

SEMINARS - ANCON CONFERENCE ROOM

Tuesday, September 6, noon seminar speaker will be KYLE SUMMERS, the University of Michigan.

Parental Investment and Mating Strategies in Dendrobates auratus, the Green Poison-Dart Frog.

Abstract: Observations on the mating and parental behaviour of the green poison-dart frog were used to test hypotheses for the function of female-female competition in this species. The hypothesis that females compete to monopolize as many mates as possible was not supported; the hypothesis that females compete to monopolize the parental care of particular males was consistent with observations.

NEXT WEEK

Tuesday, September 13, noon seminar speaker will be ELDRIDGE ADAMS, STRI Postdoctoral Fellow.

Deceptive Communication in a Stomatopod Crustacean.

ARRIVALS

September 1, THEODORE DUDLEY, to begin his new three-year post-doctoral position at STRI. He will be studying the biophysical ecology of tropical organisms on BCI.

September 1 - April 15, 1989, DARLYNE MURAWSKI, to continue her work on the breeding structure of 3 tropical tree species with James Hamrick on BCI.

September 5 - October 15, KATHLEEN COLE, from the University of Puerto Rico, on a short-term visitor appointment. She will be working at Naos and San Blas on the histology and physiology of gonadal development in hermaphroditic fishes.

September 6 - 9, PHILLIP REISS, Director, SI Office of Design and Construction, to inspect constructions at STRI and consult with various officials.

CALENDAR

SEPTEMBER 1988						
S	M	T	W	T	F	S
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

September 5 - Labor Day is an official STRI Holiday.

September 13 - STRI Fellowship Review Meeting.

September 13 - STRI Scientific Staff Meeting.

September 15 - Scholarly Studies Proposals are due in the Director's Office.

FROM THE DIRECTOR'S OFFICE

Due to STRI's recent expansion, administrative changes have been instituted. Effective October 1st, Dr. Alan Smith will become the Assistant Director for Terrestrial Research with responsibility for existing and proposed facilities on the Barro Colorado Nature Monument, Gamboa, Ancon and the Tupper Facility.

Also effective October 1st, Dr. John Christy will become the Assistant Director for Marine Research with responsibility for existing and proposed facilities at San Blas, Galeta, Isla Grande, Naos, research vessels and diving program.

FROM BCI

On September 3rd, Dr. Joseph Wright completes five years as scientist-in-charge of BCI. Dr. Alan Smith will now be in charge of this facility.

NEW PUBLICATIONS BY STRI STAFF, FELLOWS AND RESEARCH ASSOCIATES

Howard, R.W., B.L. Thorne, S.C. Levings and C.A. McDaniel. 1988. Cuticular hydrocarbons as chemotaxonomic characters for Nasutitermes corniger (Motschulsky) and N. ephrate (Holmgren) (Isoptera: Termitidae). *Annals of the Entomological Society of America* 81(3): 395-399.

### BCI SEMINARS

BCI residents meet each Thursday evening for discussion of recent literature or for informal seminars. To allow participation by scientists from other sites, an extra boat will leave BCI at 9 p.m. on Thursday evenings, beginning September 8. Plan to take the regular launch service (Gamboa to BCI at 5 p.m.) and to join residents for dinner (\$4). Papers for discussion are available in the STRI library, from Dr. Stanley Rand in Gamboa, or on BCI. Kindly notify BCI by 10 a.m. Thursday if you plan to attend.

### TIVOLI NEWS

The Tivoli Building will be closed at 4:30 p.m. on Friday, September 2, for fumigation.

Marissa Valdes, receptionist at Tivoli, is now in charge of the STRI Mini-Bookstore.

Recent office moves--

Dr. Eric Fischer, deputy director, has moved his office to Francisco Rivera's former offices on the ground floor.

Mr. Rivera now occupies new offices in the former conference room.

A telephone has been installed in the outdoor cafeteria for the convenience of users. Calls can only be transferred using 62-3133.

### FROM THE PHOTO LAB

The STRI logo has been redrawn. Prints are available from the Photo Lab upon request.

### COMPUTER AVAILABLE

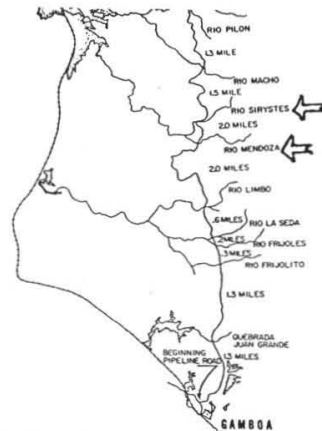
Anyone within STRI interested in an HP 87 xm computer, please contact Henk Wolda at 62-3038.

### VOLUNTEER NEEDED

A volunteer is needed to direct a conversational English group for STRI research assistants. If interested, please call the Education Office at 62-2014.

### UPDATE ON PIPELINE ROAD

Repairs on Pipeline Road continue. The bridges over the Rivers Sirystes and Mendoza are being dismantled and rotten boards replaced. Traffic will not be possible past this point from September 1-15.



### AUDUBON SOCIETY NEWS

The Panama Audubon Society announces its next monthly meeting on September 8, at 7 p.m., in the Panama Canal Commission Training Center (Balboa).

### NEWS FROM OTS / NOTICIAS DE LA OTS

The Organization for Tropical Studies in Costa Rica announces an opening for Academic Coordinator. Requirements include a graduate degree in tropical biology, forestry, agro-ecology, agro-forestry, environmental education or environment policy, as well as field experience in Latin America and fluency in Spanish and English. Job involves organization and oversight of courses, workshops and fellowship programs; institutional liaison; and other duties.

La Organización para Estudios Tropicales anuncia un curso de postgrado en ECOLOGIA DE POBLACIONES del 4 de enero al 25 de febrero 1989. El curso se ofrecerá en español. La fecha tope para entrega de solicitudes es el 15 de octubre de 1988.

OTS, Apdo. 676-2500, San Pedro Montes de Oca, Costa Rica(71-6897).

## LIBRARY NEWS

### New Books:

- ADAPTIVE PHYSIOLOGY TO STRESSFUL ENVIRONMENTS(Shlomo Samueloff and Mohamed K. Yousef, editors, 1987)  
QP82.2.S8A33 STRI.
- BIOLOGY OF PERCH AND RELATED FISH(John Craig, 1987)  
QL638.P4C88 STRI.
- BIRDS AND THEIR ATTRIBUTES(Glover Morrill Allen, 1925)  
QL673.A4X STRI.
- BLACK FLIES: ECOLOGY, POPULATION MANAGEMENT, AND ANNOTATED WORLD LIST(Ke Chung Kim and Richard Merritt, editors, 1987)  
QL537.S55B58 STRI.
- CATALOGUE OF HYMENOPTEROUS INSECTS IN THE COLLECTION OF THE BRITISH MUSEUM...(British Museum(Nat. hist.)Dept of Zoology,1853-59).  
QL566.B82X STRI. Libr has parts 1-11.
- CLASSIFICATION OF LARVAE AND ADULTS OF THE GENUS PHYLLOPHAGA(COLEOPTERA:SCARABACIDAE)(Adam G. Boving, 1942)  
QL596.S3B67 STRI. Entomological Society of Washington. Memoirs, no. 2.
- CLASSIFICATION OF THE COLEOPTERA OF NORTH AMERICA.(John L. LeConte, 1861/62-73)  
QL581.L46c STRI.
- COLEOPTERA:LAMELLICORNIA(Gilbert J. Arrow, 1910-(50)).  
QL592.A75X STRI.
- COMMON STRATEGIES OF ANADROMOUS AND CATADROMOUS FISHES(Michael J. Dadswell...et al., 1987). American Fisheries Society symposium. no. 1.  
QL639.5.C73 STRI.
- CONGRESSIONAL STAFF DIRECTORY(C.B. Brownson, 1988).  
JK1012.C76 STRI REF.
- CONSERVATION DIRECTORY(National Wildlife Federation, 1988).  
SK361.C755 STRI REF.
- CONTEMPORARY QUANTITATIVE ECOLOGY AND RELATED ECOMETRICS(G. P. Patil, and M.L. Rosenzweig, editors, 1979).  
QH541.15.M34C66X STRI.
- CONTRIBUTIONS TO THE NATURAL HISTORY OF THE LEPIDOPTERA OF NORTH AMERICA...(William Barnes...and J.H. McDunnough,19  
QL548.B3X STRI.
- CORPORATE 500. THE DIRECTORY OF CORPORATE PHILANTHROPY(Public Management Institute,1987-1988) 6th edition.  
HV41.C821 STRI REF.
- CSD FEDERAL EXECUTIVE UPDATE(Congressional Staff Directory,1987) Supplement to Congressional Staff Directory.  
JK1012.C76f STRI REF.
- CYTOSKELETON:CELL FUNCTION AND ORGANIZATION:PROCEEDINGS OF THE BRITISH SOCIETY FOR CELL BIOLOGY(Clive W. Lloyd et al., editors, 1986).Journal of cell science, supplement no.5.  
QH603.C96C997.STR1.
- DARWINISM:THE REFUTATION OF A MYTH(Sren Lvtrup, 1987).  
QH371.L911 STRI.
- EAST OF THE MOUNTAINS OF THE MOON: CHIMPANZEE SOCIETY IN THE AFRICAN JUNGLE(M.P. Ghiglieri, 1988).  
QL737.P96G55 STRI.
- ECOLOGICAL RELATIONSHIPS OF PLANTS AND ANIMALS(Henry F. Howe and Lynn C. Westley, 1988).  
QH541.H65 STRI.
- ECOLOGY OF SUMATRA(Anthony J. Whitten...(et al.),1984) 2nd editon.  
QH186.E19 STRI.
- ENCYCLOPEDIA OF ASSOCIATIONS. ASSOCIATION PERIODICALS.(Gale Research Co., 1987). 1st ed.  
AS1.E56a STRI REF.
- ENTROPY, INFORMATION, AND EVOLUTION: NEW PERSPECTIVES ON PHYSICAL AND BIOLOGICAL EVOLUTION(Bruce H. Weber, David J. Depew, and James D. Smith, editors, 1988).  
QH359.E57 STRI.
- ENVIRONMENTAL PHYSIOLOGY OF PLANTS(A.H. Fitter and R.K.M. Hay, 1987)2nd edition.  
QK711.2.F566X STRI.
- ETHNOBOTANY OF THE CHACOBO INDIANS, BENI, BOLIVIA(Brian M. Boom,1987).Advances in economic botany; no. 4.  
F3320.2.C36B66 STRI.
- EVOLUTION OF BIRD-SONG, WITH OBSERVATIONS ON THE INFLUENCE OF HEREDITY AND LIMITATIONS(Charles A. Wittchell, 1896).  
QL698.W8X STRI.
- EVOLUTIONARY BIOLOGY OF ORTHOPTEROID INSECTS(Baccio M. Baccetti, 1987).  
QL506.E96 STRI.
- FEDERAL INFORMATION SOURCES AND SYSTEMS(GPO, 1984).  
JK6.F295 STRI REF.
- FEDERAL STAFF DIRECTORY(Congressional Staff Directory,1987).  
JK6.F297 STRI REF.
- FESTIVALS AND DANCES OF PANAMA(Lila R. Cheville and Richard A. Cheville, 1977?).  
GT4827.C5Z STRI.
- FLOWERS, FRUITS AND LEAVES(Sir John Lubbock,1886).  
QK81.A94 STRI.
- FOREIGN FINCHES IN CAPTIVITY(Arthur G. Butler,1899).  
QL696.P246B88 STRI.
- FOURTEENTH SESSION OF THE ASSEMBLY, PARIS,17 MARCH-1 APRIL 1987: REPORTS OF GOVERNING AND MAJOR SUBSIDIARY BODIES/INTERGOVERNMENT OCEANOGRAPHIC COMMISSION(IOC, 1987).  
qGC57.I61 STRI.
- FROM INDIVIDUAL TO COLLECTIVE BEHAVIOR IN SOCIAL INSECTS:LES TREILLES WORKSHOP(Jacques M. Passteels and Jean-Louis Deneubourg, 1987).Experientia supplementum; vol. 54.  
QL569.4.F76 STRI
- GANNET: A BIRD WITH A HISTORY(John Henry Gurney, 1913).  
QL696.P48G98 STRI.
- GENETICS, PALEONTOLOGY, AND MACROEVOLUTION(Jeffrey S. Levinton,1988).  
QH366.2.L47 STRI.
- LOS GRUPOS POPULARES DE LA CIUDAD DE PANAMA A FINES DEL SIGLO DIECINUEVE(Alfredo Navarro Figueroa,1987).  
F1576.P2F431 STRI.
- GYPSY MOTH...(Edward Howe Forbush,1896).  
SB945.G9F6X STRI.
- HEALTH AND DISEASE(Rene J.Dubos, 1965).  
RB151.D817 STRI.
- HISTOIRE NATURELLE DES INSECTES. GENERA DES COLEOPTERES, OU EXPOSE METHODIQUE ET CRITIQUE DE TOUS LES GENRES PROPOSES JUSQU'ICI DANS CET ORDE DINSECTES, PAR M. TH. LACORDAIRE(J.T.Lacordaire,1854-).  
QL573.L14X STRI.
- HISTOIRE NATURELLE DES INSECTES, COLEOPTERES. AVEC UNE INTRODUCTION RENFERMENAT L'ANATOMIE ET LA PHYSIOLOGIE DES ANIMAUX ARTICULES, PAR M. BRULLE.(Francis Casteinau,1840).  
QL573.C34 STRI.
- INFORME DE DATOS OCEANOGRAFICOS DE LA PLATAFORMA SURORIENTAL DE CUBA Y AGUAS OCEANICAS ADYACENTES.(Maria Riera Lluís,1981).  
GC531.L59 STRI.
- INSECT LIFE: AN INTRODUCTION TO NATURE-STUDY AND A GUIDE FOR TEACHERS...(John Henry Comstock, 1929).  
QL464.C727X STRI.
- INSECT MORPHOGENESIS(Fritz E. Schwalm,1988). Monographs in developmental biology;v. 20.  
QL495.5.S39 STRI.
- INSECTS OF AUSTRALIA AND NEW ZEALAND(Robin John Tillyard,1926).  
QL487.T5X 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.(E.C. Zimmerman,1948- ).  
QL489.H325X STRI.
- INSETOS DO BRASIL(Costa Lima, 1939--).  
QL481.B8L5X STRI.
- INTRODUCTION TO THEORETICAL NEUROBIOLOGY.VOLUME 2, NONLINEAR AND STOCHASTIC THEORIES(Henry C. Tuckwell, 1988). Cambridge studies in mathematical biology;8.  
QP361.T898 STRI.
- KEW INDEX FOR...(R.A. Davies and K.M. Lloyd,compilers,1987).  
QK11.1383 STRI REF.

New Books:

Part II

- LEPIDOPTERAN ANATOMY(John L. Eaton,1988).  
QL562.E28 STRI.
- LIST OF THE INSECTS OF NEW YORK, WITH A LIST OF SPIDERS AND CERTAIN OTHER ALLIED GROUPS.(Mortimer Demarest Leonard,1928).  
QL475.N7L4 STRI.
- LOUIS AGASSIZ; HIS LIFE AND CORRESPONDENCE.(Elizabeth Cabot Agassiz,1885).  
QH31.A2A26 STRI.
- MANGROVE ECOSYSTEMS; RESEARCH METHODS(Samuel G.Snedaker and Jane G. Snedaker,editors,1984) 2nd copy.  
QK938.M27M27 STRI.
- MINERALS OF MEXICO(William D. Panczner,1987).  
QE377.M6P36 STRI.
- MONOGRAPHIE DES COCCINELLIDES, PAR E. MULSANT...(M.E. Mulsant,1866).  
QL596.C65M9 STRI.
- MOUNTAINS IN THE SEA; THE STORY OF THE GOUGH ISLAND EXPEDITION(Martin W. Holdgate,1958).  
DT671.G6H72 STRI.
- MUSCULATURE OF THE LABRUM, LABIUM, AND PHARYNGEAL REGION OF ADULT AND IMMATURE COLEOPTERA...(Carl Kester Dorsey,1943).  
Smithsonian miscellaneous collections,v.103, no. 7.  
QL597.D6 STRI.
- OCEAN BASINS AND MARGINS(Alan E.M. Nairn and Francis G. Stehli, editors,1973--). v. 7B. The Pacific Ocean.  
QE39.N27X STRI.
- ORGANIZATION OF COMMUNITIES; PAST AND PRESENT(John H.R. Gee and Paul S. Giller, editors, 1987).  
QH540.B75 STRI.
- ORNITHOLOGIE NORDOST-AFRIKA'S :DER NILQUELLEN-UND KUSTEN GEBIETE DES ROTHEN MEERES UND DES NORDLICHEN SOMAL-LANDES.(M.Th. von Heuglin,1869).  
QL692.A1H59 STRI.
- ORNITOLOGIA BRASILEIRA(Helmut Sick,1984).  
QL689.B8S53 STRI
- PARQUE NACIONAL CORCOVADO;PLAN DE MANEJO Y DESARROLLO(Christopher Vaughan,1981).  
SB484.C8V36 STRI.
- PATTERN, MECHANISM, AND ADAPTIVE SIGNIFICANCE OF TERRITORIALITY IN HERRING GULLS(LARUS ARGENTATUS)(Joanna Burger,1984).  
Ornithological monographs; no. 34.  
QL696.C46B95 STRI.
- PHOTOSYNTHESIS IN CONTRASTING ENVIRONMENTS(N.R. Baker and S.P. Long, editors, 1986).Topics in photosynthesis; v. 7.  
QK882.P556 STRI.
- PREHISTORIC SETTLEMENT PATTERNS IN THE LOWER SANTA VALLEY, PERU; A REGIONAL PERSPECTIVE ON THE ORIGINS AND DEVELOPMENT OF COMPLEX NORTH COAST SOCIETY.(David J. Wilson,1988).  
F3429.1.S37W55 STRI.
- REVISION OF THE NORTH AMERICAN MOTHS OF THE FAMILY OECOPHORIDAE, WITH DESCRIPTIONS OF NEW GENERA AND SPECIES.(John Frederick Gates Clarke,1941).U.S. National Museum .Proceedings,v.90,p.33-286.  
QL561.043C598r STRI.
- RHYNCHOPHORA OR WEEVILS OF NORTH EASTEN AMERICA(Willis Stanley Blatchley and C.W. Leng...,1916).  
QL596.C9B64 STRI.
- SEXUAL SELECTION;TESTING THE ALTERNATIVES;REPORT OF THE DAHLEM WORKSHOP ON SEXUAL SELECTION...(J.W.Bradbury and M.B. Anderson,editors, 1987).  
QL761.D33 STRI.
- SENIOR TROPICAL READER(Sir Francis Watts and C.H. Branch,1918).  
G910.W34 STRI.
- SISTEMAS AGROFORESTALES; PRINCIPIOS Y APLICACIONES EN LOS TROPICOS.(OTS, 1986).  
S494.5.A45S62 STRI.
- SNAPPERS OF THE WORLD; AN ANNOTATED AND ILLUSTRATED CATALOGUE OF LUTJANID SPECIES KNOWN TO DATE.(George Rollason Allen,1985).  
qQL638.L9A42 STRI REF
- SOCIAL ORGANIZATION;ESSAYS PRESENTED TO RAYMOND FIRTH.(Maurice Freedman,1967).  
GN29.S67 STRI.
- SYSTEMATICS AND ECONOMIC BOTANY OF THE OENOCARPUS--JESSENI(A PALMAE) COMPLEX.(Michael J. Balick, 1986.)  
Advances in economic botany; v. 3.  
QK495.P17B19 STRI.
- TENTH ANNUAL LARVAL FISH CONFERENCE...(Robert D. Hoyt, editor,1987).American Fisheries Society symposium, no. 2.  
QL639.25.L33 STRI.
- TEMPERATURE BIOLOGY OF ANIMALS(Andrew R. Cossins, 1987).  
QP135.C8 STRI.
- VIAJEROS Y CRONISTAS EN LA AMAZONIA COLOMBIANA...(Beatriz Angel Alzate, 1987).  
F2546.A44 STRI REF
- VOYAGE AUTOR DU MONDE PAR LES MERS DE L'INDE ET DE CHINE EXECUTE SUR LA CORVETTE DE LETATE LA FAVORITE PENDAT LES ANNEES 1830,1831 ET 1832 ...(Cyrille P.T. Laplace,1833-39).  
Q115.L32X STRI.

