Tupper special

Thursday, March 24, noon seminar speaker will be David Tilman, University of Minnesota. Note changes. **Niche tradeoffs, neutrality: What determines the assembly, diversity and structure of plant communities?**

Special Bambi

Friday, March 25, Bambi seminar speaker will be David Tilman, University of Minnesota. Please note change **Title to be announced**

Bocas´talk

Wed, Mar 23 7pm, Bocas´Talk speaker will be Oscar Puebla, McGill NEO Program **Ecología y evolución de peces de arrecife: el caso del genero hypoplectrus** IPAT´s CEFATI

Arrivals

Katie Cramer, from the US, Mar 19 - May 23, to complete the initial steps in the creation of a zoning scheme for a marine protected area in Coiba National Park, at Tupper.

Ben Holt, University of East Anglia, UK, Mar 20 - Apr 2, to work with Oscar Puebla, at Tupper and Bocas del Toro.

Douglas and Tara Robinson, University of Oregon, Mar 22 - Ju31, to study the life history-physiology nexus: constraints on the evolutionary diversifications of avian life histories, in Gamboa.

Rebecca Gamboa, Oregon State University, Mar 24 to work with Douglas and Tara Robinson, in Gamboa.

Smithsonian Tropical Research Institute **www.stri.org** March 18, 2005

STRI signs agreement with Panama´s National Assembly

STRI director Ira Rubinoff (left) shakes hands with the Assembly´s first vice president Raúl Rodríguez, who signed the agreement in the name of Jerry Wison, president of Panama´s National Assembly.

STRI and the Panamanian National Assembly signed a five-year renewable agreement of collaboration, on Monday, March 14, at the Palacio Legislativo. According to the agreement, and in each other's area of competence, both institutions will further joint scientific activities, technical assistance, workshops, seminars and educational programs. Upon request from the Assembly, STRI will provide advise based on studies and research conducted by STRI in the Republic of Panama, as well as any other bibliographic resources for the evaluation of projected legislation to be considered by Panama's National Assembly.

Follow-up of any activity resulting from this and any subsequent agreement between the two institutions, will be channeled through the Assembly's Technical Secretariat and STRI's Office of External Affairs. In the photo,

STRI y la Asamblea Nacional de Panamá firmaron un acuerdo de colaboración por cinco años renovables, el lunes 14 de marzo en el Palacio Legislativo. De acuerdo al convenio, y dentro de sus respectivas competencias, ambas instituciones adelantarán actividades científicas conjuntas, asistencia técnica, talleres, seminarios y programas educativos. A solicitud de la Asamblea, STRI suministrará asesoría basada en estudios e investigaciones llevadas a cabo por STRI en la República de Panamá, así como material bibliográfico relevante para la evaluación de proyectos de ley que sean considerados por la Asamblea Nacional de Panamá.

El seguimiento a actividades que resulten de éste y cualquier otro convenio que se celebre entre ambas instituciones, será responsabilidad de la Secretaría Técnica de la Asamblea y la Oficina de Asuntos Externos de STRI. En la foto, el director de STRI Ira Rubinoff (izquierda) le da la mano al primer vice-presidente de la Asamblea, Raúl Rodríguez, quien firmó el acuerdo en nombre del presidente Jerry Wilson de la Asamblea Nacional de Panamá

More arrivals

David Bradley, University of British Columbia, Mar 25, to study the effects of competitive release on social dynamics of ant- following antbirds.

New publications

Breedy, Odalisca, and Guzman, Hector M. 2005. "A new species of *Leptogorgia* (Coelenterata: Octocorallia: Gorgoniidae) from the shallow waters of the eastern Pacific." *Zootaxa*, 899(1): 1-11.

Davidar, Priya, Puyravaud, Jean Philippe, and Leigh, Jr., Egbert Giles. 2005. "Changes in rain forest tree diversity, dominance and rarity across a seasonality gradient in the Western Ghats, India." *Journal of Biogeography*, 32(3): 493-501.

Dechman, Dina, Kalko, Elisabeth K.V., Knight, Dennis H., and Kerth, G. 2005. "Mating system of a Neotropical roost-making bat: the whitethroated, round-eared bat, *Lophostoma silvicolum* (Chiroptera: Phyllostomidae)." *Behavioral Ecology and Sociobiology*, Online.

Goulet, Tamar L., and Coffroth, Mary Alice. 2004. "The genetic identity of dinoflagellate symbionts in Caribbean octocorals." *Coral Reefs*, 23(4): 465-472.

Pandolfi, John M., Jackson, Jeremy B.C., Baron, N., Bradbury, Roger H., Guzman, Hector M., Hughes, Terence P., Kappel, C.V., Micheli, F., Ogden, John C. , Possingham, H.P., and Sala, E. 2005. "Are U.S. coral reefs on the slippery slope to slime?" *Science* 307(5716): 1725-1726.

Move to Tivoli starts on time

All offices scheduled to move to Tivoli starting Friday, March 11, completed moving to their remodeled offices, on Roosevelt Avenue, Ancon.

Personnel of the Security Office Julia Areas, Alejandro Arze, Fernando Caballero, Alejandro Hernández and Luis Carlos López are back in office 412. Human Resources director Luz Latorraca (in the photo at right), Krysta Ríos and Maritza Perurena are back in office 403.

Stanley Heckadon, director of STRI´s office of Communications and Public Programs (OCAPP) is occupying the office left by director Ira Rubinoff. With him in the mezzanine are Monica Alvarado, OCAPP´s deputy director, science interpreter Beth King and administrative assistants Olga Barrio and Patrizia Pinzón. Information specialist Marialuz Calderon is on the first floor, former legal office. Anthropologist Cecilia Mañosa, OCAPP, will move to one of the offices left by OIT in the basement.

We thank Raineldo Urriola and assistant Yvette McKenzie, for coordinating the operation. OCAPP recognizes Patrizia Pinzón for a smooth move.

Todas las oficinas que debían mudarse a Tívoli del 11 de marzo, han completado su translado a oficinas remodeladas en Avenida Roosevelt, Ancón. El personal de la Oficina de Seguridad, Julia Areas, Alejandro Arze, Fernando Caballero, Alejandro Hernádez y Luis Carlos López están de vuelta en la oficina 412. La directora de la Oficina de Recursos Humanos Luz Latorraca (en la foto a la derecha), Krysta Ríos y Maritza Perurena están nuevamente en la 403.

Stanley Heckadon, director de la Oficina de Divulgación y Programas Públicos (OCAPP) está ocupando la oficina dejada por el director Ira Rubinoff. Con él en el mezanine están Mónica Alvarado, subdirectora de OCAPP, Beth King, intérprete científica y las asistentes administrativas Patrizia Pinzón y Olga Barrio.

Marialuz Calderón, especialista en información está en el primer piso, antigua oficina legal. La antropóloga Cecilia Mañosa, OCAPP, ocupará una de las oficinas dejadas por OIT en el sótano.

Agradecemos a Raineldo Urriola y su asistente Yvette Mckenzie, por la coordinación de la operación. OCAPP agradece a Patrizia Pinzón por una mudanza coordinada.

Heckadon addresses the Inter American Press Society

OCAPP director Stanley Heckadon was included as one of the keynote speakers at the annual meeting of the Inter American Press Society, on March 11, held in Panama. During his presentation "Panama: the land and the people" he highlighted the diversity and quality of STRI facilities in Panama. Hundreds of newspaper editors, owners and reporters attended the event.

El director de OCAPP Stanley Heckadon Moreno, presentó una de las conferencias magistrales en la reunión anual de la Inter American Press Society, el 11 de marzo. Durante su presentación "Panamá: la tierra y la gente", Heckadon subrayó la calidad y diversidad de las instalaciones que STRI mantiene en Panamá. Cientos de editores, reporteros y dueños de periódicos asistieron al evento.

Marine researchers deliver blueprint for rescuing America's troubled coral reefs

An international team of marine ecologists urges the US to take immediate action to save its fragile coral reefs. Their message is contained in a strongly worded essay, "Are U.S. coral reefs on the slippery slope to slime?" that appeared in the March 18 issue of *Science*.

"We're frustrated with how slowly things are moving with coral reef conservation in the US," said Fiorenza Micheli, an assistant professor of biological sciences at Stanford University. "Tiny steps are being taken, but they really don't address the overall problem."

Micheli and Stanford graduate student Carrie Kappel are among 11 researchers from the US, Panama and Australia who co-authored the *Science* essay, which focused on America's two major coral reef systems in Hawaii and Florida.

Florida´s coral reef barrier stretches some 200 miles along the Florida Keys and plays an important role in the state's economy. "Annual revenues from reef tourism are $1.6 billion, but the economic future of the Keys is gloomy owing to accelerating ecological degradation." "Florida's reefs are well over halfway toward ecological extinction. Large predatory fishes continue to decrease, reefs are increasingly dominated by seaweed and alarming diseases have emerged."

In 1990, the US government established the Florida Keys National Marine Sanctuary to protect the reef--third longest in the world behind Australia and Belize. But pollution, overfishing, disease and thermal stress caused by climate change remain significant problems throughout the sanctuary. "Conversion of 16,000 cesspools to centralized sewage treatment and control of other land-based pollution have only just begun," they noted, and only 6% of sanctuary waters have been set aside as "no take zones" where fishing is prohibited.

In contrast, the neighboring countries of Cuba and the Bahamas have agreed to conserve 20% of their coral reef ecosystems, while Australia recently zoned one-third of its massive Great Barrier Reef as "no take" in an attempt to reverse further ecological decline.

The coral reefs of Hawaii's main islands also show degradation similar to that of the Florida Keys. And while reefs in the isolated northwest Hawaiian Islands remain in relatively good condition, they, too, are showing signs of decline: "Monk seals and green turtles are endangered; large amounts of marine debris are accumulating, which injure or kill corals, seabirds, mammals, turtles and fishes; and levels of contaminants , including lead and PCBs, are high."

To prevent further ecological deterioration, the research team recommended that the US start managing its coral reefs as whole ecosystems instead of fragmented habitats. "For too long, single actions such as making a plan, reducing fishing or pollution, or conserving a part of the system were viewed as goals," they wrote. "But only combined actions addressing all of these threats will achieve the ultimate goal of reversing the trajectory of decline. We need to act now to curtail processes adversely affecting reefs."

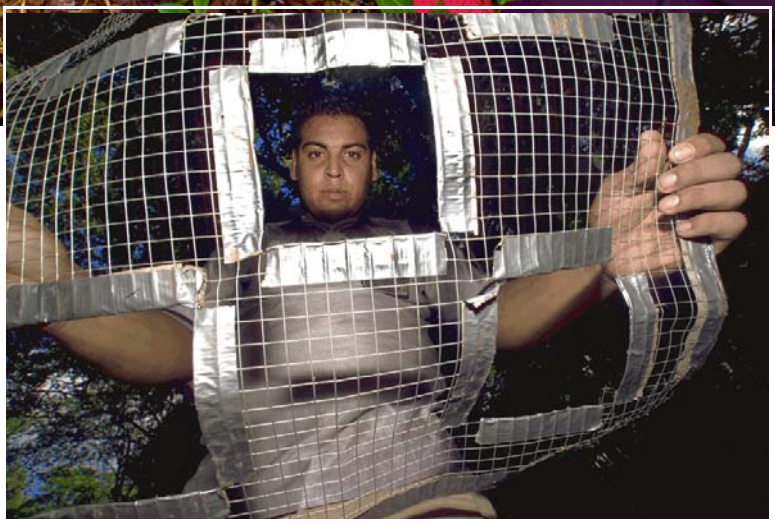
Stopping overfishing will require integrated systems of "no take" areas as well as quotas on harvests, they said, and "terrestrial runoff of nutrients, sediments and toxins must be greatly reduced by wiser land use and coastal development." In addition, "slowing or reducing global warming trends is essential for the long-term health of all tropical coral reefs."

Like any other successful business, managing coral reefs requires investment in infrastructure, according to the authors. However, such investment will produce long-term benefits for the economy and the environment.

"Short-lived species, like lobster, conch and aquarium fish will recover and generate income in just a few years," they noted. "Longer-lived species will recover, water quality will improve and the ecosystem will be more resilient to unforeseen future threats. Ultimately, we will have increased tourism and the possibility of renewed sustainable extraction of abundant megafauna. One day, reefs of the US could be the pride of the nation."

The *Science* essay was co-written by John Pandolfi of the University of Queensland, Australia; Jeremy Jackson, Scripps Institution of Oceanography and the Smithsonian Tropical Research Institute (STRI), Panama; Nancy Baron, National Center for Ecological Analysis and Synthesis; Roger Bradbury, Australian National University; Héctor Guzman, STRI; Terry Hughes, James Cook University, Australia; John Ogden, Florida Institute of Oceanography; Hugh Possingham, University of Queensland; and Enric Sala, Scripps.

Information taken from *Eurekalert*



Dry and wet season survival

Bettina Engelbrecht, STRI research associate from the University of Kaiserslautern in Germany, studies the consequences of drought periods for regional plant distribution patterns in tropical forests. She is conducting a regional-scale seedling transplant experiment to in a series of Forest Dynamics plots along the strong rainfall gradient across the Isthmus of Panama. She follows seedling dry season growth and survival and evaluates the relative importance of climatic and edaphic factors for the development of seedling drought stress.

A crew of biologists and research assistants from Panama, including Eric Manzané (photo above) and Albert Sánchez (below) work with Engelbrecht in the field.

Bettina Engelbrech, investigadora asociada a STRI de la Universidad de Kaiserslautern en Alemania, estudia las consecuencias de los períodos de sequía, en los patrones de distribución de plantas regionales en los bosques tropicales. Bettina está llevando a cabo un experimento de transplante a escala regional de plantones a una serie de parcelas de dinámica de bosques a lo largo de la pendiente de fuertes lluvias en el Istmo de Panamá. Ella le da seguimiento al crecimiento y supervivencia de los plantones en la estación seca, y evalúa la importancia relativa de los factores climáticos y edáficos, para el desarrollo del estrés de la sequía en los plantones.

Un equipo de biólogos y asistentes de investigación panameños, incluyendo a Eric Manzané (foto arriba) y Albert Sánchez (abajo) asisten a Engelbrecht en el campo.

Information:
Bettina Engelbrecht