



FEB 6, 2015

# STRI NEWS



## Orchid bees in the fast lane

Full story: [www.stri.si.edu](http://www.stri.si.edu)

### SEMINARS

#### BEHAVIOR DISCUSSION

#### GROUP MEETING

Tue, Feb. 10, 2pm

John Ratcliffe

University of Toronto

**Tupper Large Meeting Room**

Tuned to your frequency, jamming  
your signal: tiger moths in the face  
of bats

#### TUPPER SEMINAR

Tue, Feb. 10, 4pm

John Ratcliffe

University of Toronto

**Tupper Auditorium**

Constraints and convergence:  
echolocation in bats and whales  
when tracking prey

#### BAMBI SEMINAR

Thu, Feb. 12, 7:15pm

Krista Patriquin

University of Toronto

Mississauga

**Barro Colorado Island**

Causes and consequences of  
fission-fusion dynamics in bats

### WHAT'S HAPPENING AT STRI?

#### FIELD COURSES

##### **Princeton University - Semester in the field**

Contact person: Lolly O'Brien

**Feb 3 - Apr 30**

##### **GIS and R - Statistic workshop**

Contact person: Richard Condit

**Feb 11 - Feb 13**

##### **MarineGEO Workshop**

Contact person: Rachel Collin

**Mar 1 - Mar 13**





Photo by Sean Mattson - STRI

## REUNITED

STRI staff scientist Richard Cooke (L) caught up with his Ph.D. adviser, Warwick Bray, during a workshop hosted by Dumbarton Oaks Research Library and Collection and STRI. Bray, who is an Emeritus Professor of Latin American Archaeology at University College London, said Cooke has made an important contribution to local appreciation for Panama's rich prehistory, pioneered a multidisciplinary approach to archaeology and helped to demonstrate that Panama was not just a transit zone in pre-Columbian times, but in fact was home to large groups of indigenous people.

## REUNIDOS

El científico del Smithsonian en Panamá Richard Cooke (izq.) se encontró con su asesor de doctorado, Warwick Bray, durante un taller organizado por la Biblioteca Investigación y Colección Dumbarton Oaks y el Smithsonian. Bray, quien es profesor emérito de Arqueología de América Latina en el University College de Londres, comentó que Cooke ha hecho una importante contribución a la apreciación local de la rica prehistoria de Panamá, ha sido pionero en un enfoque multidisciplinario a la arqueología y ayudó a demostrar que Panamá no era sólo una zona de tránsito en la época precolombina, sino que en realidad era el hogar de grandes grupos de personas indígenas.



Photo by Sean Mattson - STRI

## CANAL FOSSIL FIELD TRIP

Nathan Jud (R), a postdoctoral researcher at the University of Florida, searches for fossilized plants in the Culebra Cut section of the Panama Canal during a Network for Neotropical Biogeography conference field trip on Jan. 14, 2015. The group includes Bruce McFadden (green hardhat), of the Florida Museum of Natural History who is one of the five co-principal investigators on a large paleontological project made possible by the Panama Canal expansion and an NSF grant, Panama PIRE. STRI hosted 60-plus participants at the fourth NNB meeting.

## GIRA DE CAMPO EN EL CANAL

Nathan Jud (der.), investigador postdoctoral en la Universidad de Florida, busca plantas fosilizadas en Corte Culebra, Canal de Panamá durante una excursión de la conferencia de la Red de Biogeografía Neotropical (NNB por sus siglas en inglés), en esta imagen del 14 de enero de 2015. El grupo incluye a Bruce McFadden (casco verde), del Museo de Historia Natural de Florida, quien es uno de los cinco investigadores co-principales en un gran proyecto paleontológico que ha sido posible gracias a la ampliación del Canal de Panamá y una subvención de la NSF. El proyecto que lleva el nombre de PIRE Panamá. El Smithsonian fue anfitrión de más de 60 participantes en la cuarta reunión del NNB.

## ARRIVALS

### Torrey Rodgers

Utah State University

Using invertebrates to sample vertebrates: a novel molecular technique for research and monitoring of vertebrate diversity using DNA from carrion-flies

### Naos Marine Lab and Barro Colorado Island

### Laura Toro

Universidad de Antioquia

Ecosystem Services in the Panama Canal Watershed  
Panama

### Lars Abromeit

GEO Magazine, Gruner + Jahr

PN Coiba BIOLITZ  
Panama

### Spencer Ingley

Brigham Young University

The Temporal Evolution of Reproductive Barriers in Brachyrhaphis fishes (Poeciliidae)  
Panama

### Krista Patriquin and John Ratcliffe

University of Toronto

### Katrine Hulgard

University of Southern Denmark

Predator foraging behavior

Gamboa, Barro Colorado Island and  
Panama

## DEPARTURES

### Jefferson Hall

To Arlington, VA  
For the NSF Principle Investigators meeting

### Owen McMillan

To Washington, DC  
To attend the BioGenomics Executive Committee Meeting

### Héctor Guzmán

To Lima, Perú and Quito, Ecuador  
To visit octocoral collections at Universidad San Cayetano Heredia (Lima) and Museo Ecuatoriano Ciencias Naturales (Quito)

### Rachel Collin

To Bocas Del Toro  
To oversee administration of the Bocas Research Station

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## PUBLICATIONS

Figueira, L., Tella, J. L., Camargo, U. M. and Ferraz, G. N. 2015. Autonomous sound monitoring shows higher use of Amazon old growth than secondary forest by parrots. *Biological Conservation*, 184: 27–35. doi:10.1016/j.biocon.2014.12.020

Amador-Vargas, S. 2014. Living in a Plant: Brain and behavioral traits of Acacias Austin, Texas: The University of Texas at Austin. 118 pages.

Atkin, O. K., Bloomfield, K. J., Reich, P. B., Tjoelker, M. G., Asner, G. P., Bonal, D., Bönnisch, G., Bradford, M., Cernusak, L. A., Cosio, E. G., Creek, D., Crous, K. Y., Domingues, T., Dukes, J. S., Egerton, J. J. G., Evans, J. R., Farquhar, G. D., Fyllas, N. M., Gauthier, P. P. G., Gloor, E., Gimeno, T. E., Griffin, K. L., Guerrieri, R., Heskel, M. A., Huntingford, C., et al. 2015. Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. *New Phytologist*, doi:10.1111/nph.13253

Rodríguez, E., Weber, J., Pagé, B., Roubik, D. W., Suarez, R. K. and Darveau, C. A. 2015. Setting the pace of life: membrane composition of flight muscle varies with metabolic rate of hovering orchid bees. *Proceedings of the Royal Society of London B: Biological Sciences*, 282(1802) doi:10.1098/rspb.2014.2232

Wolfe, B. T., Dent, D. H., Deago, J. and Wishnie, M. H. 2015. Forest regeneration under *Tectona grandis* and *Terminalia amazonica* plantation stands managed for biodiversity conservation in western Panama. *New Forests*, 46(1): 157–165. doi:10.1007/s11056-014-9448-2

Coddington, J. A., Barker, K., Droege, G., Astrin, J. J., Bartels, P., Butler, C., Cantrill, David, F. F., Gemeinholzer, B., Hobern, D., Mackenzie-Dodds, J., Tuama, É. Ó., Petersen, G., Sanjur, O., Schindel, D. and Seberg, O. 2014. GGBN: Making Genomic Collections Discoverable for Research through a Networked Community of Biodiversity Repositories. In: Applequist, W. A. and Campbell, L. M., *DNA Banking for the 21st Century*. pp.165–168.

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Questions/comments  
Preguntas/comentarios



@stri\_panama  
#smithsonian

# University of Copenhagen Graduate Course: Tropical Behavioural Ecology and Evolution

We will focus on evolutionary processes that shape the ecology and behavior of key invertebrate model systems in a diverse tropical forest with a special emphasis on symbioses. The course is designed for graduate students interested in field biology and includes a proposal writing phase (completed in Copenhagen or online) that allows the student to be trained in research design with guidance from course instructors. The project will be implemented at the world renowned Smithsonian Tropical Research Institute in Panama (May 2015). In addition, the students will work on a small group project, review and discuss the work of their peers, and attend lectures, tutorials and trips throughout the 26 day stay in Panama. A final project report will be submitted two weeks following the field component. This intense course provides unique opportunities to interact with a global community of scientists and learn successful research strategies while working in a Neotropical rainforest!

## 2015 course dates:

April 6th (start preparation)  
April 29th (proposal due)  
May 3rd-28th (STRI field course)  
June 12th (research paper due)

**Tuition:** 9000 DKK (~€1200)

*Includes room and board for 3.5 weeks & access to research facilities*

**Credits:** 15 ECTS

**Panama course:  
Register now!**

## How to apply:

Contact Rachelle Adams at [rmmadams@gmail.com](mailto:rmmadams@gmail.com) or Jon Shik at [jonathan.shik@gmail.com](mailto:jonathan.shik@gmail.com). Up to 16 students will be chosen through an application procedure.

## Information:

[www1.bio.ku.dk/english/research/oe/cse/kurser/](http://www1.bio.ku.dk/english/research/oe/cse/kurser/) or [www.megalomyrmex.com/Teaching.html](http://www.megalomyrmex.com/Teaching.html)

## Quotes from past students:

<http://socialevolution.ku.dk/kurser/tbe2013/quotes>

## Course instructors:

**Dr. Rachelle M. M. Adams**

*Centre for Social Evolution, University of Copenhagen  
Smithsonian Institution Research Collaborator*

**Dr. Jonathan Shik**

*Centre for Social Evolution, University of Copenhagen*

**Prof. Jacobus J Boomsma**

*Centre for Social Evolution, University of Copenhagen  
STRI Senior Research Associate*



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