

SEMINARS - ANCON CONFERENCE ROOM

Tuesday, July 18, noon seminar speaker will be TAMIJI INOUE, University of Kyoto.

Kin Recognition of Stingless Bees.

Abstract: I studied kin recognition systems of the stingless bee, *Melipona fasciata*, by making a colony with the daughter queen through artificial division of the colony with the mother queen. Using the mother and daughter colonies and the alien colony collected at a different location, I found that workers of the mother colony could discriminate sisters, nieces and aliens. In addition to the relatedness, ages of workers and nest odor factors also changed the probability of acceptance. I will discuss the adaptive significance of the kin recognition systems in terms of the inclusive fitness of workers.

NEXT WEEK

No noon seminar scheduled for Tuesday, July 25.

That evening, at 6:30 p.m., WILLIAM EBERHARD will give the staff evening seminar.

Coital Courtship and Animal Genitalia.

ARRIVALS

July 14 - 28, ELDREDGE BERMINGHAM, STRI staff, to review progress of molecular lab set-up and to meet with Dr. Hoffmann.

July 15 - August 15, CARLOS PEREZ-SANTOS, Consejo Superior de Investigaciones Científicas, Spain, to study the "chronological skeleton" in humid tropical zones, ANA MORENO, Universidad Complutense, to study earthworms on BCI, and BENITO SANZ.

July 15 - August 31, JOSHUA SCHWARTZ, Brown University, and SUSAN ALLAN, to study strategies employed by frogs for communication in a noisy environment in Gamboa.

July 17 - 27, STEVE MULKEY, University of Missouri, to continue study of ecology of leaf response to atmospheric drought in tropical forest understory herbs on BCI.

DEPARTURES

July 15 - August 1, ROSS ROBERTSON, staff scientist, to Aberdeen, Scotland, to attend the Fisheries Society Symposium and then to Vienna to consult with colleagues at the University of Vienna.

July 15 - 28, ADA RODRIGUEZ, assistant to Mireya Correa at the Univ. of Panama Herbarium, to Washington, D.C. to participate in the SI National Museum of Natural History Botany Department's Latin American and Caribbean Botanical Workshop.

July 15 - August 15, AMALIA HERRERA, STRI research assistant, to Paris, France, to participate in the 8th Conference of the International Bryozoology Association.

ANNOUNCEMENT

The Smithsonian Institution Council Meeting scheduled to be held at STRI in October 1989 has been deferred one year.

PERSONNEL NEWS

ANA MARIA FORD will fill the new administrative secretary position at the Tupper Center, under the supervision of Vielka Vergel. Ms. Ford has a BS in biology from the University of Panama and comes to us from the Panama Canal Commission Office of Personnel Administrative Incentive Awards Unit.

VIELKA LIAO will be temporary receptionist at the Ancon Facility from July 17 - August 18.

LESBIA ALICIA SALAS began work at the STRI Procurement Department on July 10. She will be assisting procurement until September 30.

GOOD PHOTOGRAPHS ANYONE?

The STRI Photography Department is looking for black and white negatives of 1989 events that others at STRI may have, for the annual report. Please send....!

JULY BIRTHDAYS AT STRI

Campos, Juan	3
Urriola, Raineldo	16
Rodriguez, Orlando	18
Jaramillo, Vicente	18
Hansen, Carl	20
Duke, Norman	21
De la Espada, Ana Luisa	26
Grael, Carlos	26
Leigh, Egbert	27
Ossa, Maria Lorena	27
Ureña, Alejandro	28
Thompson, Ricardo	30

NEWS FROM INRENARE

The Soberania National Park has new provisional headquarters located in building 271, just off Goethals Boulevard, in Gamboa. Office hours are from 8 a.m. to 3:30 p.m. Anyone wanting information on the park or needing assistance, such as with treefalls across Pipeline Road, should contact headquarters personnel.

PRO-IGUANA VERDE FOUNDATION NEWS

The Pro-Iguana Verde Foundation has a new office telephone number in Costa Rica: (506) 31-6756.

TEMPORARY TEACHING POSITION

There is a one-year vacancy at the Virginia Polytechnic Institute to teach General Ecology in the fall 1989 semester and co-teach a course on population and community ecology with John Tyson in the spring of 1990. Anyone interested should send letter and CV to Dr. George Simmons, Chairman, Dept. of Biology, via Fax (703) 231-9307.

LIBRARY NEWS New Book List:

AIR POLLUTION AND ECOSYSTEMS : PROCEEDINGS OF AN INTERNATIONAL SYMPOSIUM, HELD IN GRENOBLE, FRANCE, 18-22 MAY 1987 (Mathy, P., editor, 1988)

QH545.A3A37 1988X STRI.

ALGAE AND HUMAN AFFAIRS (CA Lembi & JR Waaland, editors, 1988) SH390.7.A44 1988X STRI.

ALGAE AS EXPERIMENTAL SYSTEMS : PROCEEDINGS OF A MEETING ON ALGAL EXPERIMENTAL SYSTEMS IN CELL BIOLOGICAL RESEARCH, HELD AT AIRLIE, VIRGINIA, JUNE 25-29, 1988 (AW Coleman et al, editors, 1989)

QK725.M44 1988X STRI.

THE AMERICAN DEVELOPMENT OF BIOLOGY (R. Rainger et al, editors, 1988) QH305.2.U6A54 1988X STRI.

BEFORE THE INDIANS (B. Kurten, 1988) QE881.K793 1988X STRI.

THE BIOLOGY OF NEMATOCYSTS (DA Hessinger & HM Lenhoff, editors, 1988) QL378.B56 1988X STRI.

THE BIOLOGY OF PARASITISM : A MOLECULAR AND IMMUNOLOGICAL APPROACH (PT Englund & A. Sher, editors, 1988) OL757.B57 1988X STRI.

CHEMICAL CYCLES IN THE EVOLUTION OF THE EARTH (CB Gregor et al, editors, 1988) QE514.C47 1988X STRI.

CHEMISTRY AND BIOLOGY OF SOCIAL INSECTS : PROCEEDINGS OF THE 10th INTERNATIONAL CONGRESS, MUNCHEN, AUGUST 18-22, 1986, MAX-PLANCK-INSTITUT FUR BIOCHEMIE, MARTINSRIED (J. Eder & H. Rembold, editors, 1987) QL496.C53 1986 STRI.

COMPUTATIONAL MOLECULAR BIOLOGY : SOURCES AND METHODS FOR SEQUENCE ANALYSIS (AM Lesk, editor, 1988)

QP625.N89C66 1988X STRI.

COMPUTER PRESENTATION OF DATA IN SCIENCE : A DO-IT-YOURSELF GUIDE, BASED ON THE APPLE MACINTOSH, FOR AUTHORS AND ILLUSTRATORS IN THE SCIENCES (D. Simmonds & L. Reynolds, 1989) Q222.S55 1989X STRI.

CONTRIBUTIONS TOWARDS AN UNDERSTANDING OF VEGETATIONAL DEVELOPMENT IN THE PACIFIC LOWLANDS OF PANAMA (KE Blum, 1968) SD409,E66 1968a STRI.

THE CRETACEOUS SYSTEM OF SOUTHERN SOUTH AMERICA (AC Riccardi, 1988) QE1.G24 no. 168 STRI.



CYTOLOGY AND EVOLUTION IN PARTHENOGENESIS (E. Suomalainen, A. Saura, & J. Lokki, 1987) QH487.S86 1987X STRI.

DEFORESTATION : SOCIAL DYNAMICS IN WATERSHEDS AND MOUNTAIN ECOSYSTEMS (J. Ives & DC Pitt, editors, 1988) SD418.D315 1988 STRI

DIRECTORY OF TELEFACSIMILE SITES IN NORTH AMERICAN LIBRARIES (C. Lee & PS Jones, editors, 1989) Ref TK5101.D598 1989 STRL

AN ENGLISH-SPANISH GLOSSARY OF TERMINOLOGY AN ENGLISH-SPANISH GLOSSART OF TERMINOLOGT USED IN FORESTRY, RANGE, WILDLIFE, FISHERY, SOILS, AND BOTANY = GLOSARIO EN INGLES-ESPAÑOL DE TERMINOLOGIA USADOS EN FORESTALES, PASTIZALES, FAUNA SILVESTRE, PESQUERIA, SUELOS, Y BOTANICA (AL Medina, 1988) Ref HC15.M49 1988 STRI.

ESTUARINE ECOLOGY (JW Day, Jr. et al, 1989) QH541.5.E8E849 1989X STRI.

EXTRACELLULAR AND INTRACELLULAR MESSENGERS IN THE VERTEBRATE RETINA (DA Redburn & H. Pasantes Morales, editors, 1989) OP479.E88 1989X STRI.

FORESTS OF JAMAICA : PAPERS FROM THE CARIBBEAN REGIONAL SEMINAR ON FORESTS OF JAMAICA, HELD IN KINGSTON, JAMAICA, 1983 (DA Thompson, PK Bretting, & M. Humphreys, editors, 1986) SD152.J3C37 1983X STRI.

FUNGAL DECOMPOSITION OF WOOD : ITS BIOLOGY AND ECOLOGY (ADM Rayner & L. Boddy, 1988) TA423.2.R39 1988X STRI.

GLOBAL ECOLOGY : TOWARDS A SCIENCE OF THE BIOSPHERE (MB Rambler, L. Margulis, & R. Fester, editors, 1989) QH541.G545 1989X STRI.

Mfm 1177 STRI.

THE GRASSES OF BURMA, CEYLON, INDIA, AN PAKISTAN (EXCLUDING BAMBUSEAE) (NL Bor, 1973) AND QK495.G74B65X 1973 STRI.

A GUIDE TO THE BREEDING HABITS AND IMMATURE STAGES OF DIPTERA CYCLORRHAPHA (Part 2: Figures) (P. Ferrar, 1987) QL538.F47 1987Z pt.2 STRI.

HABITAT USE AND COMPETITIVE BOTTLENECKS IN SIZE-STRUCTURED FISH POPULATIONS (JF Gilliam, 1982) QL618.3.G48 1982a STRI.

LATE NEOGENE BIOSTRATIGRAPHY (PLANKTONIC FORAMINIFERA), BIOGEOGRAPHY, AND DEPOSITIONAL HISTORY (AG Kaneps, 1970)



"Sol Planning on roaming the neighborhood with some of your buddles today?"