

STRI newsletter

June 7, 1991

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panama

No. 23

TUPPER CENTER SEMINARS

Tuesday, Jun 11, noon seminar speaker will be Rob Gradstein, Institute of Systematic Botany, Utrecht.

The rainforest as characterized by bryophytes.

Abstract

Tropical rainforests, because of their complexity and variety in microhabitats, usually harbor a rich variety of bryophytes. Recent work by the author and his associates in the Neotropics has shown that bryophyte biomass and species turn-over along altitudinal gradients are useful parameters for characterizing altitudinal rainforest types. A comparison between lowland and montane canopy floras, moreover, indicates that the lowland forest may hold a much richer bryophyte flora than previously assumed.

Next Week

Tuesday, Jun 18, noon seminar speaker will be John M. Lawrence, University of Southern Florida.

The effects of stress and disturbance on echinoderms.

PEOPLE

Arrivals

- Michael Ryan, Univ. of Texas, Jun 3-29, to work on communication in Túngara frogs.
- Frank Talbot, director, S.I. National Museum of Natural History, Jun 9-12, to visit STRI facilities.
- John Lawrence, Univ. of Southern Florida, Jun 12-25, to visit STRI facilities and present seminar.

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INRENARE personnel attended an intensive workshop on "How to Design an Environmental Education Program held from May 29-31 at the Tupper Center and organized jointly by STRI and INRENARE ••• El personal de INRENARE asistió a un taller intensivo sobre "Cómo Diseñar Programas de Educación Ambiental", llevado a cabo del 29 al 31 de mayo en el Centro Tupper. El taller fué organizado conjuntamente por el STRI e INRENARE.

(Foto: M.A. Guerra)

Departures

- Jun 8-23, Maritza Perurena, STRI Personnel Office, to attend a training course on *Qualifications Analysis* in Washington, D.C., and then on vacation.
- Jun 9-23, Carlos Urbina and Francisco Rivera, for a training course on computer software for accounting systems, in Colorado, then to Washington, D.C. to work at the SI Accounting Offices on new accounting procedures.
- Jun 13-20, Elena Lombardo, assistant director for external affairs, to Washington, D.C., at the invitation of Secretary Adams to receive the Robert Brooks Award for excellence in administration.
- Jun 14-22, Stanley Rand, to New York to attend the meetings of the American Society of Ichthyologists and Herpetologists.

On Leave

- Jorge Ventocilla, Jun 10-14.

Honor

Klaus Winter, new STRI scientist, recently became a member of the Editorial Board of the Journal *Plant Physiology*.

THINGS YOU SHOULD KNOW

Reminder

This month's scientific staff meeting will take place on Tuesday, June 11, at 9:30 am in the Tupper Center Meeting Room.

Educational Outreach Grant Deadline

The Educational Outreach Program supports the development of program models which further the diffusion of knowledge through improved and innovative educational outreach. The Outreach Fund, which is administered by the Office of the Assistant Secretary for Public Service has supported a broad range of projects and activities in most bureaus of the Institution. The Program encourages proposals that emphasize: cultural diversity, school-based education programs, audience development, and applied community programming.

Proposals should state the education and outreach goals of the project, describe the activities planned and materials to be developed, identify the participants, and present the project costs with an indication of matching funds available. Applicants for planning grants must consult and/or submit a synopsis of the proposal before the deadline. For guidelines and application materials, contact the Office of the Assistant Secretary for Public Service. The deadline for receipt of proposal in the STRI Director's Office is June 12.

Madden Road Closure

Researchers be aware that the Madden Road will be closed during the month of June, from 8 am to 4 pm.

ANNOUNCEMENTS

Personnel News

STRI has a new island manager, Daniel Millan, beginning June 16. He comes to STRI from the Panama Canal Commission Dredging Division, where he worked as a Floating Equipment Dispatcher for the last two years. Before that he worked as assistant manager at the Hotel Ejecutivo. Mr. Millan has an A.A. degree in physical therapy from Fullerton Jr. College.

5th International Festival of Documentary Films on Parks

The Sondrio Town Council is in the process of organizing the Fifth International Festival of Documentary Films on Parks to be held at Sondrio, Italy, from 11-16 Nov 1991. This festival is unique in its genre, as participation is reserved exclusively for documentary films dealing with National Parks, Protected Areas and Nature Reserves all over the world. For more information contact the STRI Education Office.

STRI NEW PUBLICATIONS

- Dudley, Robert and Stanley Rand. 1991. "Sound production and vocal sac inflation in the tungara frog, *Physalaemus pustulosus* (Leptodactylidae)." *Copeia*, 2: 460-470.
- Losos, Johathan B. 1990. "The Evolution of Form and Function: Morphology and Locomotor Performance in West Indian *Anolis* Lizards." *Evolution* 44(5): 1189-1203.
- Mulkey, Stepehn S., Wright, S. Joseph and Smith, Alan P. 1991. "Drought Acclimation of an Understory Shrub (*Psychotria limnensis*; Rubiaceae) in a Seasonality Dry Tropical Forest in Panama." *American Journal of Botany* 78(4): 579-587.
- Ryan, Michael J. 1990. "Sexual Selection, Sensory Systems and Sensory Exploitation." In: *Oxford Surveys in Evolutionary Biology Volume 7*: 157-195.
- Winter, Klaus, and Gademann, R. 1991. "Daily Changes in CO₂ and Water Vapor Exchange, Chlorophyll Fluorescence, and Leaf Water Relations in the Halophyte *Mesembryantum crystallinum* during the induction of Crassulacean Acid Metabolism in Response to high NaCl salinity." *Plant Physiology* 95: 768-776.
- Wolda, Henk. 1991. "The Usefulness of the Equilibrium Concept in Population Dynamics." *Oecologia* 86: 144-145.

EVENTOS

Simposio de Zoología

El II Simposio de Zoología se celebrará del 18 al 23 de junio en La Habana, Cuba. Incluye sesiones para la presentación de ponencias orales, posters, conferencias magistrales y paneles. Entre los temas que se discutirán se encuentran: sistemática y evolución, ecología, etología, zoogeografía, anatomía, paleontología, genética poblacional, zoología aplicada, zoología médica, conservación y aprovechamiento de recursos naturales, relación planta-animal. El simposio también incluirá sesiones plenarias de apertura y clausura, asambleas de sociedades científicas, exposiciones relacionadas con el trabajo científico y de apoyo a la zoología. Para más información consulte en Panamá a Guamá Tours, su representante, o llame al comité organizador en La Habana al 22-5511.

Simposio Científico sobre Tecnología y Economía Pesquera

La Comisión Técnica Mixta del Frente Marítimo convoca a las personas interesadas de la Comunidad Científica Internacional al 8o. Simposio Científico y las Séptimas Jornadas de Tecnología y Economía Pesquera que se realizarán los días 2 y 6 de diciembre en la ciudad de Montevideo, República Oriental del Uruguay. La inscripción es gratuita para oyentes y expositores de trabajos de investigación, quienes deberán remitir el título del trabajo y un resumen antes del 31 de julio del '91. Los detalles de los aspectos de los eventos se incluirán en la 1a. Circular de próxima distribución. La correspondencia deberá dirigirse a: Señor Secretario Técnico de la Comisión Técnica Mixta del Frente Marítimo, Lic. Héctor Otero, Juncal 1355, Esc. 604. Montevideo, Uruguay. Fax 96-1578.

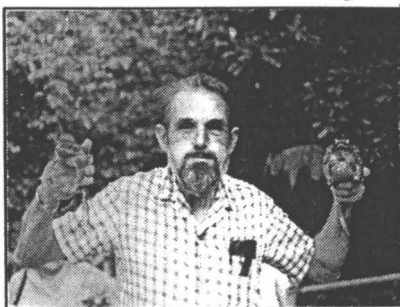
Derby day at BCI!

Día de carreras de sapos en Barro Colorado

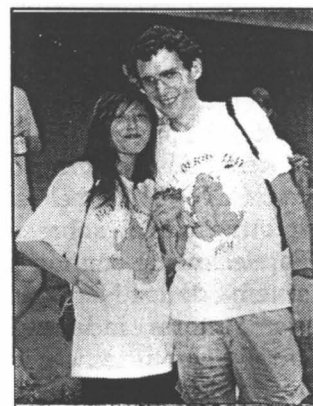


Results:
Winner: Mr. Gamba

(Photos by Carl Hansen)



Gordon Orians



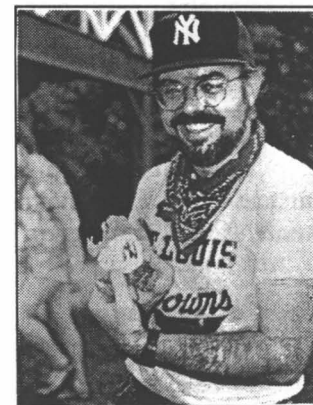
The Dudleys



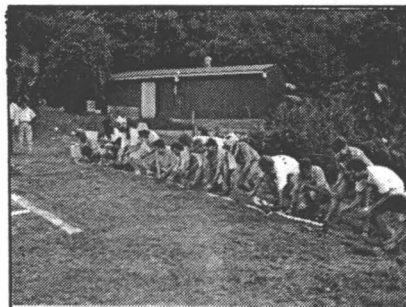
Maria Morello



Winner group and friends



George Angehr



Go!



Lizzy Stockwell



And the winner is...!



Toads' King and Queen



Betty Orians



"...brummmmm!"

EVENTOS

ECO 92

La Conferencia de las Naciones Unidas sobre el Medio Ambiente y el Desarrollo de 1992 (o ECO 1992) será del 1-12 de junio de 1992, en Río de Janeiro, y se celebrará al nivel más alto posible de participación. De acuerdo a decisión de la Asamblea General de la ONU en Brasil, se estableció un Comité Preparatorio de la UNCED, abierto a los gobiernos miembros de la ONU. En Panamá, CONAMA es el responsable de la elaboración del informe oficial sobre el estado del medio ambiente. Paralelamente con los extensos preparativos dentro del sistema de las Naciones Unidas para esta Conferencia, los "sectores independientes" también proveen una amplia gama de actividades preparatorias. El término "sectores independientes" abarca todas las ONGs relacionadas con el medio ambiente y el desarrollo, círculos comerciales e industriales, sindicatos, asociaciones profesionales, instituciones científicas y académicas, etc. que incluyan sectores significativos de la población. La reunión en el Centro Tupper del 5 de junio tuvo por objeto discutir las contribuciones sustanciales de los sectores independientes de Panamá al proceso preparatorio de UNCED, así como las modalidades de su participación en el mismo y en la Conferencia propiamente dicha. Para mayor información llamar a A. Telesca, ANCON, o a Glenda Bonamico, Grupo de Tecnología Apropriada.

FROM OTHER SOURCES

Oddball Quake in Costa Rica

(taken from *Earth Science* - May 11, 1991)

At first glance, the seismic shock that ravaged parts of Costa Rica and Panama last month appears misplaced. Major earthquakes in Central America usually occur along the Pacific coast or in the volcanic highlands, says James Dewey of the National Earthquake Information Center (NEIC) in Golden, Colorado. But the magnitude 7.6

From: *365 Ways to save our planet* •
Page-a-day calendar

In place of squeezable ketchup bottles that could not be recycled, H.J. Heinz Company is introducing bottles made mostly of recyclable PET plastic. But glass ketchup bottles are still *more likely* to be recycled, and remain a better choice.

quake on April 22 hit neither of these regions, striking instead on the eastern side of Costa Rica. Geophysicists believe the Pacific coast most often spawns intense shocks because it is here that a piece of the ocean floor, the Cocos Plate, crashes into and dives underneath Central America. This disappearing act—called subduction—also feeds the chain of volcanoes running like a twisted spine between North America and its southern sister. The puzzling April earthquake, however, occurred far from the subduction zone, apparently ruling out a direct connection, says Bruce Presgrave of NEIC. An explanation for this seismic conundrum may lie under the waves of the Pacific Ocean along a plateau called the Cocos Ridge. Sitting on the Cocos Plate, the raised region is being jammed down into the subduction zone. Yet the ridge appears unwilling to plunge underneath Central America, Dewey says. That reluctant subduction, he suggests, may generate stress over an unusually broad region extending to Costa Rica's Caribbean coast, where the recent quake occurred. Records indicate that a similarly sized quake may have struck the same location in 1913. The recent temblor killed 80 people and left almost 70,000 persons homeless, according to NEIC. Dewey cautions that scientists lack important information about the quake at this time, making it difficult to pin down an explanation. A clearer picture should emerge in the next few months as data arrive from seismic stations around the world □

