this morning.

You may send condolence cards to:  
Steve Hubbell  
139 Random Road  
Princeton, N.J. 08540