

SYMPOSIUM 8: EVOLUTION, ECOLOGY, AND CONSERVATION OF THE CERRADO: NEW DIRECTIONS, NEW APPROACHES

Bonito, 20th June 2012 (Wednesday)

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The South American savannas known as the *Cerrado* are a globally-recognized biodiversity hotspot and have also played a pivotal role in Brazil's emergence as a global economic power. The *Cerrado*'s historical importance for agriculture, coupled with Brazil's increasing prominence in the global soy and biofuels markets, has also made the *Cerrado* one of the most threatened ecosystems in South America -- over 50% has been converted to agriculture or pastures and the remainder is highly fragmented. The upsurge in national and international interest in the *Cerrado*, coupled with the large number of participants expected at ATBC 2012 that live and conduct research in the region, makes the Bonito meeting the ideal forum in which to prominently highlight cutting-edge research by Cerrado biologists and conservationists. We are proposing a symposium highlighting cutting-edge research on the evolution, ecology, and conservation of the *Cerrado*. The scientists and practitioners listed below are notable for moving the study of the *Cerrado* in new directions with their advanced and multi-disciplinary approaches. Furthermore, because they are addressing questions that are relevant throughout the tropics -- the maintenance of species diversity, climate change, the effects of nitrogen deposition, protected area management -- we expect that their presentations will also interest the many ATBC attendees working outside of the Cerrado region. In light of the symposium's focus and the location of ATBC 2012, we felt it was particularly important to highlight the efforts of Brazilian scientists (8 of the 12 speakers are from Brazil). We also made an effort to include scholars at the early stages of promising careers (6 of the 12 speakers are recent PhD's) and from a diversity of institutions including NGO's, government agencies, and universities.

TALKS (Room Terena, 09h00-12h30)

09h00-09h15 (S8.CO.01) **The evolutionary history of the Cerrado flora.** *Marcelo Simon*

09h15-09h30 (S8.CO.02) **Small-mammal diversity in the Brazilian Cerrado: patterns of alpha and beta diversity across habitat types.** *Emerson Monteiro Vieira*

09h30-09h45 (S8.CO.03) **Plant demography in political, agricultural, and biological hotspot.** *Emilio Bruna*

09h45-10h00 (S8.CO.04) **Leaf herbivory and decomposability in Cerrado plants.** *Heraldo Vasconcelos*

10h00-10h15 (S8.CO.05) **Temporal patterns of fruit color and contrasts in a Cerrado-savanna plant community.** *Maria Gabriela Gutierrez de Camargo.*

10h15-10h30 (S8.CO.06) **Rainfall does not explain nutritive plant status differences between two communities from the core and periphery of the Brazilian savanna vegetation.**
Marcelo Claro de Souza

Coffee Break

11h00-11h15 (S8.CO.07) **Carbon stocks estimates in Cerrado and Pantanal private reserves, Mato Grosso do Sul State, Brazil.** *George Camargo*

11h15-11h30 (S8.CO.08) **Climate change, agriculture and conservation in the Cerrado and why it can be the next deforestation hotspot in Brazil.** *David Montenegro Lapola*

11h30-11h45 (S8.CO.09) **The effects of climate change on distribution and conservation of Cerrado birds.** *Miguel Ângelo Marini*

11h45-12h00 (S8.CO.010) **Demographic effects of road proximity and food availability on populations of a Neotropical herbivore in the Brazilian Cerrado.** *Ernane Henrique Vieira Neto*

12h00-12h15 (S8.CO.011) **Why the Cerrado needs prescribed fire.** *William Hoffmann*

12h15-12h30 (S8.CO.012) **Non-timber forest products and fire management as tools for Brazilian Cerrado conservation - research priorities.** *Isabel Belloni Schmidt*

POSTERS (Karuha Space, 15h30-16h30)

S08.P.01. **Negative effect of fluctuating asymmetry for the restructuring of *Vochysia thyrsoidea* after burning.** *Bárbara de Carvalho Barbosa*

S08.P.02. **Nesting ecology of *Camponotus rufipes* and *Camponotus renggeri* (Hymenoptera, Formicidae) in Cerrado savanna: nest structure and interhabitat differences.**
Mariane Ueda Vaz Ronque

S08.P.03. **Spatial distribution of *Calypttranthes brasiliensis* Spreg. in a palm swamp in the environmental protection area of Pandeiros river, Minas Gerais State (Brazil).** *Yule Roberta Ferreira Nunes*

S08.P.04. **Vegetation structure and plant area index in a transition between Cerrado and Tropical dry forest in Northern Minas Gerais.** *Sarah Freitas Magalhães Silva*

S08.P.05. **Aligning conservation of the Cerrado with conservation of the Amazon.** *Ana Claudia Mendes Malhado*

S08.P.06. **Does the use of herbicide in invaded areas favour the short-term regeneration of Cerrado?** *Mariana Ninno Rissi*

S08.P.07. **The effect of converting Cerrado vegetation into agro-systems over the functional structure of native ground-dwelling ant communities.** *Sarah Marie-Jeanne Lucette Groc*

S08.P.08. **Effect of increased nitrogen deposition on leaf litter decomposition and soil microbial activity in the Cerrado vegetation, Brazil.** *Laura Vivian Barbosa Silva*

- S08.P.09. **Estimation of the speciation rate for the Cerrado biome.** *Luís Cláudio Benevides Moreira*
- S08.P.10. **Ecological functions performed by dung beetles in Cerrado's pastures.** *Sabrina Almeida*
- S08.P.11. **The importance of the maintenance in pastures for bird conservation at Bodoquena mountains, Brazil.** *Mauricio Neves Godoi*
- S08.P.12. **Floral resource availability and its use by hummingbirds in the Cerrado of Central Brazil.** *Pietro Kiyoshi Maruyama*
- S08.P.13. **Ixodids associated to small mammals in a forest fragment of the Cerrado biome, southeastern Brazil.** *Vanessa Nascimento Ramos*
- S08.P.14. **Floristic and dispersion syndrome in a Cerrado *sensu stricto* 22 years after different treatments of deforestation.** *Lamartine Soares Bezerra de Oliveira*
- S08.P.15. **Direct seeding of Cerrado tree species: testing nurse plants and fertilization.** *Daniel Vieira*
- S08.P.16. **Aclimatization of *Cyrtopodium cf. palmifrons* Rchb. F. & Warm (Orchidaceae) in different substrates.** *Amanda Galdi Boaretto*
- S08.P.17. **Economic value of the biodiversity storage service provided by Brazilian quartz mountain ecosystems.** *Fernando Resende*
- S08.P.18. **The effect of land-use change in Brazilian savanna: comparing ant community structure between natural habitats and agro-systems.** *Renata Pacheco do Nascimento*
- S08.P.19. **Arsenic effects on *Baccharis dracunculifolia* (Asteraceae): performance, toxicity, accumulation and nutritional quality.** *Ana Cláudia Dias Rodrigues da Silva*