

STRI newsletter

JULY 20, 1990

SMITHSONIAN TROPICAL RESEARCH INSTITUTE, Apartado 2072, Balboa, Panamá

No. 29

SEMINARS

Tupper Center Auditorium

Tuesday, July 24, noon seminar speaker will be Charles Birkeland, University of Guam.

Nutrient input, rather than productivity, as a major determinant of marine community structure.

Abstract:

The trophic structures of tropical marine communities are not influenced so much by the magnitude of primary productivity, but by whether the primary productivity is mainly in the water column or in the benthos. This distribution of primary producers is strongly influenced by the pattern and degree of concentration of nutrient input. Second-order effects of concentrated nutrient input include a shift in species which dominate the community from large, slow-growing species which use nutrients effectively to small, rapidly-growing species that can take advantage of concentrated inputs.

Intensity of predation and competition increase with nutrient supply because of increased population sizes resulting from input of greater numbers of recruits of species with planktotrophic larvae and because of greater growth rates in the community. Recent widespread events on western Pacific reefs, such as increased frequency of red tides, paralytic shellfish poisoning, dinoflagellate blooms, and increased frequencies of outbreaks of animals with planktotrophic larvae such as *Acanthaster*, *Echinometra*, and *Drupella* spp., may be related to increased nutrient input into coastal waters due to human activities.



(Photo by Marcos Guerra)

The new Tupper Center auditorium and meeting rooms have been the site of national and international events this year. On July 5, a ceremony in celebration of World Environment Day took place, from left to right: J. Manelia, CONAMA, E. Lombardo, STRI, J. Baquero, UN, G. Ford, Panama's Vicepresident, L. Gudiño, Viceminister of Education, A. de la Reza, president of Refinería Panama. This week we are hosting a meeting of the Commission for Studies of the Alternatives to the Canal on July 17 and 18, with representatives from the U.S., Japan and Panama. On July 19, local government institutions will present the national Tropical Forestry Action Plan to representatives of international organizations and development agencies.

That evening at 6:30 p.m. Alfred Fischer, University of Southern California, will give a talk on—

Life is a Chancey Business: scheduled stresses in the Milankovitch frequency band.

Thursday, July 26, noon seminar speaker will be Charles Birkeland.

Why do generalists have a major impact on coral-reef community structure, but specialists do not?

Abstract:

Particular species of animals have major impacts on coral-reef communities, affecting species composition, trophic structure, and reef topography, sometimes over geographic regions, while other species have only local or negligible effects. The impacts of the more influenced species result from the morphological and physiological traits which allows them to be generalists. Generalist eliminate all benthic age-classes of prey, they are not affected by the absence of particular prey species, and behavioral and dietary plasticity allows their role in the community to change with circumstances. Specialists are limited by morphological and physiological constraints and are perpetually in danger of generalists eliminating their food supply.

NEXT WEEK

Tuesday, July 31, no noon seminar scheduled.

Barro Colorado Island - Reminder

Thursday, July 26, Alfred Fischer, University of Southern California, Los Angeles, will give an evening seminar at 7:30 p.m. in the new Conference Room.

Life is a chancey business: longer term stresses and bolts out of the blue.

A boat will leave for BCI at 5:35 p.m. and return at 9:00 p.m. Those who plan to attend please contact Maritza Concepción or Gloria Zelaya.

PEOPLE**Departures**

♦ July 26 - August 6, Alan Smith, Assistant Director for Terrestrial Research, on official business to the University of Miami, then to attend meetings of the Ecological Society of America in Snowbird, Utah, and on to Washington, D.C. to attend a meeting of the SI Research Policy Committee.

THINGS YOU SHOULD KNOW**Reminder from Procurement**

We would like to remind you that APO mail has very specific regulations that must be followed. Packages should be within the 70" limit and 108" length plus girth, well-wrapped and with a custom declaration. Shipping must be specified: air mail, SAM, PAL, Surface, Insured. Your facility secretary has a guide for military postal service.

♦ Please be advised that the correct mailing address is as follows:

For Official Mail

Smithsonian Tropical Research Institute
ATTN:

APO Miami 34002-0011

For Personal Mail

Smithsonian Tropical Research Institute
ATTN:

P.O. Box 2072

Balboa, Republic of Panama

♦ It is important to remember that the APO address is to be used exclusively for official mail. Improper use of the APO could result in the return to sender of mail and packages for unauthorized APO use.

The Center for Field Research

Center for Field Research
680 Mount Auburn Street
P.O. Box 403
Watertown, MA 0227
Phone: 617-926-8200
Fax: 617-926-8538

The Center for Field Research annually sponsors field research in 50 countries. Both funds and volunteers are provided through Earthwatch. This is a call for proposals (1991-1992) for those who have field work planned in any of the following areas which might benefit from this assistance:

*Research addressing the velocity and costs of environmental change, including long term monitoring of fragile ecosystems or threatened species

*Research providing paleo-climatic data which are needed to corroborate and refine climatic models of environmental change

*Research leading to the preservation of biodiversity

*Inter-disciplinary field science which contributes to policy revisions leading to sustainable development

*Field work in medical anthropology, public health, and nutrition

*Research addressing the social and economic implications of energy use in developing countries.

Proposals should be sent no later than July 31st.

Iguana Management Project Update

Dr. Dagmar Werner received the Bruno H. Schubert science award in her native West Germany this month for her innovative green iguana farming program. West Germany Foreign Minister Hans Dietrich Genscher presented Werner with the prestigious annual prize awarded by a commission of experts for special merits in the field of environmental conservation.

Available

Lizzy Leigh has 100 lbs. soft white (pastry) flour at 70 cents for a half gallon ice cream box, and many spinach seedlings (*Basella alba*, New Zealand or Malabar) for free. (Tel: 56-6331)

ANNOUNCEMENTS

STRI Fortuna Station

Place: Fortuna, Province of Chiriqui, Edwin Fabrega Dam

Site: Basin of the Chiriqui River: 1000m - 2000m. Town of "Los Planes" where station is located: 900m. There are extensive areas of rigorously protected montane wet forest available for research. "Los Planes" is 15 minutes away by car or bus from the Forest Reservation of Fortuna (Tropical Cloud Forest of the Chiriqui River Basin). There are few footpaths in the Basin. The biggest one goes to the shelter of the deep pass of Hornitos.

The IRHE personnel of "Los Planes" can suggest and help locate possible routes in the forest. There is also access to the tropical forest and lowlands of Bocas del Toro, using the road to Chiriqui Grande. Volcan Baru(3500m) is about 3 hours away by road; best access is from Boquete.

Temperature: Average annual temperature is 19 C at 1200m. Maximum of 26 C, minimum of 17 C.

Precipitation: 3,500mm annually. From January to April the average precipitation is less than 200mm and from April to December it is between 300mm and 800mm.

STRI Facility: The IRHE has assigned a duplex to STRI in the town of "Los Planes". The town was built to house employees of the engineering companies that participated in building the Edwin Fabrega Dam. "Los Planes" is outside the Chiriqui River Basin, on the southern side of the Panamanian Central Mountain Range, and can be reached by hourly bus service from David.

The STRI duplex has two bedrooms and a bath in each unit. One unit has a kitchen equipped with refrigerator, stove and utensils, and a dining/living area. The other unit will be used as a lab. Electricity is 110 watts. There is a hot water heater, and a coin-operated washer and dryer (takes quarters).

Visitors will find sheets there, but must provide their own towels, blankets and food.

•Fee: \$5.00 per person/per day.

Postgrado en Recursos Naturales

La Universidad Nacional Experimental de los Llanos Occidentales de Venezuela ofrece un post-grado en Recursos Naturales Renovables, con un programa de becas de US\$5,000 por año con financiamiento

del U.S. Fish and Wildlife de los Estados Unidos, para optar a la Mención Manejo de Fauna Silvestre y Acuática. Para mayor información escribir a Margioly de Leon Morales, Universidad Nacional Experimental de los Llanos Occidentales "Ezequiel Zamora", Unellez-Guanare-Portuguesa, Venezuela.

Grants and Fellowships

•The Alfred P. Sloan Foundation believes that although the tools of molecular biology offer exciting possibilities for expanding scientific knowledge about evolution, there are too few scientists trained in the complexities of both evolutionary and molecular biology. This postdoctoral awards program is intended for scientist interested in developing relevant interdisciplinary skills.

Awards will support up to two years of research work at a department or laboratory in the U.S. or Canada selected by the applicant.

The deadline for receipt of all application materials from applicant, sponsoring scientist and related reference letters is September 7, 1990 (firm).

Send applications to:

Dr. Michael S. Teitelbaum
Postdoctoral Fellowships
Alfred P. Sloan Foundation
630 Fifth Avenue, Suite 10111
Tel: (212) 649-1649

•WWF-The World Wide Fund for Nature is making available a small number of grants not exceeding Swiss Francs 5000 each for work on conservation of islands and floras.

Applications will be considered for:

- Rescue of individual threatened endemic plants.
- Sustainable utilisation of island endemic plants.
- Creation of protected areas for clusters of threatened endemic species and/or unique vegetation types.
- Assessment in the field of which species or vegetation types are endangered.

Applicants should use the standard application form for WWF international projects (Project 3334), which can be obtained from Project Screening Department, WWF-International, Avenue du Mont-Blanc, CH-1196 Gland, Switzerland.

STRI LIBRARY NEW BOOK LIST

Atlas florae Europaeae ; distribution of vascular plants in Europe. QK281.A85X v.8 STRI.

A Catalogue of the Eriococcidae (Homoptera:Coccoidea) of the world. (JM Hoy, 1963) QL527.E73H86c STRI.

Comparative vertebrate endocrinology (PJ Bentley, 1982) QP187.B46 1982X STRI.

Elsevier's dictionary of botany : In English, French, German, Latin, and Russian (P. Macura, comp., 1979-1982) QK9.E47X v.2 STRI.

Entomological excerpts from southeastern China (Fukien Province); aborigines, silkworms, honeybees, and other insects (CR Kellog, 1967) QL483.C6K29 STRI.

The Entomology of Indigenous and naturalized systems in agriculture (MK Harris & CE Rogers, eds., 1988) SB931.E57 1988X STRI.

Estuaries; (papers) (Conference on Estuaries (1964 : Jekyll Island), 1967) GC96.C74 1964 STRI.

Galapagos : a terrestrial and marine phenomenon (P. Humann, 1988) QH198.G3H918 1988 STRI.

Glosario de terminos de acuicultura. Ref SH135.G56 1988 STRI.

Guide to the marine isopod crustaceans of the Caribbean (B. Kensley & M. Schotte, 1989) QL444.M34K434 1989X STRI.

Indigenous peoples and tropical forests : models of land use and management from Latin America (JW Clay, 1988) GF514.C56 1988X STRI.

Insects of Hawaii; a manual of the insects of the Hawaiian Islands, including an enumeration of the species and notes on their origin, distribution, hosts, parasites, etc. (EC Zimmerman, 1948-) QL489.H3Z5X v.3-5 STRI.

Lasers in biology and medicine (Nato Symposium on Lasers in Biology and Medicine (1979: Camaiore, Italy), 1980) QH324.9.L37N37 1979X STRI.

The Legacy of Tethys : an aquatic biogeography of the Levant (FD Por, 1989) QH193.M5P83 1989 STRI.

Marine Ecology (O.Kinne, ed., 1972-) QH541.5.S3K55 v.1, pt.1-3 STRI.

Marine microbiology (B. Austin, 1988) QR106.A97 1988X STRI.

Methods and principles of mycorrhizal research QK604.M47 1982X STRI.

Opportunities in biology / Committee on Research Opportunities in Biology, Board in Biology, Commission on Life Sciences, National Research Council. QH315.O66 1989X STRI.

Perspectives on plant competition (JB Grace & D. Tilman, eds., 1990) QK911.P37 1990X STRI.

Proceedings of the Seventh Entomological Congress, Pietermaritzburg, 10-13 July, 1989 / organized by the Entomological Society of Southern Africa (Entomological Congress (7th : 1989 : Pietermaritzburg, South Africa), 1989) QL485.A35E61 1989 STRI.

Science, ethics, and food : papers and proceedings of a colloquium / organized by the Smithsonian Institution ; edited

by BWJ LeMay. HD9000.5.S377 1988X STRI.

Socio-economic effects and constraints in tropical forest management : the results of an enquiry / organized by the International Federation of Institutes for Advanced Study ; edited by EG Hallsworth. SD247.S63 1982X STRI.

Status of uncommon and previously unreported birds of El Salvador (WA Thurber ...[et al.], 1987) QL687.S2T53 1987 STRI.

Tropical rain forest ecosystems (FB Golley, ed., 1983-1989) QH541.5.R27T76X STRI.

Viruses of lower vertebrates (W. Ahne & E. Kurstak, eds., 1989) QR321.V57 1989X STRI.

MISCELLANY

Tour to Boquete

PTY Tours is offering a trip to Boquete this weekend, July 20-22 (Prices \$165-\$125). For more information, call Tel. 69-2183.

Do You Know?

What the Eastern-most State in the U.S. is?

Humor



(Alaska is both the eastern and westernmost state. The 180th meridian runs through it so it is both.)