



No. 8

## S T R I NEWSLETTER

February 24, 1989

### SEMINARS - ANCON CONFERENCE ROOM

Tuesday, February 28, noon seminar speaker will be STEPHEN EMLEN, Cornell University.

Reverse Sexual Selection and Sex Role Reversal in Jacanas.

Abstract: Jacanas are common birds on the rivers and in the marshlands of Panama. They are of particular interest to evolutionary behaviorists because they exhibit the most extreme sex role reversal known among higher vertebrates. Females are larger and more aggressive than males. Males, in turn, perform all parental care duties, including full incubation of the eggs and care of the chicks. Females compete intensively for sexual access to "available" males, and highly successful females may simultaneously be mated to as many as four male mates. Research plans and preliminary results concerning such issues as reversed sexual selection, multiple paternity of clutches, and female infanticide will be presented.

### NEXT WEEK

Tuesday, March 7, noon seminar speaker will be JORGE BRICEÑO, Universidad de Panamá.

Hydrilla en el Lago Gatún: un Reporte de su Situación Biológica.

### ARRIVING

February 26 - March 2, WILLIAM EBERHARD, to attend the fellowship review meeting.

February 27 - March 2, ROBERTA RUBINOFF, SI Office of Fellowships and Grants, and MEREDITH JONES, SI National Museum of Natural History, to attend the Tropical Biology Fellowship Meeting.

February 27 - March 1, nine students from the "Ecología de Poblaciones" OTS course, to visit STRI facilities.

February 28 - April 28, FRED THOMPSON, University of Florida, to work on a systematic revision of neotropical hydrobiid snails.

February 28 - March 9, JOSEPH YAVITT, Cornell University, for 10 days to do soil studies on BCI.

March 1 - 8, ALAN WATSON and JACKIE PHOENIX, from "Trees for Life", Scotland, to photograph flora on BCI.

### DEPARTING

February 28 - March 5, ERIC FISCHER, to New York to attend the National Governors' Association Conference on Global Change.

### CALENDAR

MARCH 1989						
S	M	T	W	T	F	S
	5	6	7	8	9	10
	12	13	14	15	16	17
	19	20	21	22	23	24
	26	27	28	29	30	31

March 5, JOHN ARMER, SI Health Services, and TOM BRESSON, SI Safety Office, will arrive to meet with STRI staff.

March 12 - 16, THOMAS McCANCE, SI Director of Development and Deputy Assistant Secretary for External Affairs, will visit STRI.

March 15, Visit of University of Panama professors to BCI.

March 21, Scientific Staff Meeting.

March 24, Good Friday is a STRI holiday and a Panamanian holiday.

March 27, Deadline for arrival of Scholarly Studies and James Smithson Society proposals at STRI Director's Office.

## REMINDER

The Tropical Biology Fellowship Meeting will be held on Wednesday, March 1, at 9:30 a.m. in the Ancon Conference Room.

## PERSONNEL NEWS

**VICTOR HUGO HERNANDEZ, STRI**  
Diving Officer, resigned February 1.

During HELY CORTEZ's absence on maternity/annual leave from February 21 to June 30, Roxana Duran will handle payroll/personnel problems. Also during this period, MARITZA DE PERURENA will be assisting in the Accounting Department.

### **Personnel Changes:**

ISIS ESTRIBI will leave the Office of Education and Conservation to fill the position as new secretary at the Facilities Management Office in Tivoli beginning March 6.

MARISSA VALDES, previously the Tivoli receptionist, is the new secretary of the Office of Education and Conservation. BARBARA CUSATTI will be working out of BCI beginning March 20, as Housing and Dining Manager.

### **New Personnel:**

RUBEN LOPEZ, outboard mechanic; UNA SMITH, data analyst, Tropical Forest Dynamics Project; AMERICA STAFF, Tivoli receptionist.

## FROM THE DIRECTORS OFFICE

All mail addressed to ALAN SMITH should be sent for forwarding to Audrey Smith, at the Director's Office.

## FROM J. WRIGHT AND A. HERNANDEZ, BCI

Significant progress has been made against poaching in the Barro Colorado Nature Monument (BCNM). A crisis occurred between April and July 1986, when poachers threatened our ability to conduct research on BCI. Equipment left in the forest was stolen or vandalized and animal entrails were found with dismaying frequency. That August the operating plan of the guardabosques was revised. For the first time patrols and ambushes took place in the forest at night, and the number of patrols was increased by 100% by reducing the number of men per patrol. The figure on the next page demonstrates how our best index of the intensity of poaching in the BCNM has responded. The chart gives the number of contacts with poachers by year for BCI and for the peninsulas of the BCNM. Contacts include arrests, sightings, shots heard, gunshot animals, hidden cayucos discovered, and fresh tracks and shells.

We believe the recent decline in the number of contacts with poachers can be attributed to the arrest of 40 poachers since August 1986, and to the wide dissemination of the arrests in the local press. The increase in contacts between 1986 and 1987 on the peninsulas probably reflects changes in operating procedures and not a real jump in poaching activity. After regaining control of BCI in late 1986, frequent night patrols began on the peninsulas in early 1987, and poaching activity that was probably always present was detected for the first time. Again, on the peninsulas, a reduction in contacts with poachers occurred in 1988.

The STRI community is indebted to many people for this progress. The Policia Forestal of the Fuerzas de Defensa assign three men to the BCNM at all times and closely coordinate activities and sanctions with INRENARE. The SI Office of Protection Services provided funds to

upgrade radio communications and to purchase new equipment, including night vision devices. Elena Lombardo, Gilberto Ocaña, James Karr and Ira Rubinoff gave the protection of the BCNM the highest priority which resulted in an agreement for joint action between the Fuerzas de Defensa, STRI and INRENARE to maintain the integrity of the BCNM under SI's custodianship. But, most important are the sacrifices and dedication of the guardabosques and the members of the Policia Forestal who man the Nature Monument 24 hours each day.

#### COMUNICADO DE J. WRIGHT Y A. HERNANDEZ, BCI

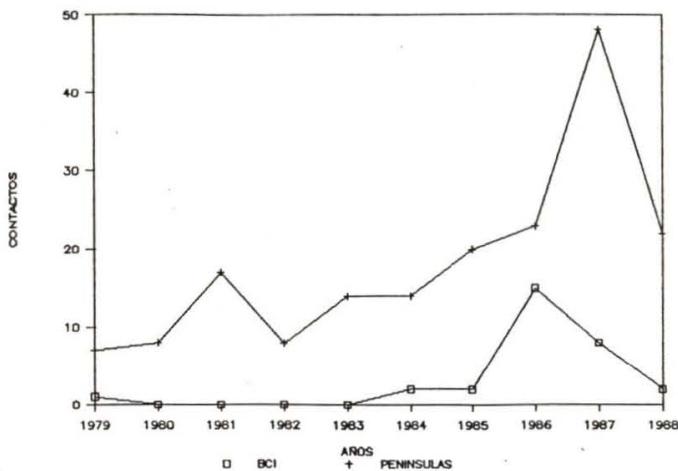
Se ha logrado un avance significativo contra la caza furtiva en el Monumento Natural de Barro Colorado (MNBC). Entre abril y julio de 1986, se presentó una crisis cuando cazadores furtivos amenazaron nuestra capacidad de llevar a cabo investigaciones en BCI. El equipo que se dejaba en el bosque desaparecía o resultaba vandalizado, y se encontraban con frecuencia tripas de animales. En agosto, el plan operativo de los guardabosques fue revisado. Por primera vez se organizaron patrullas y emboscadas en el bosque de noche, y se aumentó en un 100% el número de patrullas reduciendo el número de hombres por patrulla. La gráfica al final muestra como el mejor índice de intensidad de caza furtiva en el MNBC respondió a estas medidas. La gráfica muestra el número de contactos con cazadores por año en BCI y las penínsulas del MNBC. Los contactos incluyen arrestos, detección de cazadores, tiros escuchados, animales heridos de bala, detección de cayucos escondidos, y observaciones de huellas frescas y casquillos de balas.

Se cree que la baja reciente en el número de contactos con cazadores furtivos se puede atribuir al arresto de 40 cazadores desde agosto 1986, y a la amplia difusión que se le dió a los arrestos en la prensa local. El aumento de contactos con cazadores entre 1986 y 1987 en las penínsulas probablemente es un

reflejo de los cambios que se dieron en los procedimientos operativos, y no reflejan un aumento verdadero en la cacería. Despues de lograr el control de la caza furtiva en BCI a finales de 1986, se iniciaron frecuentes patrullajes nocturnos en las penínsulas a principios de 1987, y se detectó por primera vez una caza furtiva que probablemente siempre existió. Igualmente, durante 1988 disminuyeron los contactos con cazadores furtivos en las penínsulas.

La comunidad de STRI le debe este progreso a muchas personas e instituciones. La Policia Forestal de la Fuerzas de Defensa ha asignado a tres unidades al MNBC continuamente, y coordina actividades y sanciones muy de cerca con INRENARE. La Oficina de Protección del Smithsonian suministró fondos para la adquisición de equipo nuevo, incluyendo aparatos de visión nocturna, y para el mejoramiento de equipo de comunicaciones por radio. Elena Lombardo, Gilberto Ocaña, James Karr e Ira Rubinoff le dieron la más alta prioridad a la protección del MNBC, lo cual culminó en un acuerdo de acción conjunta entre las Fuerzas de Defensa, STRI e INRENARE, para mantener la integridad del MNBC, bajo custodia de STRI. Pero sobre todo debemos destacar los sacrificios y la dedicación de los guardabosques y de los miembros de la Policia Forestal, quienes protegen el Monumento Natural 24 horas al día.

CONTACTOS CON CAZADORES



## LIBRARY NEWS

### New Book List

ATLANTIDE-REPORT: SCIENTIFIC RESULTS OF THE DANISH EXPEDITION TO THE COASTS OF TROPICAL WEST AFRICA, 1945-1946 (Kbenhavns Universitet & British Museum (Natural History), 1945-..)

Q115.D3AEZ STRI.

A BIBLIOGRAPHY OF THE EARLY LIFE HISTORY OF FISHES (RD Hoyt, 1988) Z5973.L33H86 1988 STRI.

THE BOOK OF NATURALISTS: AN ANTHOLOGY OF THE BEST NATURAL HISTORY (W. Beebe, editor, 1988)  
QH81.B715 1988X STRI.

LE CANAL DE PANAMA: L'ISTHME AMERICAN, EXPLORATIONS: COMPARAISON DES TRACES ETUDEIS, NEGOCIATIONS; ETAT DES TRAVAUX (LNB Wyse, 1886)  
F1569.C2W99 STRI.

CURRENT PROTOCOLS IN MOLECULAR BIOLOGY, 2 vols. (FM Ausubel et al, editors, 1988)  
QH506.C87 1988X STRIREF.

FACTORS OF EVOLUTION: THE THEORY OF STABILIZING SELECTION (II Schmalhausen, 1986)  
QH371.S45413 1986X STRI.

INTRODUCTION TO THE STUDY OF MEIOFAUNA (RP Higgins & H. Thiel, editors, 1988)  
QL120.I584 1988X STRI.

SILICICLASTIC SHELF SEDIMENTS: BASED ON A SYMPOSIUM SPONSORED BY THE SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS (RW Tillman & CT Siemers, 1980)  
QE471.15.S25S22 1980 STRI.

WHALES, DOLPHINS & PORPOISES (R. Harrison & M. Bryden, consulting editors, 1988)  
QL737.C4W442 1988X STRI.

### EVOLUTION of the ANTARCTICA PENGUIN

KOLOSTA  
HOUSTON  
POST

