

IS THE PANTANAL A PRISTINE PLACE? CONFLICTS RELATED TO THE CONSERVATION OF THE PANTANAL¹

RAFAEL MORAIS CHIARAVALLOTTI²

A review of the Book: FRANCO, Jose Luis Andrade; DRUMMOND, Jose Augusto; CHIARA, Gentile; AZEVEDO, Aldemir Inácio de. **Biodiversidade e ocupação humana do Pantanal mato-grossense: conflitos e oportunidades.** 1 ed. ed. Rio de Janeiro: Garamond, 2013. p. 260

The book “Biodiversidade e ocupação humana do Pantanal mato-grossense: conflitos e oportunidades” brings to discussion a hardly cited issue in academic debates: the conservation of the Pantanal. In a simple search in Scopus using the name of the biome added the word “conservation” we find 159 references for the Pantanal, very different from the Amazon or Atlantic Forest with 1,319 and 1,405 respectively. It is possible to reflect about some possible reasons, such as: it is considered a quite well-preserved environment, in which the deforestation of native vegetation is less than 17% (IBAMA, 2012); roughly 95% of the 140,000 km² biome is privately owned, with few conflicts related to land tenure (Harris et al., 2005); and there are few records of endemic species in the region (Junk et al., 2006). It is thus not surprising that the Pantanal does not figure on most maps of priority areas for conservation (Jenkins et al., 2013; Myers et al., 2000; Olson and Dinerstein, 2002) being considered by some a pristine place (Desbiez, 2009) free of threats. However, it does indeed play an important role in world biodiversity conservation. If on one hand there are few records of endemic species in the region, on the other the Pantanal preserves healthy populations of threatened species such as Jaguar (*Panthera onca*) (Cavalcanti et al., 2012), Marsh Deer (*Blastocerus dichotomus*) (Mourão et al., 2000), and Jabiru Stork (*Jabiru mycteria*) (Mourão et al., 2010). Thus, should the region not be preserved, these species will find themselves closer to extinction. Furthermore, the Pantanal faces threats that need to be taken into account. In recent discussions on the relevance of the new Brazilian forest code to the Pantanal, local ranches are fighting to raise the amount of deforestation permitted to 60%, while local research institutes point out this should average no more than 35% to guarantee ecological sustainability of the biomeⁱ. Therefore, it is dangerous to see the Pantanal as a place free of environmental

1. PhD candidate, University College London, rafael.chiaravallotti.12@ucl.ac.uk,

2. “The present work has been realized with support of CNPQ, Conselho Nacional de Desenvolvimento Científico e Tecnológico, Brazil”

concerns. This book is one of the few publications that bring conflicts related to the conservation of the Pantanal to the attention of the wider public.

The book is divided into three main chapters. The first and shortest part of the book (“O Pantanal da Biodiversidade”) briefly describes the physical and biological features of the region, explaining its formation and climate changes throughout the time. It gives a good summary of Ab’Sáber (2006)’s description with some additions related to the subregions of the biome. It goes on to describe the biodiversity of the region in an equally accurate way, ably summarising eight chapters on Pantanal plant and animal biodiversity presented in Junk *et al.* (2011). The second chapter (“Ocupação do Pantanal Mato-grossense”) covers the historical occupation of the region from the European colonization in the 16th (Spanish) and 18th century (Portuguese) to the present day. In parallel they point out the extermination of Amerindians living in this region as a consequence of this period, illustrating it with cases of diseases that caused a drastic drop in the local populations, along side wars against them in European attempts to occupy the region. The historical process of colonization is well referenced. Lastly in the same chapter the authors outline the recent incentives from the government for cattle ranching in the region. The last chapter (“Disputas socioambientais e conservação da natureza no Pantanal”) is the core part of the book, giving an extensive discussion of conflict in the Western Border of the Pantanal between local people and Protected Areas, and including some results from a questionnaire survey held by them. Unfortunately, this chapter does not live up to the accuracy and careful referencing used in the previous chapters. The conflict described between local people and protected areas is real and has indeed led, on the one hand, to restrictions on activities fundamental to local communities’ livelihoods and, on the other, triggered concerns that they may be damaging important biodiversity hotspots (in some cases affecting fragile species in the region) (Bertassoni *et al.*, 2012). However, the authors misuse several findings about the local settlements in the region, undermining the book’s scientific value.

The authors’ misinterpretation is about, firstly, the emergence of local settlements in the region. They argue that these appeared after 1974 when a great flood covered part of the region leading some ranch workers to move to the riverside and switch their livelihood to fishing. However, it is known that when slavery came to an end in 1888, African ex-slaves who were working in farms in this region, with no finance or social support, settled on Amerindian Indigenous Mounds and alongside the rivers in the same region as the remaining Guatós (Silva and Silva, 1995). Also, some Paraguayans came to live in this region due to the wave of poverty and disease experienced by their country as a consequence of the Paraguayan War (or War of Triple Alliance – 1864-1870- part fought over this region) (Schuch, 1995). Thus, at the beginning of the 20th century several mixed communities were already established, made up of Indigenous people, African ex-slaves, and Paraguayans. This is consistent with the findings of Ethnobotanical studies which have documented when the communities and numbers of people living in or around the Paraguay and São Lourenço river floodplains started to increase (Bortolotto, 2006). Therefore, the authors’ argument that local settlements were set up just after the flood of 1974 is neither consistent with nor informed by current knowledge about the local people.

Secondly, the authors make some statements that are unsubstantiated and biased, for instance “*their weak ability to organize themselves*” (p. 91) and “*Within the environment impacts [...] it can be counted the overfishing*” (p. 91). Both these statements are demonstrably incorrect. First, three settlements have organized themselves and established recognized Local Associations (Barra do São Lourenço Association, São Francisco Port Association and Paraguai Mirim Association), moreover, recently, one of them applied for and received a small grant to built the Association Office from the Fundação Socioambiental CASA – grant number GGF 38/2014, R\$ 12,000). Secondly, the issue as to whether overfishing occurs in the Pantanal, and if so by whom and to what extent, is still controversial. Reviewing the few studies for the region, Mateus *et al.* (2011) points out that with the exception of Pacu (*Piaractus mesopotamicus*) the stocks show no sign of overfishing. In the rest of the chapter the authors first present the results of their survey questionnaire. It shows data about the socio-economic profile and their livelihood, which gives a good scenario of the region. The chapter ends with a more broad discussion about the concept of traditional people, trying to argue that most so-called “traditional communities” should be named instead “rural poor” because there are no differences from “non-traditional people”. They argue that they shouldn’t be treated with special rights, regretting some public benefits given to the “traditional people”. The authors illustrate their opinion with the example of the Western Border of the Pantanal where they argue that the region has always been focused on cattle ranching, and that it does not make sense to give livelihood-supporting benefits to the fishermen. However, as already made clear, literature review on the state of knowledge for this region shows a different perspective, with fishing having clearly been part of the local non-Indian people’s livelihoods for well over 100 years.

The lack of scientific accuracy in the most important part of the book undermines its potential academic impact. Its findings and statements are in several places rhetorical rather than well researched, and need to be read with caution. On the other hand this book is an important trigger of debates about the conservation of the Pantanal, showing that it is not pristine and free of threats as is widely claimed.

Note

i <http://capitaldopantanal.com.br/?p=21870>

References

AB’SÁBER, A. N. **Brasil: Paisagens de Excessão, o litoral e o Pantanal Mato-Grossense patrimônios básicos**. Cotia, SP: Ateliê Editorial, 2006. p. 182

BERTASSONI, A. et al. Paraguay River Environmental Monitoring by Rede de Proteção e Conservação da Serra do Amolar, Pantanal, Brazil. **Pan-American Journal of Aquatic Sciences**, v. 7, p. 77–84, 2012.

BORTOLOTTO, I. **Etnobotânica nas comunidades do Castelo e Amolar, borda oeste do Pantanal brasileiro**. [s.l.] Universidade Estadual Paulista, 2006.

- CAVALCANTI, S. C. et al. The status of the jaguar in the Pantanal. **CATnews**, v. 7, p. 29–34, 2012.
- DESBIEZ, A. Wildlife habitat selection and sustainable resources management in a Neotropical wetland. **International Journal of Biodiversity and Conservation**, v. 1, n. 1, p. 11–20, 2009.
- HARRIS, M. B. et al. Desafios para proteger o Pantanal brasileiro : ameaças e iniciativas em conservação. **Megadiversidade**, v. 1, n. 1, 2005.
- IBAMA, C. DE S. R. **Monitoramento dos Biomas Brasileiros: Bioma Pantanal**. [s.l.: s.n.].
- JENKINS, C.; PIMM, S. L.; JOPPA, L. N. Global patterns of terrestrial vertebrate diversity and conservation. **Proceedings of the National Academy of Sciences**, v. June, p. 2602–2610, 2013.
- JUNK, W. J. et al. Biodiversity and its conservation in the Pantanal of Mato Grosso, Brazil. **Aquatic Sciences**, v. 68, n. 3, p. 278–309, 12 ago. 2006.
- JUNK, W. J. et al. **The Pantanal: Ecology, biodiversity and sustainable management of a large neotropical wetland**. 1 ed. ed. Sofia-Moscow: Pensoft, 2011. p. 870
- MATEUS, L. A. F.; VAZ, M. M.; CATELLA, A. C. Fishery and fishing resources in the Pantanal. In: JUNK, W. J. et al. (Eds.). **The Pantanal: Ecology, biodiversity and sustainable management of a large neotropical seasonal wetland**. First ed. Sofia-Moscow: Pensoft, 2011. p. 621–647.
- MOURÃO, G. et al. Aerial surveys of caiman, marsh deer and pampas deer in the Pantanal Wetland of Brazil. **Biological Conservation**, v. 92, p. 175–183, 2000.
- MOURÃO, G.; TOMAS, W.; CAMPOS, Z. How much can the number of jabiru stork (*Ciconiidae*) nests vary due to change of flood extension in a large Neotropical floodplain? **Zoologia (Curitiba, Impresso)**, v. 27, n. 5, p. 751–756, out. 2010.
- MYERS, N. et al. Biodiversity hotspots for conservation priorities. **Nature**, v. 403, n. 6772, p. 853–8, 24 fev. 2000.
- OLSON, D.; DINERSTEIN, E. The Global 200: Priority Ecoregions for Global Conservation. **Annals of the Missouri Botanical garden**, v. 89, n. 2, p. 199–224, 2002.
- SCHUCH, M. E. J. O índio enquanto etnia: etno-história dos Xaray e Chané alto-paraguaienses. **Estudos Leopoldenses**, v. 31, n. 143, p. 109–124, 1995.
- SILVA, C. J. DA; SILVA, J. A. F. **No Ritmo das Águas do Pantanal**. 1 ed. ed. São Paulo: NUPAUB/USP, 1995. p. 210

Submitted on: 28/12/2014

Accepted on: 20/09/2015

<http://dx.doi.org/10.1590/1809-4422ASOC142964V1922016>

IS THE PANTANAL A PRISTINE PLACE? CONFLICTS RELATED TO THE CONSERVATION OF THE PANTANAL

RAFAEL MORAIS CHIARAVALLOTI

Abstract: The book “Biodiversidade e ocupação humana do Pantanal mato-grossense: conflitos e oportunidades” brings to discussion a hardly cited issue in academic debates: the conservation of the Pantanal. A place pointed out by some authors as pristine. The book is divided into three main chapters. The first one is about the physical / biological feature of the region and the second covers the local historical occupation. Important publications about the Pantanal are summarized well in both chapters. The last chapter describes current conflict between local people and Protected Areas over land use. However the authors misuse several findings about local settlements in the region, leading to imprecise conclusions. The lack of scientific accuracy in the main part of the book undermines its potential academic impact. Nonetheless this book triggers important debates about the conservation of the Pantanal, showing that it is not pristine and free of threats as is widely claimed.

Key words: The Pantanal, traditional communities, Protected Areas

Resumo: O livro “Biodiversidade e ocupação humana do Pantanal mato-grossense: conflitos e oportunidades” traz uma discussão de um tema pouco debatido dentro das discussões acadêmicas: conservação do Pantanal. Um local apontado por alguns autores como intocável. O livro é dividido em três capítulos principais. O primeiro é sobre as características físicas / biológicas da região, e o segundo trata do processo histórico de ocupação. Importantes publicações sobre o Pantanal são sumarizadas em ambos os capítulos. O último capítulo descreve um atual conflito entre moradores locais e Unidades de Conservação. No entanto os autores não utilizam diversos achados sobre os assentamentos locais, levando a conclusões imprecisas. A falta de acurácia científica na parte mais importante do livro minimiza o seu impacto acadêmico. Entretanto, esse livro inicia um importante debate sobre a conservação do Pantanal, mostrando que a região não é intocável e está livre de ameaças como muitos apontam.

Palavras Chave: Pantanal, comunidades tradicionais, Unidades de Conservação

Resumen: El libro “Biodiversidade e ocupação humana do Pantanal mato-grossense: conflitos e oportunidades” pone en discusión un tema que rara vez se debate en ámbitos académicos: la conservación del Pantanal. Un ecosistema considerado por algunos autores como intocable. El libro está dividido en tres capítulos principales. El primero es sobre la región física / biológica del Pantanal, el segundo trata el proceso histórico de su ocupación. Publicaciones importantes sobre el Pantanal son resumidas en ambos capítulos. En el último capítulo se describe un conflicto actual entre los residentes locales y áreas protegidas. Sin embargo, algunos de los autores que se mencionan en capítulos anteriores, utilizan de forma inexacta los hallazgos de investigaciones, generando conclusiones imprecisas. La falta de precisión científica en la parte más importante del libro minimiza su impacto académico. Sin embargo, este libro inicia un debate importante sobre la conservación del Pantanal, mostrando que la región no es intocable y está libre de amenazas como muchos afirman.

Palabras Chaves: Pantanal, las comunidades tradicionales, las áreas protegidas
