

Tupper 4pm seminar

Tue, Nov 29, 4pm seminar speaker will be Carole Bewley, National Institutes of Health
Novel molecules from Cyanobacteria: from structure to function, to ecology?

Bambi seminar

Please consult GroupWise to learn about the next Bambi seminar on BCI.

Monthly talk

Wed, Nov 30, Monthly talk speaker will be Marc de Banville, 6pm, Tupper **Ferdinand de Lesseps o el decisivo aporte francés a Panamá**

Arrived this week

Flavia Fiorini, Italy, to work on the biostatigraphy of the Neotropics, at the CTPA.

Piotr Lukasik, Jagiellonian University, Poland, to study the herbivory on tropical trees along rainfall gradient, in Gamboa.

Birgit Kohler and Markus Adamek, University of Goettingen, to study the Nitrof-impact of elevated nitrogen input on the biogeochemistry and productivity of tropical forest, on BCI.

Arriving next week

Sally Shuler, Barbara Thomas and Claudia Campbell, National Science Resources Center and Mark Brady and Cecilia Mañosa, STRI, to meet with STRI scientists and officials regarding agreement of collaboration and work on the Smithsonian Series of Biodiversity.



Smithsonian Tropical Research Institute, Panamá

www.stri.org

November 25, 2005

Service award ceremony

STRI's Human Resources Office organized the annual award ceremony to honor a group of employees in their 30th, 20th and 10th anniversary as part of the STRI staff.

Staff scientists Donald M. Windsor, Mary Jane West Eberhard and D. Ross Robertson celebrated their 30th anniversary this year. Associate director for Operations and Facilities Fernando Pascal, research assistant Milton García, gamewarden Andrés Ramos and OIT director Francisco Rivera were awarded for 20 years of service. OIT manager Fernando Bouche, marine superintendent Pierre Jacinto Fuentes and boat operator Rafael Batista received 10-year service pins. The photo below shows



Windsor



West-Eberhard



Robertson

10 and 20-year awarded employees and their supervisors.

La Oficina de Recursos Humanos de STRI organizó la ceremonia anual para honrar a los empleados que cumplieron 30, 20 y 10 años de servicio.

Los científicos Donald M. Windsor, Mary Jane West-Eberhard y D. Ross Robertson cumplieron 30 años en 2005. Fernando Pascal, director

adjunto para Operaciones e Instalaciones, Milton García, asistente de investigación, el guardabosques Andrés Ramos y el director de OIT, Francisco Rivera cumplieron 20 años de servicio. Fernando Bouche, gerente de OIT, Pierre-Jacinto Fuentes, superintendente marino y el operador de botes Rafael Batista cumplieron 10 años. La foto de abajo muestra los empleados galardonados por 10 y 20 años y sus supervisores.



Congratulations!

To María Leone for the birth of her grandchildren Marco, Carmela and Lucca, on Thursday, November 24th. The children weighed 5.6lb each.

Departures

Fernando Santos-Granero to Charlottesville, VA, to participate in a conference at the University of Virginia, and to attend meetings of the American Anthropological Association in Washington DC

Ira Rubinoff for official business at the SI, and to attend event honoring the election of Dolores Piperno to the National Academy of Sciences.

Carlos Jaramillo to Bucaramanga and Santafé de Bogota, Colombia, to meet with colleagues at Biostatigrafia del ICP and Servicio Geológico.

William F. Laurance to Brisbane, Australia, to present a paper at the meetings of the Ecological Society of Australia. He will also visit the UCLA Center for Tropical Research, where he is a research fellow, to present a seminar and consult with colleagues.

New publications

Eltz, Thomas, Lunau, Klaus, and Roubik, David Ward. 2005. "Experience-dependent choices ensure species-specific fragrance accumulation in male orchid bees." *Behavioral Ecology and Sociobiology* Online.

Nature: Is speciation driven by species diversity? by Bermingham and colleagues

Carlos Daniel Cadena and Robert E. Ricklefs from the University of Missouri, Ivan Jiménez from the Missouri Botanical Garden, and STRI's deputy director Eldredge Bermingham published a brief communication in *Nature* (Nov 3) commenting on an article by B.C. Emerson and N Kolm (*Nature*, Apr 21). They show "that the proportion of species endemic to an island is positively related to its species richness and, assuming that endemism indexes speciation rate, they infer that greater species diversity accelerates diversification." In their communication, Cadena et al demonstrate that the same correlation between species

richness and percentage endemism can arise even if within-island speciation is negligible, particularly when both endemism and species richness depend on attributes of islands (such as area) that influence the average age of resident populations.

Island biogeography theory indicates that, where the average time to extinction is relatively long, diversity increases through colonization, irrespective of whether new species are formed; at the same time, islands on which populations persist for longer accumulate more endemic species as local populations differentiate and populations on neighboring islands become extinct. The



Eldredge Bermingham

researchers suggest that species richness and endemism are correlated fortuitously owing to their mutual dependence on the life spans of populations on islands, which is unrelated to speciation itself.

Science: Dinosaurs dined on grass, by Piperno and Sues

Grasses are among the most ecologically dominant flowering plants. Did the most dominant herbivores of the Mesozoic —the dinosaurs— evolve together with grasses? This question has been hard to answer, owing to the poor fossil record. In their Perspective in *Science* (Nov 18), STRI's Dolores Piperno (also with the NMNH) and colleague Hans-Dieter Sues discuss results reported in the same issue by V. Prasad, C.A.E. Strömberg, H.

Alimohammadian and A. Sahni in which phytoliths, the small silicate structures synthesized by many plants, found in coprolites (fossilized dinosaur dung) have been examined and compared. The work is the first evidence that dinosaurs ate grass and that the large grass family, known as Poaceae, had originated and diversified during the Cretaceous era. The results will have important implications for studies of evolutionary interactions between ancient plants and herbivores.



Dolores Piperno

December b'days

Francisco J. Morales	3	Daniel Obando	11	Dayra Navarro	17	Adriana Bilgray	24
Vinicio Terán	4	Héctor García	12	Mélida Ruiz	18	Raúl Ríos	25
Lina González	4	José R. Perurena	12	Julio A. Polo	20	Elizabeth Sánchez	26
Luis H. Castillo	6	Tania Quiel	12	Damaris Martínez	20	Clementina Chung	26
Leonardo M. Chávez	6	Grettehun Grajales	13	Sonia Tejada	20	Zuleyka Maynard	26
Benjamin Turner	6	Maricela Salazar	14	Ira Rubinoff	21	Mario Santamaría	27
Mirna Samaniego	8	Michelle Ng	15	Demetrio Botacio	22	Thomas Reina	27
Jorge Melgar	11	Alejandro Garrido	15	Alvis Vergara	22	Sixto Martínez	28
		Pierre J. Fuentes	17	José Nuñez	22	Jaime Flores	28
		Andrés Ramos	17	Aníbal Velarde	22		



Scientists and entrepreneurs join to protect the environment

During a press conference held on November 22 at Panama's Restaurante La Posta, owner David Henesy announced a partnership with STRI's Native Species Reforestation Project (PRORENA) and Futuro Forestal SA, to counteract the restaurant's emissions of CO₂, that cooks with wood.

Henesy contracted Futuro Forestal to establish a plot to grow native trees as part of the long-term plots studied by PRORENA. His initiative aims to promote restaurants with zero impact to the environment, serving as an example to other industries in Panama and the world. Henesy has an extensive experience in the restaurant business in New York and Colombia.

Futuro Forestal promotes investments in reforestation that pay back to nature for environmental services and can also be traded in the stock market. It is the first Panamanian reforestation agency certified by the Forest Stewardship Council. Their

activities are based on the scientific results generated by PRORENA.

PRORENA is part of STRI's Center for Tropical Forest Science and the University of Yale's Tropical Resources Institute (YTRI).

The press conference was attended by the German Press Agency (DPA), Cuban Latin Press, La Prensa newspaper and local TV channel 5.

Durante una conferencia de prensa realizada el 22 de noviembre en el Restaurante la Posta en la ciudad de Panamá, su dueño, David Henesy anunció su asociación con el Proyecto de Reforestación con Especies Nativas (PRORENA) de STRI y Futuro Forestal SA, para contrarrestar las emisiones de CO₂ del restaurante, que cocina con leña.

Henesy contrató a Futuro Forestal para establecer una parcela y para sembrar árboles nativos como parte de las parcelas a largo plazo estudiadas

por PRORENA. Su iniciativa tiene como objetivo promover restaurantes como industrias con impacto cero en el ambiente, sirviendo como ejemplo a otras industrias en Panamá y el mundo. Henesy tiene una amplia experiencia en el negocio de restaurantes, en New York y Colombia.

Futuro Forestal promueve inversiones en reforestación que devuelven al ambiente sus servicios prestados, y que también pueden ser canjeados en el mercado de valores. Es la primera compañía de reforestación panameña certificada por Forest Stewardship Council. Sus actividades están fundamentadas en los resultados científicos que genera PRORENA.

PRORENA es parte del Centro de Ciencias Forestales del Trópico de STRI y el Instituto de Recursos Tropicales de Yale.

German Press Agency (DPA), La Prensa, La Prensa Latian y Canal 5 estuvieron presentes.

More publications

Kirby, Michael Xavier, and MacFadden, Bruce. 2005. "Was southern Central America an archipelago or a peninsula in the middle Miocene? A test using land-mammal body size." *Palaeogeography, Palaeoclimatology, Palaeoecology* 228(3-4): 173-202.

Laurance, William F. 2005. "2005 Bacardi Award for Advances in Tropical Conservation." *Biotropica* 37(4): 712-712.

Lewinsohn, Thomas M., Novotny, Vojtech, and Basset, Yves. 2005. "Insects on plants: Diversity of herbivore assemblages revisited." *Annual Review in Ecology, Evolution and Systematics* 36(1): 597-620.

Piperno, Dolores R., and Sues, Hans-Dieter. 2005. "Dinosaurs dined on grass." *Science* 310(310): 1126-1128.

Skillman, John B., Garcia N., Milton, Virgo, Aurelio, and Winter, Klaus. 2005. "Growth irradiance effects on photosynthesis and growth in two co-occurring shade-tolerant Neotropical perennials of contrasting photosynthetic pathways." *American Journal of Botany* 92(11): 1811-1819.

Torchin, Mark E., Byers, James E., and Huspeni, Todd C. 2005. "Differential parasitism of native and introduced snails: replacement of a parasite fauna." *Biological Invasions* 7(6): 885-894.

Wehncke, Elisabet V., and Dalling, James W. 2005. "Post-Dispersal Seed Removal and Germination Selected Tree Species Dispersed by *Cebus capucinus* on Barro Colorado Island, Panama." *Biotropica* 37(1): 73-80.

science in progress:

Raptors Ocean-to-Ocean

by Marialuz Calderon

Photo: Marcos A. Guerra



Last year, more than 3.1 million migratory raptors were recorded in the first annual "Raptors Ocean-to-Ocean" count held in Panama in October and November. Nine watch sites covering the width of the

Isthmus were established with the support of STRI, the Peregrine Fund, the Canopy Tower Hotel, the Gamboa Rainforest Resort and Panama's Center for Research and Social Action.

Panama is the narrowest part of the route of raptors migrating between breeding areas in North and South America, making the easiest place to monitor their numbers. The most numerous species passing through the region are Turkey Vultures, Broad-winged Hawk and Swaison's Hawks, that rely mainly on thermal soaring on their migrations, and therefore travel almost entirely over land.

Again this year, STRI's George Angehr, author of the *Directory of important bird areas in Panama (2003)* leads a team of volunteers, students and assistants conducting the count, aiming to improve the scientific understanding of these migrations, and promote conservation, environmental education, and economic development through ecotourism in Panama.

El año pasado, más de 3.1 millones de

rapaces migratorios fueron registrados en el primer conteo anual "Rapaces de Océano a Océano" que se llevó a cabo en Panamá en octubre y noviembre. Nueve puntos de monitoreo cubriendo el ancho del Istmo de Panamá se establecieron con el apoyo de STRI, el Fondo Peregrino, el Hotel Canopy Tower, el Gamboa Rainforest Resort y el Centro de Estudios Avanzados de Panamá.

Panamá es el área más estrecha en la ruta de los rapaces que migran entre sus lugares de reproducción en Norte y Sur América, convirtiéndolo en el lugar más adecuado para su conteo. Las especies más numerosas que pasan a través de la región son el gallinazo cabecirrojo, el gavilán aludo, y el gavilán de Swainson.

Nuevamente es año, George Angehr de STRI, autor del *Directorio de áreas importantes para aves en Panamá (2003)* lidera el grupo de voluntarios, estudiantes y asistentes que llevan a cabo este monitoreo con el objetivo de aumentar el entendimiento científico de estas migraciones, y promover la conservación, educación ambiental y desarrollo económico a través del ecoturismo, en Panamá.