

# STRI newsletter

February 12, 1993

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panamá

No. 7

## TUPPER CENTER SEMINARS

Tue, Feb 16, noon seminar speaker will be Bridget Stutchbury, York University, Toronto.

*High rates of EPF's in monogamous songbirds: a temperate zone bias?*

Hooded Warblers are typical monogamous songbirds: fingerprinting results revealed that about half the females produce extra-pair young each breeding season. Indirect evidence suggests that females have some control over which males obtain EPFs. Late nests and second broods had lower EPF rates than first nests. Traditional models for the effects of breeding synchrony on EPF rates predict that asynchrony will increase EPF rates. However, these models were based on the assumption that males control EPF's, and therefore EPF rates were simply a function of the operational sex ratio. A new model that makes into account partial control by females indicates that breeding asynchrony can reduce the payoff to males from pursuing an extra-pair mating strategy. Most studies of EPF rates in monogamous songbirds came from the temperate zone where breeding synchrony is relatively high. In tropical resident songbirds with prolonged breeding seasons, EPF rates are predicted to be low.

## Special Seminar at Tupper Center

Wed, Feb 17, 10:30 am seminar speaker will be David Zeh, STRI.

*Oscillating sexual selection and the male variability paradox.*

## Seminar at Gamboa School

Thu, Feb 18 at 6:15 pm. The speaker will be M. Donnelly, Univ. of Miami.

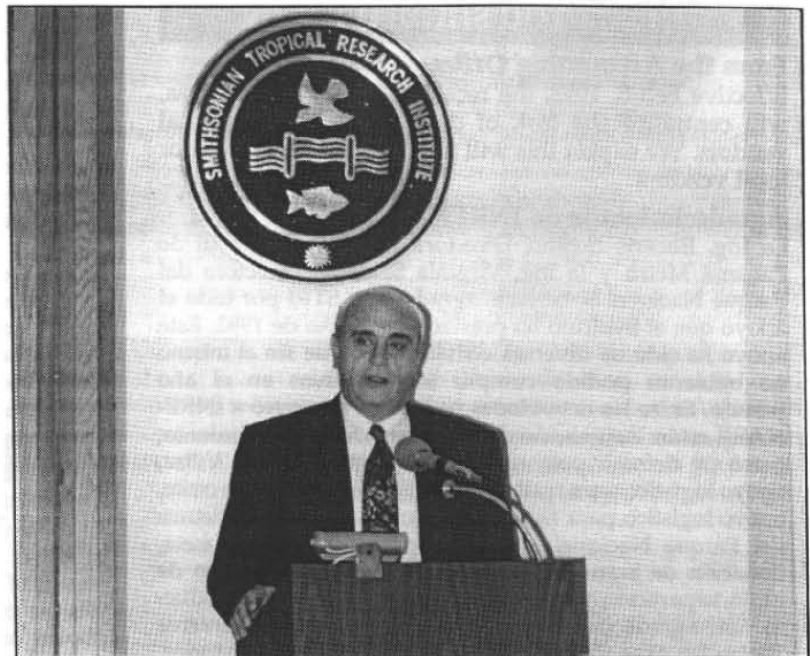
*Individual and demographic effects of reproductive resources supplementation on male strawberry poison frogs (Dendrobates pumilio).*

Please contact Akimi Adler to arrange for supper. There will be a late boat back to BCI at 8 pm.

## PEOPLE

### Arrivals

- G. Goldstein, R. Meinzer and P. Jackson, Mellon Fellows, Feb 15-29, to continue work on study aspects of stable isotopes and hydrilla relations on trees at BCI. Also arriving to collaborate on this project is J. Cavalier, U. de los Andes, Feb 19-25.



*The recent conference by Ceferino Sanchez at the Tupper Center concluded the STRI-U. of Panama series, that consisted of four seminars. The series will be reinitiated when the new academic year begins in May 1993. ••• La reciente conferencia del Dr. Ceferino Sánchez finalizó la serie de conferencias STRI-U. de Panamá, que consistió de cuatro seminarios. Se reiniciará este programa cuando comience el nuevo año académico en mayo de 1993. (Photo: A. Montañer)*

- Matthew Gompper, predoctoral fellow, Feb 15 - Mar 30 to continue work on the importance of genetic relatedness to the exhibition of social behavior in the coati (*Nasua narica*) on BCI.
- Hans Schnitzler, University of Tubingen, Feb 15-28, to work on Charles Handley's project of demography and natural history on BCI and behavior of bats on BCI.
- Uldrich Zimmerman, Frank Turner, Heike Schemske, Rainer Berkert, Feb 16 - Mar 16, to collaborate with Guillermo Goldstein.
- Dolores Piperno, scientific staff, Feb 18, to work at STRI for the next seven months.
- Roberta Rubinoff, director, SI Fellowships & Grants, Feb 19 - Mar 24, for fellowship meeting.
- David Roubik, scientific staff, Feb 19 - Mar 1st, to attend fellowship meeting and consult with staff.
- Charles Handley, NMNH, Feb 17 - Apr 22, to continue research on the evolution and biogeography of terrestrial vertebrates in Bocas del Toro.

### Departures

- Ira Rubinoff, director, Feb 16-23, on official business to Washington, DC.
- Anthony Coates, deputy director, Feb 17-24, on official business to Washington, DC.
- Ricardo Beteta and Elizabeth Sanchez, STRI library staff, will be attending the IV Encuentro Nacional de Profesores y Estudiantes de Bibliotecología, in Santiago de Veraguas, Feb 17-19.

## THINGS YOU SHOULD KNOW

### From the Accounting Office

Effective Feb 8, 1993, the receptionist, Marcela Vargas, will centralize the task of delivering checks to local vendors. We expect this will improve the service to our local vendors.

### Agradecimientos de INRENARE

La Ing. Eucaris Espino, Directora Ejecutiva Regional de Panamá Metro y la Ing. Virginia Saldaña, Directora del Parque Nacional Soberanía, agradecen a STRI por todo el apoyo que el instituto ha prestado en el año de 1992. Este apoyo ha sido en diversas actividades y que sin el mismo no hubieran podido cumplir sus objetivos en el año pasado. Entre las actividades en las que se apoyó a INRENARE están: Asignación del vehículo y su mantenimiento, curso de defensa personal para el Agro. Euclides Villar, apoyo logístico para realizar la rotulación en el límite oeste, apoyo logístico para eliminar un rancho que estaba dentro del Parque Nacional Soberanía, patrullajes en avioneta, donación de juguetes en las comunidades, asignación de radio, reparación y mantenimiento del camino de oleoducto. Este agradecimiento se hace extensivo a los ingenieros Alejandro Arze y Carlos Tejada, y a Alejandro Hernández, Georgina de Alba, María Morello y Dorita Justo.

### Programa de Maestría en Manejo de Vida Silvestre

El Programa Regional en La Universidad Nacional de Costa Rica anuncia su Programa Regional en Manejo de Vida Silvestre para Mesoamérica y el Caribe, con el objetivo general de formar profesionales en el campo de la vida silvestre para América Latina dando prioridad a la región de Mesoamérica y el Caribe. Los egresados de este programa de posgrado serán capaces de planificar y desarrollar programas de investigación y extensión para el manejo de las especies silvestres y su hábitat dentro de las estrategias de desarrollo nacional. Este programa está auspiciado por el Fondo Mundial de Vida Silvestre y el Servicio de Peces y Vida Silvestre (EUA) de la Organización de Estados Americanos. Inicio: septiembre de 1993. La fecha tope para entrega de documentos es el 31 de mayo. Para mayor información contactar: Programa Regional en Manejo de Vida Silvestre para Mesoamérica y el Caribe, Universidad Nacional, Apartado 1350, 3000 Heredia, Costa Rica, Tel: (506) 377039, Fax: (506) 377036, y Oficina de Educación.

### Asistente de Investigación

Marco L. Diaz would like to offer his services as a research assistant to a STRI scientist researcher. He has a B.S. in marine biology from the University of Tampa, Florida, was a research assistant for Eric Fisher (Naos and San Blas) and for the Oil Spill Project. He also assisted the Office of Education with the development of the exhibit plan for Culebra Point and has experience in translations, and speaks, reads and writes in Spanish, English and Italian. He has working knowledge of the following computer pro-

grams: Word Perfect, Lotus, DBase, Sigmaplot, Optical Pattern Recognition System and Jaba. He has experience with audiovisual equipment and underwater photography and is a certified diver. Anyone interested, can contact him at 61-4964. ••• Marco L. Díaz desea brindar sus servicios como asistente de investigación en STRI; posee título en Biología Marina de la Universidad de Tampa, FL., trabajó como asistente de investigación para Eric Fisher (Naos y San Blas) y en el proyecto de derrame de petróleo (Naos y Galeta). Asistió en la Oficina de Educación en la elaboración del plan para la exhibición de Culebra Point, Naos, y tiene experiencia en traducciones. Habla, lee y escribe español, inglés e italiano; maneja programas de Word Perfect, Lotus, DBase, Sigmaplot, Optical Pattern Recognition System, Jaba; maneja equipo fotográfico y audiovisual y tiene conocimientos de buceo avanzado y fotografía submarina. Interesados en contactarlo favor llamar al tel. 61-4964.

## ANNOUNCEMENTS

### Opportunity Available ••• Oportunidad Disponible

To celebrate the 70th anniversary of Barro Colorado Island in Apr of this year, we plan to develop an exhibit of historic photos of BCI. We are looking for a person to take charge of this project starting Feb 22. Duties include the selection of photos and elaboration of the captions in English and Spanish. Those interested, please send letter indicating relevant experience to the Office of Personnel, by Feb 18. ••• Para celebrar el 70 aniversario de la Isla de Barro Colorado se planea desarrollar una exhibición, utilizando fotografías históricas de la Isla. Se contratará a una persona para encargarse de este proyecto por un período aproximado de seis meses a partir del 22 de febrero. Entre las responsabilidades están la escogencia de las fotografías y de las leyendas de las mismas tanto en inglés como en español. Los interesados favor enviar carta de interés indicando su experiencia en este campo a la Oficina de Personal, antes del 18 de febrero.

### From Bookstore ••• De la Librería

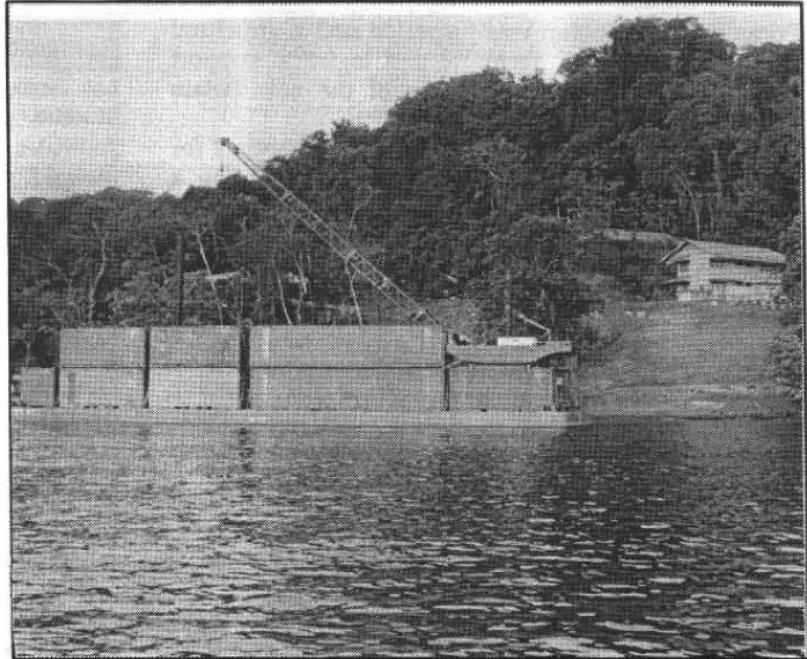
The bookstore will be closed on Feb 17-18 for inventory. ••• La librería de STRI estará cerrada los días 17 y 18 de febrero por inventario.

### Scholarship Program

Federal Employee Education and Assistance Fund (FEEA) scholarship applications are now available to federal employees with at least 3 years federal service and their dependent family members. Applications are being accepted for scholarships of \$300 to \$1,200 for 1993-94 school year. Applications judged on a essay, a recommendation, awards, extracurricular activities/community service as well as grades, test scores....must have grade point average of at least 3.0 on 4.0 scale and plans to enroll in 2 or 4 yr. post-secondary, graduate or post-grad program working toward accredited degree. June 4, 1993 is application deadline. The STRI Office of Human Resources has requested applications from the Ombudsman's office in Washington. Chandra Heilman will be available for questions at (202) 357-3261. •••

### Programa de Becas

Ya están disponibles las solicitudes para becas del Fondo para Educación y Asistencia para Empleados Federales (FEEA). Son elegibles aquellos empleados que tengan un mínimo de 3 años de servicio federal y sus dependientes inmediatos. Se aceptarán solicitudes para becas de \$300 a \$1,200 para el año escolar 1993-94. Se escogerán los ganadores por medio de trabajos escritos, recomendaciones, honores, actividades extra-curriculares o servicio comunitario, y por promedios y calificaciones...deberán tener promedio mínimo de 3.0 en escala de 4.0 y que planeen matricularse en algún plan de estudios de 2 o 4 años a nivel universitario o de post-grado para obtener un título. Fecha límite para recibir solicitudes: 4 de junio de 1993. La Oficina de Recursos Humanos de STRI ha solicitado formularios a la Oficina del Ombudsman en Washington. Llamar a Chandra Heilman para mayor información al (202) 3578-3261.



The containers arriving at BCI are transporting construction materials for the new laboratory on the island. The construction activities were initiated in January. ••• Los contenedores están transportando los materiales para el nuevo laboratorio en la Isla de Barro Colorado. La construcción se inició en enero.

(Photo: A. Montaner)

### STRI UPDATE

#### Office of Design and Construction - Mission and Major Accomplishments

The Panama Branch of the Office of Design and Construction (ODC) provides the Smithsonian Tropical Research Institute (STRI) with architectural, engineering and other professional services including planning, design, construction and fiscal management. ODC administers the expenditure of federal and trust funds, prepares long range facilities program requirements, develops funding requirements for budget submittal related to STRI's physical plant, and provides consultation for executive decisions.

The scope of ODC's work includes all construction, restoration, renovation, and space alteration programs that use either federal or trust funds for implementation. Services may be provided either by the staff professionals or by consultant architects and engineers under contract to ODC.

Since 1985, ODC's major accomplishments in Panama include the construction of the Tupper Laboratory and Conference Center, the BCI Kitchen/Dining, dormitories, path-

way, utilities backup generator the complete renovation of Bldg. 183 Gamboa, the Naos Sewage Treatment Plant, the Naos backup electrical generator, the New Galeta Pier, and the complete renovation of Bld. 401 Tivoli and the Pastor's House.

During 1992, ODC's major accomplishments included the completion of the Naos Sewage Plant and the renovation of Bldg. 401 (Tivoli) and Pastor's House. Also completed in 1992 were minor/general repairs at different sites as well as the installation of a new submarine-grade underwater electrical cable between Frijoles and BCI at a cost of more than \$285,000. This cable replaces the old cable installed almost 30 years ago that suffered damages just days before the new cable was to be installed. The installation of this new cable closes a cycle of complete electrical upgrade for BCI that began with a new transformer, generator, conductors, etc. and continued with the installation of new step-down transformers in the Frijoles substation.

Four pre-fabricated chemical storage units were purchased during 1992. Two were installed at Naos, one at Tupper and on/ temporarily at Gamboa.

Also in 1992, a structural assessment of Bldg. 401 Tivoli, with the use of sophisticated scanning equipment, determined the 60-year-old structure to be structurally sound and in good condition. However, a similar assessment of the Naos pier revealed that the entire structure should either be replaced or totally reconstructed. The newly acquired

Bocas del Toro Station was inspected and a structural assessment prepared. Technical and logistical support was provided for the installation of the new Potain crane in Parque Metropolitano.

ODC also awarded in 1992 a \$3 million contract for the construction in BCI of a new laboratory building, a new pier, new workers' housing, a dormitory building for scientists and extension of pathway and utilities. Construction at the site is scheduled to begin early in 1993. ODC also provided support in the renovation work for the new STRI Bookstore, and the renovation and exterior cleaning of the Gamboa school.

Additionally, the following designs on planning projects were either initiated or completed during 1992:

- Installation of new fire pump, holding tank and sprinkles at Naos.
- Construction of a new pier in Gamboa, just north of the Gamboa town site.
- A complete update of the STRI Master Development Plan of 1985.
- a back-up electrical generator for the Tivoli/Tupper/Library complex.
- a new system to increase the electrical capacity at BCI.
- a new storage building at Naos for ultra low freezers.
- the renovation of the 2nd floor of Bldg. 352 Naos (Surfside Theater).
- the installation of a new central air conditioner system for the ground floor of Naos Bldg. 352.
- Renovation and construction of a new mezzanine in Naos Bldg. 359 (Shop).
- Design of a new research vessel.
- Renovation of Ancon Building 235 for the Center for Tropical Paleocology.
- Renovation and expansion of the STRI Library.

During 1993, ODC has a total of 27 projects scheduled for minor repairs, renovations, and alterations.

### Last Minute News ••• Al Cierre

All government offices will close from Feb 22-24 for Carnival. Please plan ahead if your need to do any business that involves government offices.

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Todas las oficinas de gobierno estarán cerradas del 22 al 24 de febrero por la celebración del Carnaval. Se ud. tiene que hacer algún trámite oficial, agradeceríamos que tome esto en cuenta.

### STRI NEW BOOKLIST

- Los Acaros en alergia / Carlos Pérez-Santos y Ana G. Moreno. RA641.M5P43 1991 STRI.
- Animales en el experimento / Paul Raths y Gustav-Adolf Biewald. QL55.R23 1988 STRI.
- Aquatic microbiology / G. Rheiheimer; [translated from the German by Norman Walker]. QR105.R49513 1992X STRI.
- Clonal growth in plants: regulation and function / edited by Jan van Groenendael and Hans de Kroon. QK826.C64 1990 STRI.
- Dinâmica de populações de Ithomiinae (Lep., Nymphalidae) em Sumar-SP./João Vasconcelos Neto. QL561.N5V33 1980 STRI.
- Fish physiology, v.12, part A & B: The cardiovascular system, edited by W.S. Hoar and D.J. Randall. QL639.1.H67 v.12A, v.12B STRI.
- Fungi in vegetation science / edited by W. Winterhoff. QK604.2.C64F98 1992 STRI.
- Genética ecológica de Chelymormpha cribraria F. 1775 (Cassidinae Chrysomelidae) / João Vasconcelos Neto. QL596.C5V33 1987 STRI.
- Interpretación ambiental: una guía práctica para gente con grandes ideas y presupuestos pequeños / San Ham. QH75.H3618 1992X STRI.
- The Management of crocodiles in captivity / prepared by Melvin Bolton. SF515.5.C75B65 1989X STRI.
- North American polypores / R.L. Gilbertson and L. Ryarden; with drawings by R.L. Gilbertson. QK629.P6G46 1986 STRI.
- Ofidios de Colombia / C. Pérez-Santos y A.G. Moreno. QL666.O6S23 1988 STRI.
- Plantas acuáticas de Panamá (Tracheophyta) / por Rodolfo E. Mendoza B., José E. González. Ref QK221.M46 1991X STRI.
- Proceedings of the Tenth International Diatom Symposium / edited by Heikki Simola. QK569.D54I61 1990 STRI.
- Researchers' perspectives: research support resources at the Smithsonian / Z.D. Doering; with the assistance of E.K. Ziebarth. AM101.W3D65re 1990 STRI.

### Reminder ••• Recorderis

Mon, Feb 15, is a STRI Holiday ••• El lunes 15 de febrero es día libre en STRI.

### From the Library

Due to fumigation, the STRI library will remain closed to patrons during the following days: Fri, Feb 19 starting at 3 pm; Sat, Feb 20 and Mon, Feb 22. It will open as usual on Tuesday, Feb 23.