



STRINNEWS

AUG 7, 2015



Sweat bee *Megalopta genalis*
(Photo by Ajay Narendra)

Abeja del sudor *Megalopta genalis*
(Foto por Ajay Narendra)

Beeline flights through the dark

Full story: www.stri.si.edu/issuu.com/strinewspanama

SEMINARS

BEHAVIOR DISCUSSION GROUP MEETING Tue., Aug. 11, 2pm
Aafke Oldenbeuving
University of Amsterdam
Tupper Large Meeting Room
Pollinator attraction in figs – How to make sense of their scents

TUPPER SEMINAR
Tue., Aug. 11, 4pm
Chris Jiggins
Cambridge, St John's College
Tupper Auditorium
The genetic origins for novel butterfly wing patterns

BAMBI SEMINAR
Thu., Aug. 13, 7:15pm
Jane Lucas
Barro Colorado Island
TBA

WHAT'S HAPPENING AT STRI?

FIELD COURSES and SPECIAL EVENTS

University of California, Riverside Tropical Ecology field course
26JULY-22AUG
Contact person: Louis Santiago

Golden Frog Festival
August 14 - 30
Contact person: Jimena Pity





Heliconius among us

STRI staff scientist Owen McMillan hosted 55 experts on *Heliconius* butterflies for the research network's annual meeting, held this year in Panama. Participants hailed from a dozen countries, and included undergrads, pre-docs, postdocs and principal investigators. The *Heliconius* genus includes 43 species and hundreds of distinct geographic forms that are found throughout the Americas. Advances in genetic sequencing of species was a centerpiece of the meeting. "The workshop has two goals," said McMillan. "To bring everyone up-to-date on research and to find ways we can leverage the research community and the *Heliconius* system to stay at the forefront of evolutionary model systems."

Heliconius entre nosotros

El científico del Smithsonian Owen McMillan recibió a 55 expertos en mariposas *Heliconius* durante la reunión anual de la red de investigación, celebrada este año en Panamá. Los participantes provenían de una docena de países, e incluyó a estudiantes de licenciatura, estudiante de doctorado, investigadores de post doctorado e investigadores principales. El género *Heliconius* incluye 43 especies y cientos de formas geográficas distintas que se encuentran en todo el continente americano. Los avances en la secuenciación genética de las especies fue una pieza central de la reunión. "El taller tiene dos objetivos", comentó McMillan. "Poner a todos al tanto de la investigación y encontrar maneras en que podemos aprovechar la comunidad de investigación y que el sistema de *Heliconius* permanezca a la vanguardia en sistemas de modelos evolutivos."





How good R your statistics?

STRI's Office of Academic Programs held a workshop on the programming language R at the Gamboa Schoolhouse and the Tupper Exhibition Hall. Some 30 STRI interns, fellows, and even a few staff scientists participated in the two-day course on the popular data analysis tool. The course was taught by Andy Jones, an assistant professor at Oregon State University, and Justin Touchon, an assistant professor at Vassar College. For information on upcoming workshops, direct enquiries to fellows@si.edu.

¿Qué tan buenas son tus estadísticas?

La Oficina de Programas Académicos del Smithsonian celebró un taller sobre el lenguaje de programación R en la Escuela de Gamboa y la Sala de Exhibiciones en el Centro Tupper. Unos 30 pasantes, becarios y algunos científicos participaron en el curso de dos días sobre la popular herramienta de análisis de datos. El curso fue impartido por Andy Jones, profesor asistente en la Universidad Estatal de Oregon, y Justin Touchon, profesor asistente en el Vassar College. Para obtener más información sobre los próximos talleres, escribir a fellows@si.edu.



ARRIVALS

Brandon Guell

University of California - San Diego
Development, behavior, and adaptive plasticity at life history switch points
Gamboa and Tupper

Clare Fieseler

University of North Carolina
Does competition mediate the beneficial value of coral thermal acclimation?
Bocas Del Toro

Luisa Hosse

University of Potsdam
Ecosystem Services in the Panama Canal Watershed
Agua Salud

Ben Hirsch

University of Florida
Food for thought: Does "smart foraging" explain how primates can afford big brains?
Barro Colorado Island

Nathalia Rincón

Pontificia Universidad Javeriana
Genomic Cross Talk: Comparing the genomic interactions between a plant host (*Theobroma cacao*) and a fungal endophyte mutualist with those of closely and distantly related pathogens

Gamboa and Naos

Klara Scharnagl
Michigan State University
Patterns of alpha diversity and biotic interactions from tropical to temperate forests: Using lichens to investigate the latitudinal diversity gradient
Barro Colorado Island

Diana Hsueh and Wade McGillis

Columbia University
Tyler Smith and Viktor Brandtneris
University of the Virgin Islands
Peggy Fong
University of California - Los Angeles

Ana Palacio

University of Miami
Are Eastern Tropical Pacific reefs becoming more resilient to ENSO?
Naos and Panama

DEPARTURES

Esteban Guerra

To Isla Colon, Bocas Del Toro
To support the Bocas Del Toro Station with the Nature Fair

Ana Endara

To Isla Colon, Bocas Del Toro
For scientific diving course at Bocas Station

Helene Muller-Landau

To Baltimore, MD
To attend the NGEE-Tropics all-hands meeting and the 100th Annual meeting of the Ecological Society of America

Hector Guzman and Carlos Guevara

To Isla Coiba (Veraguas)
To monitor and tag whales and sharks

Stuart Davies and Matteo Detto

To Baltimore, MD
To attend the 2015 Ecological Society of America (ESA) Annual Meeting

Raul De León

To Isla Colon, Bocas Del Toro
For equipment maintenance, compressor service, scientific diving course

Carlos Jaramillo

To Espinar, Peru
To perform biostratigraphic, sedimentological and backgrounds studies

Saskia Santamaria and Jacob Slusser

To Azuero Peninsula
To visit research/training sites and provide leadership Program follow-up

Sean Mattson

To Bocas Del Toro
For dive training and research

PUBLICATIONS

Maas, B., Karp, D. S., Bumrungsri, S., Darras, K., Gonthier, D., Huang, J. C. C., Lindell, C. A., Maine, J. J., Mestre, L., Michel, N. L., Morrison, E. B., Perfecto, I., Philpott, S. M., Sekercioglu, Ç. H., Silva, R. M., Taylor, P. J., Tschamtker, T., Van Bael, S. A., Whelan, C. J. and Williams-Guillén, K. 2015. Bird and bat predation services in tropical forests and agroforestry landscapes. *Biological Reviews*, doi:10.1111/brv.12211

Rossman, A. Y., Adams, G. C., Cannon, P. F., Castlebury, L. A., Crous, P. W., Gryzenhout, M., Jaklitsch, W. M., Mejia, L. C., Stoykov, D., Udayanga, D., Voglmayr, H. and Walker, D. M. 2015. Recommendations of generic names in Diaporthales competing for protection or use. *IMA fungus*, 6(1): 145-154. doi:10.5598/ima fungus.2015.06.01.09

Waring, B. G., Álvarez-Cansino, L., Barry, K. E., Becklund, K. K., Dale, S., Gei, M. G., Keller, A. B., Lopez, O. R., Markesteijn, L., Mangan, S., Riggs, C. E., Rodríguez-Ronderos, M. E., Segnitz, R. M., Schnitzer, S. A. and Powers, J. S. 2015. Pervasive and strong

effects of plants on soil chemistry: a meta-analysis of individual plant 'Zinke' effects. *Proceedings of the Royal Society B: Biological Sciences*, 282(1812) doi:10.1098/rspb.2015.1001

Baldwin, C. C. and Robertson, D. R. 2015. A new, mesophotic *Coryphopterus* goby (Teleostei, Gobiidae) from the southern Caribbean, with comments on relationships and depth distributions within the genus. *Zookeys*, 513: 123-142. doi:10.3897/zookeys.513.9998

Brown, G. P., Kelehear, C., Shilton, C. M., Phillips, B. L. and Shine, R. 2015. Stress and immunity at the invasion front: a comparison across cane toad (*Rhinella marina*) populations. *Biological Journal of the Linnean Society*, doi:10.1111/bij.12623

Ceron-Souza, I., Gonzalez, E. G., Schwarzbach, A. E., Salas-Leiva, D., Rivera-Ocasio, E., Toro-Perea, N., Bermingham, E. and McMillan, W. O. 2015. Contrasting demographic history and gene flow patterns of two

mangrove species on either side of the Central American Isthmus. *Ecology and Evolution*, doi:10.1002/ece3.1569

Chase, J. M., Powell, K. I. and Knight, T. M. 2015. 'Bigger data' on scale-dependent effects of invasive species on biodiversity cannot overcome confounded analyses: a comment on Stohlgren & Rejmánek (2014). *Biology Letters*, 11(8): 20150103 doi:10.1098/rsbl.2015.0103

Condit, R. S. 2015. Extracting Environmental Benefits from a New Canal in Nicaragua: Lessons from Panama. *PLoS Biology*, 13(7): e1002208 doi:10.1371/journal.pbio.1002208

Heim, O., Treitler, J. T., Tschapka, M., Knornschild, M. and Jung, K. 2015. The Importance of Landscape Elements for Bat Activity and Species Richness in Agricultural Areas. *Plos One*, 10(7): e013443 doi:10.1371/journal.pone.0134443

Pinto-Sanchez, N., Calderon-Espinosa, M., Miralles, A., Crawford, A. and Ramirez-Pinilla, M. 2015. Molecular

phylogenetics and biogeography of the Neotropical skink genus *Mabuya* Fitzinger (Squamata: Scincidae) with emphasis on Colombian populations. *Molecular phylogenetics and evolution*, doi:10.1016/j.ympev.2015.07.016

Roberts, T. R. 2015. Mimicry of a Bean Seed by the Amazonian Aspredinid Catfish *Amaralia hypsiura* (Kner 1855), with Notes on Vegetative Camouflage by Fishes. *International Journal of Ichthyology*, 21(3): 120-127.

Lim, Y. A., Kida, H., Miyaji, M., Kusumoto, I. T., Miyashiro, H., Hattori, M., Shimotohno, K., Gupta, M. P. and Correa A., M. D. 1997. Inhibitory effects of some Panamanian plants on human immunodeficiency viral reverse transcriptase and protease. *Journal of Traditional Medicines*, 14: 54-58.



Instituto Smithsonian de Investigaciones Tropicales



FERIA DE LA NATURALEZA

NATURE FAIR

ESTACIÓN DE INVESTIGACIÓN DE BOCAS DEL TORO

14-15 AGOSTO
AUGUST
10:00 am - 4:30 pm

- Explora el mundo submarino abordo de nuestro bote con fondo de vidrio Explore the underwater world as you ride our glass-bottom boat
- Investiga y aprende sobre plantas, árboles, ranas y otros animales Learn about plants, trees, frogs and other animals
- ¡Manualidades, concursos y Diversión para toda la familia! Crafts, contests and Family fun for everyone!



ENTRADA GRATUITA
FREE ADMISSION

PARA MAYOR INFORMACIÓN
FOR MORE INFORMATION
Marlon Smith
212.8574 | SmithM@si.edu

#ranaticos



Festival de la RANA DORADA

Atelopus zeteki

Salvando un tesoro nacional

Calendario de eventos agosto 2015

Viernes 14 de agosto

CASA ABIERTA

Proyecto de Rescate y Conservación de Anfibios Gamboa

1 - 4 PM

Actividades: Visitas a la exhibición de ranas y al laboratorio con expertos en ranas.

Sábado 15 de agosto

DÍA #RANATICOS

Paseo El Valle, El Valle de Antón

11 AM - 3 PM

Actividades: Juegos para niños, intervenciones artísticas, exhibiciones de ranas, venta de comidas y bebidas, y la Rana Dorada en persona!

Para más información

florezna@si.edu

Domingo 16 de agosto

DÍA #RANATICOS

Centro Natural Punta Culebra
Calzada de Amador, Panamá

11 AM - 4 PM

Actividades: Conoce a expertos en ranas, Sé un superhéroe de las ranas, Exhibición de ranas, La Rana Dorada en persona, disfraces, pinta caritas, juegos, venta de comidas y bebidas.

Miércoles 19 de agosto

RANAS NOCTURNAS

Biomuseo, Calzada de Amador,
Panamá

7 - 10 PM

Exhibición de ranas, conoce a expertos en ranas, rifa de ranáticos, photo booth, y más.

Sábado 22 de agosto

DÍA #RANATICOS

Mall Multiplaza Pacific, Panamá

11 AM - 5 PM

Actividades: Salto de ranas, pintura de mascararas, exhibición de ranas, juegos, acrobacias por La Tribu, rifas, La Rana Dorada en persona, y photo booth para ranaticos.

Domingo 30 de agosto

CARRERA LA DORADA

El Valle de Antón

Carrera / Caminata La Dorada

7 AM

¡Camina o corre 5 y 15 kilómetros para "salvar un tesoro nacional!"

amphibianrescue.org



SmithsonianPanama



PuntaCulebra



Stri_panama



Smithsonian



MINISTERIO DE AMBIENTE



UBER

BIOMUSEO



LIVE ANIMALS