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BOOK OF ABSTRACTS

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State. The litter production was bigger in the larger fragment, litter humidity and canopy openness did not vary with fragment size, and thickness of the litter layer was bigger in the smaller fragments. We can infer that the differences between litter fall and accumulation in the ground may be related with differences in the decomposition rate in these areas. Difference in the litter production and thickness of the litter layer was not found between fragments edges and interiors, litter humidity was bigger in the interior of the fragments, and the canopy of the forest was more opened in the edges. In the dry season there were an increase of litter production, a reduction of litter humidity and an increase of canopy openness, but did not have difference in the thickness of the litter layer.

703. THE CONSERVATION RESOURCE ALLOCATION PROBLEM. POSSINGHAM, HUGH P.; McCarthy, Mick A.; Pressey, Robert L.; Wilson, Kerrie. The Ecology Centre, The University of Queensland, Brisbane, Queensland, 4072, Australia.

We formulate the general conservation resource allocation problem. This encompasses all issues of resource allocation in conservation, including: national spending on threatened species, reserve system design and problems of local biodiversity management. The general formulation tells us how to optimally allocate effort to different management actions in both time and space. The approach is illustrated with two examples. First, we show how funds should be allocated to threatened species in a country or region using an example of Australian birds. This introduces the controversial issue of ecological triage. Second, we show how habitat destruction, metapopulation dynamics and other dynamic ecological processes can be accommodated into conservation planning. We will resolve the concern about whether more classical static conservation planning is a valid approach to real world reserve system design - an issue that is controversial in the current literature.

704. GENETIC VARIABILITY OF A BRAZILIAN NATIVE SEMI-ARID SPECIES BY RAPD MARKER. PÓVOA, JOEMA S. R.; Lacerda, Ana Luiza M.; Ciampi, Ana Y. Universidade Federal de Lavras, Lavras MG, Brasil, joemap@hotmail.com (JSRP). Embrapa Recursos Genéticos e Biotecnologia, PqEB final W5 norte, CEP 70770-900 Brasília DF, Brasil (JSRP, ALML, AYC).

Genetic studies are very important mainly for species under strong antropic pressure and with high economic and ecologic potential. To provide the conduction of collect and conservation plans of native semi-arid species with pharmacological potential, genetic studies are being made to investigate the genetic variability between and within populations of species belonging to Bignoniaceae using RAPD markers. Four populations of distinct locality in Brazilian semi-arid were analyzed, totaling 96 individuals. Nineteen primers provided 130 polimorphic loci. The similarity dendrogram showed formation of three groups: population A, population B and populations C and D. Dissimilarity of 30% was found showing low genetic variability in populations. The dendrogram of populations showed that these are divided in two groups: A and B, and C and D. The Mantel Test between matrixes of Jaccard similarity and cophenetic values showed high correlation and no significance ($r = 0.864$, $p = 0.1672$), and between matrixes of Jaccard similarity and Euclidian distances between points of the dispersion graphic showed high correlation and significance ($r = 0.999$, $p = 0.0438$). This indicates that the 3D dispersion graphic is more efficient in show the genetic variability between sampled populations. All populations analysed are genetic distinct one of others.

705. DEVELOPING A BIODIVERSITY CONSERVATION PLAN FOR THE VÁRZEA FLOODPLAINS OF THE MIDDLE AND LOWER AMAZON. PRESSEY, ROBERT L.; Albernaz, Ana Luisa; Scaramuzza, Carlos A. M.; Ridges, Malcolm J.; Watts, Matthew E. Department of Environment and Conservation, PO Box 402, Armidale, NSW 2350 Australia, bob.pressey@environment.nsw.gov.au (RLP, MJR, MEW); Ciências da Terra e Ecologia, Museu Emilio Goeldi, Av. Perimetral 1901, Belém, PA 66077-530, Brazil (ALA); WWF Brazil, SHIS EQ QL 6/8 conj E, Brasília, DF 71620-430, Brasil (CAMS).

We are developing a biodiversity conservation plan for the middle and lower várzea floodplains of the Solimões and Amazon. Several stages have been completed: (1) biological surveys to inform the delineation of environmental surrogates; (2) compilation of a spatial framework of environmental surrogates defined by the major factors determining species distributions; (3) design guidelines for protected areas; and (4) preliminary data analyses in decision-support software (C-Plan and Marxan) to inform decisions about size of planning units, targets, weightings for compactness, and cost surfaces to favour proximity to established protected areas and distance from deforestation and urban centres. We are ready to present the data sets and preliminary analyses to stakeholders, including local and regional experts who will recommend specific boundaries and configurations of new protected areas. With the experts, we will use the software to map and resolve options (irreplaceability values of planning units) for achieving targets and design preferences. This part of the planning exercise will use information from socio-economic studies and attempt to minimise conflict between conservation management and extractive uses. After this design phase, the software systems will facilitate ongoing adjustments to conservation design. We expect these adjustments to be frequent during the protracted period of implementation.

706. A SPATIAL FRAMEWORK FOR CONSERVATION PLANNING IN THE VÁRZEA FLOODPLAINS OF THE BRAZILIAN AMAZON. PRESSEY, ROBERT L.; Albernaz, Ana Luisa; Scaramuzza, Carlos A. M. Department of Environment and Conservation, PO Box 402 Armidale, NSW 2350, Australia, bob.pressey@environment.nsw.gov.au (RLP); Ciências da Terra e Ecologia, Museu Paraense Emilio Goeldi, Av. Perimetral 1901, Belém, PA 66077-530, Brazil (ALA); Ecologia da Paisagem, WWF Brazil, SHIS EQ QL 6/8 conj E, Brasília, DF 71620-430, Brazil (CAMS).

Conservation planning for the várzea floodplains of the lower and middle Amazon will attempt to deal with biodiversity pattern and process. Biological data in the várzea are sparse and highly biased geographically and taxonomically. Therefore, to provide a consistent picture of biodiversity pattern, and based on advice from experts and a thorough review of the literature, we have developed a spatial framework of surrogates that reflect the major factors known to determine species distributions. The framework is a system of floodplain subdivisions based on major longitudinal zones, local variation in flood depths, structural vegetation units, river confluences, and areas influenced by small, lateral catchments. Three other fixed surrogates are intended to reflect the processes of species movements between the várzea and associated environments. These are the várzea "edge" or interface with terra firme, terra firme biogeographic subregions defined by river barriers, and lateral blackwater and clearwater tributaries. To these fixed sur-