Tupper 4pm seminar
Tuesday, August 5, 4pm
Seminar speaker will be Marcy Balunas, STRI
Ecologically directed tropical disease drug discovery from marine cyanobacteria in Panama

BDG
The next Behavior Discussion Group (BDG) will meet on Tuesday, August 5, at 2pm, in the Large Meeting Room, Tupper Center, with Karen M. Warkentin, Boston University

Vibrational cues in predator-induced hatching of red-eyed treefrogs

NEO Symposium
The STRI/NEO program invite the STRI community to their Annual Symposium on Tuesday August 5 at 8:15am
See the program at striweb.si.edu/images/announcement/annual_neo_symposium_program

Bambi seminar
Thursday, August 7, Bambi seminar speaker will be Lou Santiago, University of California, Riverside

Plant nutrition in tropical forests: food for thought

Arrivals
Benjamin Feit, University of Wuerzburg, to study the echolocation and foraging behavior of Neotropical bats, on BCI.

HCP global coordinator visits STRI sites and projects
Sue Alexander (at right) HSBC Climate Partnership (HCP) global coordinator, toured the Agua Salud project in the Panama Canal watershed and planted trees with Jeff Hall (to her right in the photo below), director of Applied Science, CTFS/SIGEO. She also visited the 50-ha plot on BCI, the first established Forest Dynamic Plot that paved the path to the CTFS/SIGEO, and the nursery in Gamboa. All these projects are supported by the HSBC Climate partnership

The group included Stuart Davies, CTFS director (first from right to left) Mónica Alvarado, director of STRI’s Public Information Office and HSBC Climate Partnership liaison in Panama, STRI director emeritus Ira Rubinoﬀ and Lisa Barnett, director of STRI’s Development Office in Washington DC. The group also included other members of the STRI staff and Agua Salud Project. Alexander also visited the Punta Culebra Nature Center.

Sue Alexander (a la derecha en la foto de arriba) coordinadora global del HSBC Climate Partnership (HPC), visitó el proyecto de Agua Salud en la Cuenca del Canal de Panamá y plantó árboles con Jeff Hall (a su derecha en la foto de abajo), director de biología aplicada del CTFS/SIGEO.

El grupo también incluyó (desde la derecha) al director de CTFS Stuart Davies, Mónica Alvarado, directora de Divulgación y enlace con el HCP en STRI, el director emérito Ira Rubinoﬀ, Lisa Barnett, directora de la Oficina de Desarrollo Institucional de STRI en Washington DC, y otros miembros del personal de STRI y el Proyecto de Agua Salud. Alexander también visitó el Centro Natural de Punta Culebra.

Safety number: 212-8211
**More arrivals**

Participants of the field course - CFNS 500: Curriculum Development in Conservation Education, from Montclair State University.

Harry Lagerman, Montclair State University, to collaborate with the Barro Colorado Island Mammal Census.

Anthony Cognato, Sarah Smith and Aaron Smith, Michigan State University, to study the scolytines of Panama, in Fortuna.

Ellen Reid, Louisiana State University, to study the maintenance of tree species diversity though pest-mediated mortality on seedlings of Tetragastris panamensis, on BCI.

**New publications**


**More publications**


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**Science:**

**Spotlight on marine biodiversity hotspots... 50 million years old**

Certain regions of the globe harbor particularly high numbers of species of organisms. These biologically important regions have become known as biodiversity hotspots. The deep-time history of hotspots is however not well charted.

"Hotspots of high species diversity are a prominent feature of modern global biodiversity patterns. Fossil and molecular evidence is starting to reveal the history of these hotspots. There have been at least three marine biodiversity hotspots during the past 50 million years. They have moved across almost half the globe, with their timing and locations coinciding with major tectonic events. The birth and death of successive hotspots highlights the link between environmental change and biodiversity patterns. The antiquity of the taxa in the modern Indo-Australian Archipelago hotspot emphasizes the role of pre-Pleistocene events in shaping modern diversity patterns."

A group of scientists led by W. Renema, from the Nationaal Natuurhistorisch Museum, in Leiden Netherlands, that includes STRI's Aaron O'Dea, from the Center for Tropical Paleoecology and Archaeology and John M. Pandolfi, frequent collaborator of STRI researchers from the University of Queensland, just published the article "Hopping hotspots: global shifts in marine biodiversity" in *Science* (August 1st).

Redema *et al* used fossils and molecules to propose a mechanism explaining how hotspots are formed and how they move. Their data shed light on the dynamic nature of biodiversity in deep-time while placing the present-day global threats to areas of high biodiversity into perspective.

The article was distributed by Neal G. Smith. You may also obtained it from: calderom@si.edu

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Figure taken from *Science* 321 (5889): 655.
STR I joined Mangroves’ week and International Day

STR I se unió a las celebraciones de la Semana de los Manglares (20-26 de julio) y al Día Internacional en Defensa de los Ecosistemas de Manglar (26 de julio). La Estación de Investigaciones de STRI en Bocas del Toro (BRS) organizó actividades de información y educación con estudiantes escolares, visitantes a la Estación y visitantes a las Oficinas de Turismo en la comunidad (foto de arriba)

El Centro Natural de Punta Culebra organizó un centro de votación para escoger el único candidato posible para el día, el Manglar. Quinientas ochenta y siete personas participaron en la votación, quienes fueron informados sobre el significado de la celebración de Día Internacional del Manglar y la importancia de estos frágiles ecosistemas tropicales.

El Laboratorio Marino de Punta Galeta llevó a cabo una variedad de actividades junto con estudiantes universitarios y escolares, representantes del gobierno e instituciones no gubernamentales y una serie de conferencias y mensajes radiales que tuvieron mucho éxito y una gran audiencia (foto inferior.)

From OBIO: www.stri.org/dfm

The Office of Bioinformatics (OBIO) would like to announce the availability of sound recordings provided to us by Diane Hope. The recordings include a diverse array of organisms recordings, interviews and sounds capes. These recordings are available for use in any STRI presentation. The recordings can be found at stri.org/dfm (select the audio tab and enter your search).

Las grabaciones incluyen una diversa gama de sonidos de organismos, entrevistas y otros. Estas grabaciones están disponibles para el uso de cualquier presentación de STRI. Las grabaciones pueden encontrarse en stri.org/dfm (seleccione el “tab” de audio y entre su palabra de búsqueda.)

More publications


“Fly determines if a bee is worker or queen” 2008. UPI.com: July 30.

“Isthmus of Panama formed as result of plate tectonic” 2008. Thaindian.com - Bangkok, Bangkok, Thailand: July 30.
Cheme, Thailand — “For much of his life, Viroj Dedsonprak paid little attention to the mangrove forests that surrounded his Thai village. He thought nothing of it when neighbors chopped down trees for firewood or plowed them under for shrimp ponds.”

Mangrove forests: white, black or red alert?

Information: Lidia de Valencia
Edited by M Alvarado & ML Calderon
Photo: MA Guerra

Experts advise to the other end: to protect, conserve and allow mangroves to spread.

Mangroves are natural filters. They keep sediment and pollutants from neighboring areas trapping them in their webs of roots. They help control floods during the rainy season and are natural barriers to extreme weather events like tsunamis and hurricanes. Are home and breeding area to a great number of organisms vital to the daily subsistence of coastal communities. Provide nutrients to the marine food chain. Contribute to avoid erosion caused by wind, high tides and water currents. They capture CO2 and avoid the intrusion of salty waters into populated costs and crops.

This forest has been the subject of long-term study by Wayne Sousa and students from the University of California at Berkeley. Among other aspects of mangrove forests, Sousa focuses on forest regeneration in light gaps created by lightning strikes, the most common natural agent of canopy disturbance in the region, creating clearings exceeding 1000m2.

But what happens when mangroves are cut down extensively? Have reforestation efforts with mangrove species ever succeeded at great scale?

Apparently not many, since these ecosystems are highly complex and fragile. Apparently not many, since these ecosystems are highly complex and fragile.