

# STRI newsletter

January 24, 1992

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panama

No. 4

## TUPPER CENTER SEMINARS

Tuesday, Jan 28, noon seminar speaker will be Paul Ewald, Amherst College.

*Human culture, virulence and the parasites of our future: from cholera to AIDS, and beyond (or, WHO needs Darwin)*

### Abstract

The power of evolutionary principles to explain variations in virulence among human pathogens adds a new dimension to policy-making by agencies such as the World Health Organization. This new evolutionary dimension evaluates how health interventions alter the future evolutionary course of existing diseases; it also permits *a priori* differentiation of newly emerging pathogens that present grave threats to world health from those presenting little threat. The value of this evolutionary dimension is illustrated by four processes. The first process is the unplanned, the hitherto unexplained, effects of water purification on the evolution of bacteria that causes cholera and dysentery. The second is the design of vaccines to favor evolutionary decreases in virulence. The third is alteration of housing to favor evolutionary reductions in the virulence of vectorborne pathogens. The fourth involves the evolutionary effects of differences in sexual behavior needleborne transmission on the evolution of two retrovirus: The Human Immunodeficiency Virus (HIV) and the Human T-cell Lymphotropic Virus (HTLV). When policy-makers in wealthy nonendemic regions recognize the evolutionary benefits of certain improvements of health standards, they should be more willing to invest in these improvements in the poorer endemic areas, because less virulent pathogens represent a lower threat to people living in nonendemic areas. More generally, if policy-makers do not consider evolutionary consequences of their activities, they may choose intervention strategies that provide fewer health benefits in return for the money spent.



*Theodore Panayotou, economist from Harvard Institute for International Development, working on valuation of tropical forests, was given a tour of the Forest Dynamics plot on BCI by STRI's Alan Smith and George Angehr ••• Theodore Panayotou, economista del Instituto de Harvard para el Desarrollo Internacional que está trabajando en la evaluación de bosques tropicales, visitó la parcela del proyecto de Dinámica de Bosques en Barro Colorado con Alan Smith y George Angehr del STRI.*

(Foto: M.A. Guerra)

### Next Week

Tuesday, Feb 4, noon seminar speaker will be Koji Nakamura, Kanazawa University.

*Population dynamics of herbivorous beetles under non-seasonal climate in Sumatra.*

## SPECIAL SEMINAR

Tuesday, Jan 28, 10am seminar speaker will be Pamela Lehmann, Tropical Conservation and Development Program, University of Florida.

### Abstract

The TCD program is housed in the University of Florida's Center for Latin American Studies, along with its companion programs, the Amazon Training and Research Program (ATRP) and the Program for Studies in Tropical Conservation (PSTC). TCD is dedicated to interdisciplinary academic research and training related to problems of biological conservation and the livelihoods of the rural poor in Latin America. With assistance from the Ford Foundation, the Alton Jones Foundation, the John and Catherine T. MacArthur Foundation, and the Tinker Foundation, the TCD Program offers graduate fellowships, field training, and research grants to qualified students throughout the Americas.

*Habr  traducci n simult nea al espa ol.*

## PEOPLE

### Arrivals

- Anthony Wisnieski, Baltimore Zoo, Jan 26-Feb 26, to do studies of variability in alkaloid production in neotropical poison frogs.
- Robert Thacker, Univ. of Michigan, Jan 27-May 10, to study induced feeding preferences of land hermit crabs.
- James Wetterer, Harvard University, Jan 31, 1992-Jan 1993, postdoctoral fellow, to work on coevolution of fungus-growing ant and their fungi.

### Departures

- David Roubik, STRI scientific staff, Jan 20-Feb 3, to give lectures at the Univ. of Puerto Rico.
- Pablo Amaris, assistant security officer, Jan 31-Feb 10, to attend a training course at the National Conference on Museum Security in Washington, DC.

### New Baby ••• Nuevo Bebé

José Arturo Lam Palacios was born to Eric Lam and his wife, Madaly, on December 19 at 8:00 am. He weighed 7 lbs. 2 oz. Congratulations! ••• *Nuestras felicitaciones a Eric Lam y a su esposa Madaly por el nacimiento de su hijo, Jose Arturo Lam Palacios, el 19 de diciembre a las 8:00 am; pesó 7 lbs. 2 oz.*

## THINGS YOU SHOULD KNOW

### Diving Officer Leaving

Steve Miller is resigning as Diving Officer at STRI effective Jan 15, 1992. He has accepted a position as Program Director at the Seacoast Science Center in New Hampshire. This position will allow him to become fully involved in a major conservation education program. Our best wishes in his new endeavour.

### Congratulations to STRI Employees ••• Felicitaciones a Empleados de STRI

We mention the following events in order to congratulate these STRI employees for their exceptional work.

- On Dec 21st, 1991 as launch operator Abel Gomez approached BCI on the evening trip from Gamboa, he noticed that the Jacana was tilting to one side. Gomez immediately checked the engine room and noticed that large quantities of water had entered the engine room and the boat was about to sink. He quickly summoned maintenance worker Diomedes Abrego, and together they installed two water pumps that saved the Jacana from sinking to the bottom of the lake.
- The team composed of game wardens Juan Barria and Enrique Marciaga, and forest guard Bienvenido Larga-

cha successfully arrested a series of poachers in the Barro Colorado Nature Monument during 1991. In the last four weeks they have captured several hunters on two separate occasions, and confiscated several weapons, equipment, and dead animals.

- On Thursday January 16, Jose Sanchez, a BCI janitor, found a belt pouch as he was cleaning a room. He immediately turned the pouch over to scientific coordinator Nelida Gomez. Upon examination the pouch contained a passport, airline ticket, and several hundred dollars in currency and travel checks. The pouch and all its contents were returned to the owner.

•••

Mencionamos los eventos a continuación para felicitar a estos empleados de STRI por su gran labor.

- La noche del 21 de diciembre de 1991, cuando el operador de lancha Abel Gómez regresaba a la isla, vió que la Jacana estaba inclinada hacia un lado. Luego de revisar el cuarto de máquinas notó la gran cantidad de agua que había entrado al cuarto y que la lancha estaba por hundirse. Junto con el trabajador de mantenimiento Diomedes Abrego procedieron a instalar dos bombas de agua y de esta manera evitaron que la Jacana se hundiera al fondo del lago.
- El equipo formado por los guardabosques Juan Barría y Enrique Marciaga, y el policía forestal Bienvenido Largacha, lograron varias capturas de cazadores furtivos en el área del Monumento Natural de Barro Colorado en 1991. Durante las últimas cuatro semanas han capturado varios cazadores en dos incidentes separados, confiscando en el proceso armas, equipo y animales muertos.
- El jueves 16 de enero, José Sánchez encontró una cartera-cinturón mientras limpiaba uno de los cuartos en BCI. Rápidamente lo entregó a Nélida Gómez, Coordinadora Científica. Adentro se encontraban un pasaporte, dinero en efectivo, cheques viajeros y un tiquete aéreo; artículos que luego fueron devueltos a su dueño.

### At Tupper Center

- Tue, Jan 28
  - Presentation of the Tropical Conservation and Development Program (TCD), Auditorium, 10 am.
  - Interview of possible candidates for TCD, Small Meeting Room, 11 am.
  - Policies and Procedures Meeting, Accounting Dept., Small Meeting Room, 1:30 pm.
- Wed, Jan 29
  - Amigos de la Biblioteca Meeting, Small Meeting, 9 am.

## POSITION AVAILABLE

### Director, Escuela Agricola Zamorano, Honduras

The Search and Screening Committee for the Escuela Agricola Panamericana is seeking nominations and applications for the position of Director. The Escuela Agricola Panamericana (Zamorano) was established in 1942 to serve the American tropics and is today the leading private agricultural college serving Latin America.

The Director reports to the Board of Trustees and works with them to set policy. He/she is responsible for all administrative activities, including budgeting, personnel and fiscal matters for the large and complex program of teaching, research, outreach and production. The Director provides the leadership and guidance in the institution's quest for excellence in agricultural scholarship and development. The Director is responsible for maintaining the discipline system which is the basis for the entire learning-by-doing-methodology. Fund raising and donor agency contacts are important functions.

Applicants should be completely fluent in Spanish and English, have a bicultural background, hold a Ph.D. in an agricultural or related discipline, and have ten or more years of academic and administrative experience in the department or other unit involved in teaching, research, outreach and production.

Nominations and expressions of interest should be directed to: Dr. Hugh L. Pope, Chair, Search and Screen Committee, International Programs, 3028 McCarthy Hall, University of Florida, Gainesville, FL 32611.

## TRAINING

### Permaculture Design Course

The Tropical Conservation Foundation (TCF) is pleased to announce that an intensive Permaculture Design Course will be presented at the Belize Agroforestry Research Center (BARC) from February 19 to March 6, 1992. The workshop is open to all interested participants who pre-register on a first-come, first serve



*In 1991 STRI Visitor Services Office recorded approximately 1696 day visitors to BCI compared to the 960 visitors of the previous year. This is due to new released information on BCI in international and local media, new guides at BCI and the increased public awareness on the importance of tropical forests. In the photo Mario Bernal explains to members of a conservationist group how epiphytes survive in the dry season when their host tree loses its humidity ••• En 1991 la Oficina de Visitantes registró cerca de 1696 visitantes de un día a la isla de Barro Colorado comparado a los 960 visitantes del año anterior. Esto se ha debido a las recientes publicaciones internacionales y locales sobre Barro Colorado, los nuevos guías en la isla y el aumento del interés del público hacia la importancia de los bosques tropicales. En la foto, Mario Bernal explica a miembros de un grupo conservacionista cómo las epifitas sobreviven en la época seca cuando su árbol hospedero pierde humedad.*

*(Foto: M.A. Guerra)*

basis, up to a maximum of 25 people.

The course will focus on how the design of natural ecosystems can be applied to creating balanced habitats which provide social and economic benefits in a sustainable ecology. Contact: Tropical Conservation Foundation, 14 North Court St., Suite 301, Athens, Ohio 45701.

### Concerts Next Week

♪ Youth symphony and Oberlin visitors (string quartet and wind quintet) Tuesday January 28, National Theatre, 8pm.

♪ Chamber Groups, Wednesday January 29 at 2pm at the school in Boca La Caja behind Las Esclavas (turn at Casa de la Carne and look for Concert Association sign on left).

## STRI NEW BOOKLIST

Acoustic behaviour of insects: an evolutionary perspective / Winston J. Bailey; with a foreword by John Alcock.

QL496.B35 1991X STRI.

Aves del Ecuador: continente y archipiélago de Galápagos / autores Fernando Ortiz Crespo, Paul J. Greenfield, Juan Carlo Matheus = Birds of Ecuador: locational checklist with English and Spanish common names / prepared by Fernando Ortiz Crespo, Paul J. Greenfield, Juan Carlos Matheus.

QL689.E2O77 1990 STRI.

A Bibliography of the Ichneumonidae, 1970-1990 (parasitic Hymenoptera) / by Virendra Gupta & Santosh Gupta.

Ref QL568.I2G7b 1991 STRI.

The Birds of Isla Coiba, Panama.

QL687.A1P18 1957 STRI.

Birds of the Chukchi Peninsula and Wrangel Island = (Ptitsy Chukotskogo poluoostrova i ostrova Vrangelya) / L.A. Portenko; translated from Russian [by P.M. Rao].

QL691.R9P84 E1981 STRI.

Bone modification / edited by: Robson Bonnichsen, Marcella H. Sorg.

CC79.5.A5B712 1989 STRI.

CRC handbook of medicinal herbs / author, James A. Duke.

Ref QK99.A1D83 1985X STRI.

Contribución a la flora del Departamento del Cuzco, por el dr. Fortunato L. Herrera

QK271.H56 1921Z STRI.

The Enchanted canopy: a journey of discovery to the last unexplored frontier, the roof of the world's rainforests / by Andrew W. Mitchell.

QH541.5.R27M58 1986X STRI.

Endau-Rompin: a Malaysian heritage / [editor, G.W.H. Davison].

QH185.E56 1988 STRI.

Evolution at the molecular level / edited by Robert K. Selander, Andrew G. Clark, and Thomas S. Whittman.

QH325.E96 1990X STRI.

Fishes of the Great Barrier Reef and Coral Sea / John E. Randall, Gerald R. Allen, Roger C. Steene.

Ref QL636.R36 1990X STRI.

Gene expression and its control / edited by Kay E. Davies, Shirley M. Tilghman.

QH540.G32 1991 STRI.

Gene-mapping techniques and applications / edited by Lawrence B. Schook, Harris A. Lewin, David G. McLaren.

QH445.2.G44 1991X STRI.

A Green estate: restoring independence in Madagascar / Gillian Feeley-Harnik. DT469.M277S355 1991X STRI.

Heterochrony: the evolution of ontogeny / Michael L. McKinney and Kenneth J. McNamara.

QH395.M34 1991X STRI.

Index Kewensis - Supplement XIX (1986-1990)

Ref QK11.I38 Suppl. STRI.

Keepers of the forest: land management alternatives in Southeast Asia / editor, Mark Poffenberger.

SD235.A785K44 1989X STRI.

Manual of the flowering plants of Hawaii / Warren L. Wagner, Derral R. Herbst, S.H. Sohmer.

Ref QK473.H4W33 1990X STRI.

Methods in plant biochemistry.

QK862.M592 v.3,5,6 STRI.

The Mundugumor: from the field notes of Margaret Mead and Reo Fortune.

DU740.42.M39 1991X STRI.

Neotropical rainforest mammals: a field guide / text by Louise H. Emmons; color plates and illustrations by Francois Feer.

QL723.A1E44 1990X STRI.

Nombres indígenas de plantas chilenas.

Ref QK13.G8 1960X STRI.

Pesticide residues and environmental pollution / S.C. Goel, editor.

TD196.P38N27 1985 STRI.

The Science of words / George A. Miller.

P326.M55 1991X STRI.

Statistical methods / George W. Snedecor, William G. Cochran.

QA276.12.S59 1989 STRI.

The Yuccae. by William Trelease. (From the thirteenth Annual Report of the Missouri Botanical Garden.)

QK495.Y94T8X STRI.

Advances in Ecological Research, v.19, 1989 & v.21, 1991. Serials section STRI.

From: *365 Ways to Save our Planet*  
• Page-a-Day Calendar •

In 1990, the major sellers of canned tuna — Star Kist, Bumble Bee, and Chicken of the Sea brands — agreed to sell only tuna caught using "dolphin safe" methods. Look for cans so marked, and avoid albacore tuna, which is still caught by dangerous driftnet methods.