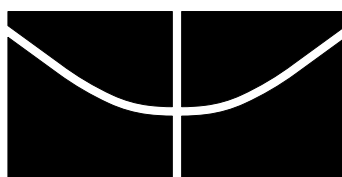


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# 19<sup>th</sup> Annual Meeting of the Society for Conservation Biology

## BOOK OF ABSTRACTS



Universidade de Brasília

Universidade de Brasília  
Brasília, DF, Brazil

15<sup>th</sup> - 19<sup>th</sup> July 2005

family Pachygastrinae increases and Sarginae decreases. These results indicate that treefall gaps are important for providing resources to many kinds of flies, most of them rare in undisturbed plots.

**327. GENETICALLY MODIFIED CROPS IN THE CERRADO - EFFECTS ON LAND USE AND AGROBIODIVERSITY CONSERVATION.** FONTES, ELIANA; Sujii, Edison; Pires, Carmen; Schmidt, F.; Lauman, R.; Faria, M.; Vieira, P.; Portilho, T.; Pereira, F.; Ortiz, G.; Ciampi, Ana Y.; Barroso, Paulo. Núcleo de Controle Biológico, Embrapa Recursos Genéticos e Biotecnologia, Caixa Postal 02372, Brasília, DF, 70.049-970, Brazil, eliana@cenargen.embrapa.br.

Agricultural crops grown in the Cerrado result from the selection of hundreds of landraces, and the development of new varieties of introduced plants. This high genetic diversity and variability of genotypes have been colonized by arthropods, weeds and microorganisms present in the surrounding natural vegetation. Other species present include annelids, amphibians, reptiles, birds, and mammals. It is expected that GM crops may be soon commercialized in Brazil, bringing benefits to farmers and the environment, as they may facilitate farm management and reduce pesticide usage. Before GM crops are introduced for commercial use the potential negative impact on the conservation of biodiversity must be assessed. The large number of arthropods, weeds and microbes found in agricultural fields raises the question of adverse effects on non-target organisms. Some crop species have wild, feral, and dooryard relatives and landraces in Brazil. Some of these are sexually compatible with the cultivated type and gene flow from new conventional or transgenic varieties may pose a threat to the long-term conservation of the crop species' genetic diversity. We will present information on species diversity on cotton cultivated in the Cerrado and discuss the potential effects on the dynamics and conservation of species diversity in agroecosystems.

**328. ENDANGERED FORESTS: MOBILIZING SCIENCE TO PROTECT ENDANGERED FORESTS WORLDWIDE.** FORD, JIM. ForestEthics, One Haight Street, San Francisco, California, 94102, USA, jim.ford@forestethics.org.

As forests loss and biodiversity loss accelerate under pressure from logging and other industrial demands around the world, new commitments to protect biodiversity and natural systems by the very same companies responsible for much of this demand are a source of hope. Breakthroughs in conservation areas design in Chile and the Great Bear Rainforest of British Columbia that are a result of markets campaigns and the implementation of corporate commitments are exemplary. Sound, independent science is needed to guide the implementation of corporate commitments to protect biodiversity through their purchases of wood and paper products. "Ecological Components of Endangered Forests" outlines the major regional and global needs for conservation of forest ecosystems by scientists, GIS mapping projects and forest biodiversity experts. Three- and four-way partnerships between industry, scientists, non-governmental organizations and governments will be necessary as more regions worldwide are the subjects of far-reaching forest conservation initiatives where markets demand them.

**329. SUSTAINING LINKS AND BUILDING BRIDGES WITH INDIGENOUS COMMUNITIES: TOWARDS THE MUTUAL GOAL OF CONSERVING BIODIVERSITY AND ETHNODEVELOPMENT IN THE AMAZON.** FORLINE, LOUIS. Department of Anthropology/096, University of Nevada - Reno, 1664 N. Virginia Street, Reno, Nevada 89557, USA, forline@unr.edu.

Amerindian peoples, researchers, NGOs, and government institutions have forged functional partnerships in some cases. In other cases, partnerships become difficult when other players such as loggers and miners intervene. Expectations and goals can differ among the different partners yet objectives are not necessarily mutually exclusive. As indigenous peoples strive to maintain their livelihoods, many find that this objective can be met without undermining conservationist goals. Two examples are used to illustrate the resolution of differing sets of goals. The first example is the Guajá Indians of Maranhão State who currently share two reserves with members of other ethnic groups but prefer their own reserve. The establishment of a separate reserve would preserve headwater areas and biodiversity, in addition to extending security and resources to the Guajá. The second example riverine indigenous communities of the lower Xingu river near Altamira, Pará State. The establishment of new reserves for the Xipaiá and Curuaia groups and the urban Indians of Altamira would halt ecosystem degradation in addition to providing these people with security and improved means to sustain their livelihoods. Conflicting claims by third parties will also be analyzed to better comprehend the potential for establishing indigenous reserves.

**330. THE CAUSES AND CONSEQUENCES OF AQUATIC MERCURY CONTAMINATION IN THE BRAZILIAN AMAZON.** FORSBERG, BRUCE; Belger, Lauren; Peleja, Reinaldo; Zeidemann, Vivian. Coordenacao de Pesquisas em Ecologia, Instituto Nacional de Pesquisas da Amazonia, CP 478, Manaus, AM 69011-970, Brazil, forsberg@vivax.com.br.

High concentrations of mercury have been encountered in fish, soils and human hair collected in various parts of the Amazon basin. These elevated concentrations are often attributed to anthropogenic pollution from gold mining operations. However some of the highest levels of mercury contamination have been found in isolated black water tributaries far from any industrial activity. Recent findings suggest that most of the mercury present in the Amazon ecosystem is, in fact, derived from natural processes and that its distribution in the basin is determined more by river chemistry and wetland densities than by anthropogenic influences. I summarize these findings here and present an updated overview of the biogeochemistry of mercury in the Amazon basin. Current information on the distribution and dynamics of mercury in the region, including anthropogenic influences, are evaluated in the context of the regional and global mercury cycles. Mercury concentrations in fish and human hair are shown to be highly correlated with river pH and wetland densities. Mercury concentrations are shown to be naturally high in most central Amazonian soils.

**331. BAT HABITAT USE IN BOMBAY HOOK NATIONAL WILDLIFE REFUGE, USA.** FOX, MARCIA; Vulinec, Kevina. Department of Agriculture and Natural Resources, Delaware State University, Dover Delaware 19901, USA, (Marcia.Fox@state.de.us).

The USFWS requirement for states to develop conservation strategies for species of conservation concern has highlighted the need for preservation of natural habitats in Delaware due to increased