

Tupper 4pm seminar

Tuesday, May 19, Tupper seminar speaker will be Jacobus Boomsma, University of Copenhagen

Life-time commitment and the evolution of altruism and mutualism

Bocas talk

Thursday, May 21 at 7pm, Bocas talk speaker will be Gayatri Thampy, Ohio State University. CEFATI

Conference Room, IPAT
What do the people of Bocas think about tourism here? Results of a study on local perspectives on the impact of tourism

Arrivals

Charles Darveau, University of Ottawa, principal investigator of a project to study the cellular basis of flight metabolic rate variation in Euglossine bees, on BCI.

Thomas Eltz, University of Duesseldorf, to study reproductive genetics of orchid bees, on BCI.

Karen Warkentin, Boston University, to study fear, death and life history switch points: cumulative effects of phenotypic plasticity and predation across three life stages, in Gamboa.

Venetia Briggs, Boston University, to study multisensory communication in red-eyed treefrogs, *Agalychnis callidryas*, in Gamboa.

Steve Yanoviak, University of Arkansas, to study the behavior and ecology of tropical canopy ants, on BCI.

Jacobus Boomsma, Luke Holman, Patrizia D'Ettorre, University of Copenhagen and William Hughes, University of Leeds, to study the evolutionary ecology of fungus growing ants, in Gamboa.



Smithsonian Tropical Research Institute, Panamá

www.stri.org

May 15, 2009



Eight institutions announced their joint venture to save amphibians from the brink of extinction in Panama—an area rich with diverse amphibian species—on Washington DC.

Experts from Smithsonian's National Zoological Park, STRI, African Safari Park, Cheyenne Mountain Zoo, Defenders of Wildlife, Summit Municipal Park, Panama, Houston Zoo, and Zoo New England have pooled their energy and resources to form the Panama Amphibian Rescue and Conservation Project to protect a number of species from extinction.

According to the American Association for the Advancement of Science, a

systematic global assessment of all 5,743 known amphibian species has found that one-third of them are in danger of being eliminated at an alarming rate by a pathogen known as the chytrid fungus.

The institutions involved in the project have collectively pledged more than \$750,000 in cash and in-kind donations during the next three years.

The project will consist of three complementary parts: the ongoing operation of El Valle Amphibian Conservation Center run by the Houston Zoo; the amphibian chytrid cure research program to be initiated at the National Zoo in collaboration with Vanderbilt University; and the construction

and operation of the new Summit Park Amphibian Rescue Center in Panama. One “amphibian rescue pod,” which is a bio-secure, modified shipping container that will house the first rescued species from eastern Panama, has already been established.

The project will be launched in Panama later this year in close coordination with Panamanian authorities.

Ocho instituciones anunciaron un esfuerzo conjunto para salvar a los anfibios de una extinción inminente que se llevará a cabo en Panamá—un área rica en diversidad de especies de anfibios—en Washington DC. Expertos del Parque Zoológico

More arrivals

Hector Merchan, North Carolina State University, to study the evolution of mimicry in *Heliconius*, at Naos and Gamboa.

Paul Gillian, Yale University, to conduct a comparison of herbivore damage among native tree species in mixed and pure forest plantations in Central Panama.

Adriane Cromer, Yale University, to join the Agua Salud project.

Nick Isaac, Centre for Ecology & Hydrology (NERC), to study species and site-level determinants of abundance in tropical trees, in Gamboa.

Ching-Hong Yang, University of Wisconsin, to study if lianas cause chronic disturbance and alter successional trajectories in tropical forests.

Patalano Solenn, and Stephanie Dreier, Institute of Zoology, UK, to study nest drifting behavior in paper wasps, in Gamboa.

Departures

Susan Laurance to Manaus, Brazil, to identify tree species from the recent recollection of the phytodemographic project at the Biological Dynamics of Forest Fragments Project.

Oris Sanjur to Atlanta, at the invitation of SENACYT to represent STRI and join the Panamanian delegation at the 2009 Bio International Convention, an international biotechnology fair.

John and Beate Christy to Seattle, WA, on vacation.

Haris Lessios to Roseau, Commonwealth of Dominica, to participate in the 34th Scientific Meeting of the Association of Marine Laboratories of the Caribbean.

Nacional de EU del Smithsonian (NZP) STRI African Safari Park, Cheyenne Mountain Zoo, Defenders of Wildlife, Parque Municipal Summit, Panamá, Houston Zoo y Zoo New England han unido sus recursos para establecer el Proyecto de Conservación y Rescate de Anfibios de Panamá para proteger un número de especies de la pérdida total.

De acuerdo con la Asociación de EU para el Avance de la Ciencia, un censo global sistemático de todas las 5,743 especies de anfibios ha mostrado que un tercio de ellos

Ricklefs elected to NAS

STRI research associate Robert E. Ricklefs from the University of Missouri at Saint Louis was recently elected fellow of the National Academy of Sciences (NAS). Ricklefs has contributed to a greater understanding of evolutionary history and environmental biology, as well as species diversity and the aging process, with a focus on birds. His research on avian development, reproduction and demography have earned him an international reputation. Among his more than 400 publications, at least 60 have been product of studies with STRI. He is the author of *Ecology*, 1973, now in its 4th edition, and *The Economy of Nature*, 1976, now in its 5th edition).

NAS is an honorific society of distinguished scholars engaged in scientific and engineering research, dedicated to the

están en peligro de desaparecer en una escala alarmante, por el patógeno conocido como hongo quítrido.

Las instituciones que apoyan este esfuerzo se han comprometido con más de \$750,000 en efectivo y donaciones en especie, durante los próximos tres años.

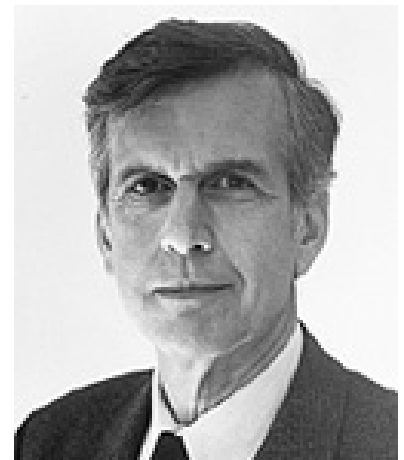
El proyecto consistirá en tres partes complementarias: la operación en curso en el Centro de Conservación de Anfibios en El Valle que maneja el Zoológico de Huston; el programa de investigación para la cura del quítrido en los

furtherance of science and technology for general welfare. The election to the Academy is considered one of the highest honors that can be accorded a scientist or engineer.

Robert E. Ricklefs, investigador asociado a STRI de la Universidad de Missouri en St. Louis, fue electo miembro de la Academia Nacional de Ciencias de los Estados Unidos (NAS.) Ricklefs ha contribuido a enriquecer el conocimiento de historia evolutiva y la biología ambiental, así como la diversidad de especies y el proceso de envejecimiento, con atención a las aves. Sus estudios en el desarrollo de aves, reproducción y demografía le han ganado su reputación internacional. Entre sus más de 400 publicaciones, al menos 60 han sido producto de estudios con STRI. Es autor de *Ecology*, 1973, el cual va en su cuarta edición y *The Economy of*

anfibios que se iniciará en NZP en colaboración con la Universidad de Vanderbilt, y la construcción y operación de un nuevo Centro de Rescate de Anfibios en el Parque Summit en Panamá. Ya se estableció una "refugio de anfibios" un contenedor de embarque modificado y bio-seguro que albergará las primeras especies rescatadas del este.

El proyecto se dará a conocer este año en Panamá en coordinación con las autoridades panameñas.



Nature, 1993, ya en su quinta edición.

La Academia Nacional de Ciencias de los EU es una sociedad honorífica de académicos distinguidos dedicados a la investigación en ciencias e ingeniería, dedicada a promover ambas especialidades para el bienestar general. El ser elegido como miembro de la Academia es considerado uno de los honores más altos que pueden recibir un científico o un ingeniero.

New publications

Hudson, Theresa M., Turner, Benjamin L., Herz, Hubert, and Robinson, James S. 2009. "Temporal patterns of nutrient availability around nests of leaf-cutting ants (*Atta colombica*)

in secondary moist tropical forest." *Soil Biology and Biochemistry* Online.

Mendoza Franco, Edgar F., Violante-Gonzalez, Juan, and Roche, Dominique G. 2009. "Interoceanic occurrence of species of *Aristocleides* Mueller, 1936 (Monogenoidea:

Dactylogryidae) parasitizing the gills of gerreid fishes in the Neotropics." *Parasitology Research* Online.

Walker, Tom N. and Hughes, William O.H. 2009. "Adaptive social immunity in leaf-cutting ants." *Biology Letters Online*.

<http://intranet.stri.si.edu/> provides information on A(H1N1) virus

STRI's safety officer José Ramón Perurena has published relevant information to reduce viral transmission of the A(H1N1) virus that causes the current pandemic influenza at <http://intranet.stri.si.edu>

STRI also provided the staff with vaccination against seasonal influenza. This vaccination, given to 147 employees this week, does not prevent contracting the A(H1N1) virus, but it builds up defenses against previous known virus that may affect one's immune system.

The respirators for STRI employees in close contact with general public and visitors are the safest against the A(H1N1) virus (see illustration below). Other masks may avoid transmitting the virus to others and in some lesser degree will also protect yourself.

Wash your hands frequently. If you contract a respiratory

disease, stay home, try to stay away from the rest of your family, rest, drink lots of fluids, sleep alone, keep windows opened and doors closed. Do not self-medicate. There is no need to go to a clinic unless there are complications such as breathing difficulties. With children, please seek medical attention when breathing becomes agitated, noisy and the abdomen lowers underneath the ribs.

According to a release from Associated Press generated on May 13 in Geneva, people who already suffer from a weak immune system, diabetes, cardiovascular diseases as well as pregnant women are recommended to seek medical attention if experiencing any respiratory problem. Other media include asthma and hypertension patients in the most vulnerable groups, children under 5 and people over 50.

Aileen Campo, a medical doctor from the Gorgas Memorial Institute gave a presentation for the STRI community on Thursday, to update the information gathered by Gorgas and answer questions on the pandemic situation in Panama and abroad.

José Ramón Perurena, director de Seguridad



Industrial de STRI publicó información pertinente, medidas de seguridad y recomendaciones para reducir la transmisión del virus A(H1N1) causante de la actual influenza pandémica en: <http://intranet.stri.si.edu>

STRI proporcionó vacunas para contrarrestar la influenza estacional. Esta vacuna, inoculada a 147 empleados esta semana, no evita contraer el virus A(H1N1), pero refuerza las defensas contra virus previos ya conocidos que puedan afectar el sistema inmunológico.

Los respiradores que se han repartido entre personal en STRI que atienden al público y a los visitantes son las más seguras contra el virus A(H1N1). Otras máscaras pueden evitar transmitir el virus a otros y en menor grado también protegen al usuario.

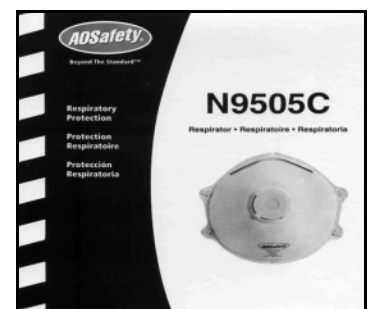
Lávese las manos tantas veces como pueda. Si se contagia de alguna enfermedad respiratoria, quédese en casa, trate de mantenerse alejado de su familia, descanse, tome mucho líquido, duerma solo, mantenga las ventanas abiertas y las puertas cerradas. No se auto-medique. No es necesario acudir a una clínica si no tiene dificultad para respirar. Con los niños debe buscar atención

médica cuando se agita su respiración, se le escuchan ruidos al respirar o se le hunde el abdomen bajo las costillas.

Evite aglomeraciones. Escuche las noticias y esté atento a nuevas instrucciones.

De acuerdo a un comunicado de prensa de Associated Press en Ginebra del 13 de mayo, aquellos que ya sufren de un sistema inmune débil, diabetes, enfermedades cardiovasculares y mujeres embarazadas, se les recomienda buscar ayuda médica si experimentan cualquier problema respiratorio. Otras fuentes informativas incluyen a pacientes de asma e hipertensión entre los grupos más vulnerables, niños menores de 5 y personas mayores de 50.

Aileen Campo, doctora en medicina del Gorgas Memorial hizo una presentación para la comunidad de STRI el jueves, para actualizar la información recogida por el Gorgas y contestar preguntas sobre la situación de la pandemia en Panamá y otros países.



Bocas del Toro Research Station celebrates Earth Day with Great Beach Clean Up: Four tons collected

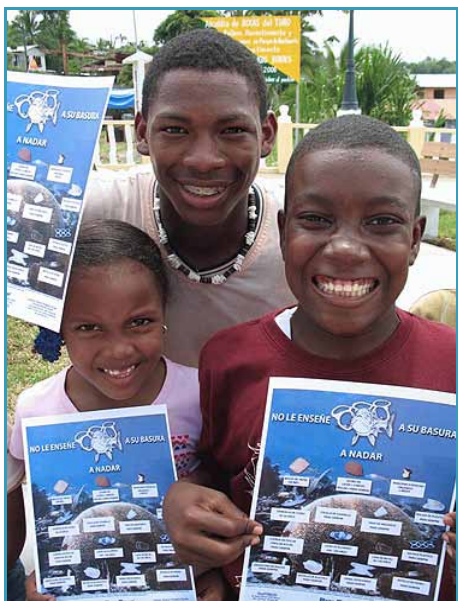


STRI's Marlon Smith, Noel Longo, Kristin Panke, Christian Harris, Christopher Mein, Sebastian Tilman, Tony Sanders, Melina, John Schneiderman, Yorlenis Delgado, Bastimentos School and Bet-El School students and their principals Dayra Powell and Adira Culioli, lead the effort.

From the total 4000 pounds of garbage collected, 540 pounds were put aside for recycling in the form of cans, plastic and glass.

The Bocas del Toro Research Station (BRS) celebrated Earth Day with a beach cleaning on Friday April 17 at Bastimentos

Town and on Sunday April 19, 2009 at Playa La Cabaña (Bocas Island) in collaboration with Alianza Bocas, ANAM, Ancon Expedition, Aqua Lounge, Bastimentos Public School, Bocas Water Sports, Buena Vista Restaurant & Bar, Cable Chicho, Corporación Wong, S.A., Escuela de Bastimentos, Escuela Bet-El, Flip Flop, Gran Kahuna, Hotel Limbo on the Sea, Hotel Vista Mar, IPAT, La Iguana Surf Bar, Playa Pristina, Pro Mar, Spanish by the Sea and Starfleet Scuba and The Dutch Pirate. A total of 230 volunteers participated in the event.



After the clean up, Bet-El school children went to oversee the trash being taken to the Dump. The Alcaldia of Bocas

Island donated their time and the use of their cars and boat to take the trash to the Dump.

Along with the clean up on Naos Island on April 22, this year's Earth Day celebrations at STRI collected almost ten tons of garbage. How green can we get when we work together with our friends?

La Estación de Investigaciones de STRI en Bocas del Toro (BRS) celebró



el Día de la Tierra con una gran limpieza de playas el viernes 17 de abril en Bastimentos y el domingo 19 de abril en Playa La Cabaña en Isla Bocas en colaboración con Alianza Bocas, ANAM, Ancon Expedition, Aqua Lounge, Bastimentos Public School, Bocas Water Sports, Buena Vista Restaurant & Bar, Cable Chicho, Corporación Wong, S.A., Escuela de Bastimentos, Escuela Bet-El, Flip Flop, Gran Kahuna, Hotel Limbo on the Sea, Hotel Vista Mar, IPAT, La Iguana Surf Bar, Playa Pristina, Pro Mar, Spanish by the Sea and Starfleet Scuba y The Dutch Pirate.

Marlon Smith, Noel Longo, Kristin Panke, Christian Harris, Christopher Mein, Sebastian

Tilman, Tony Sanders, Melina, John Schneiderman y Yorlenis Delgado, de STRI, y los estudiantes de las escuelas de Bastimentos y Bet-El y sus directoras Dayra Powell y Adira Culioli lideraron el esfuerzo.



Marlon Smith, STRI

De un total de 4000 libras de basura recogida, se separaron 540 libras para reciclaje en forma de latas, plásticos y vidrio.

Después de la limpieza, los estudiantes de la Escuela Bet-El fueron a observar cuando la basura fue transportada al basurero municipal. La Alcaldía de la Isla de Bocas donó su tiempo y el uso de sus vehículos y botes para transportar dicha basura.

Junto con la limpieza en Isla Naos el 22 de abril, la celebraciones del Día de la Tierra con STRI recogieron cerca de diez toneladas de basura. ¿Qué tan verdes podemos ser cuando trabajamos juntos con nuestros amigos?

