

The Ecology and Conservation of the Hooded Capuchin (*Sapajus cay*) through Scientific Research and Community Engagement.



Rebecca L Smith^{1,2}, David Lusseau² & Stuart Piertney²

¹Fundación Para La Tierra, Centro IDEAL, Pilar, Ñeembucú, Paraguay.

²School of Biological Science, Zoology Bldg, University of Aberdeen, Tillydrone Avenue, Aberdeen, Scotland
Contact: rebecca@paralatierra.org/www.paralatierra.org



Introduction

Over the last 50 years, the Upper Paraná Atlantic Forest of eastern Paraguay has been devastated by the encroachment of agriculture, mainly vast monocultures of soybean plantations. The hooded capuchin (*Sapajus cay*) is the only one of the country's primates that is restricted in its range to the Upper Paraná Atlantic Forest (Lynch Alfaro *et al.*, 2012).

Little is known about the socioecology of this species in Paraguay (Rylands *et al.*, 2013). This species is an excellent flagship species as it is appealing to the general public while being an important seed disperser and ecosystem engineer (Oppenheimer & Lang, 1969; Russo & Chapman, 2006).

Study Sites

From January 2013 – May 2017 two groups of capuchins were followed on a daily basis in the highly degraded forest fragment of Rancho Laguna Blanca, San Pedro. 1-minute scan samples were used to record all the behaviour of all visible individuals. From May 2017 data collection continued two weeks per month with one group of capuchins in San Rafael National Park, Itapúa, the largest remaining tract of pristine Atlantic Forest in Paraguay.

Aims and Objectives

To determine key drivers of population viability in hooded capuchins living in fragmented and pristine forests, assess the conservation value of small forest fragments and integrate the socioecological needs of the capuchin in the overall conservation plan for Paraguay's forest.

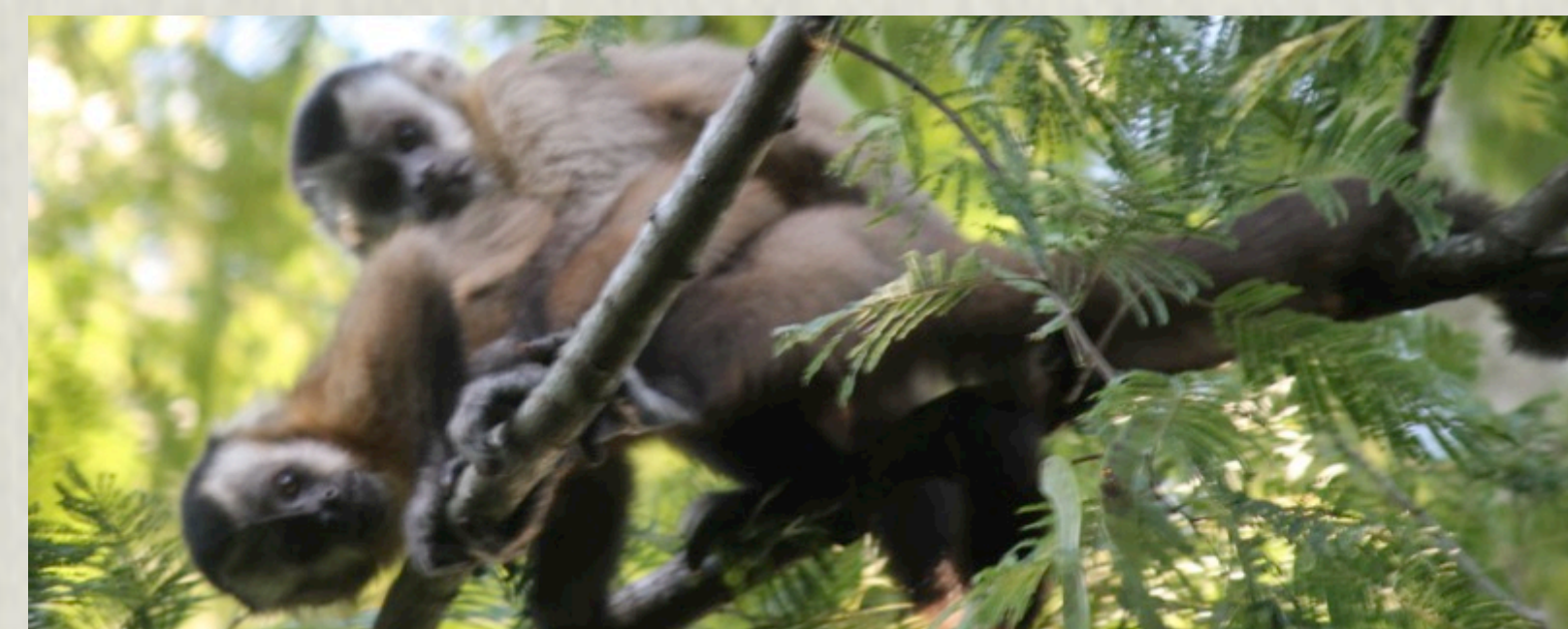
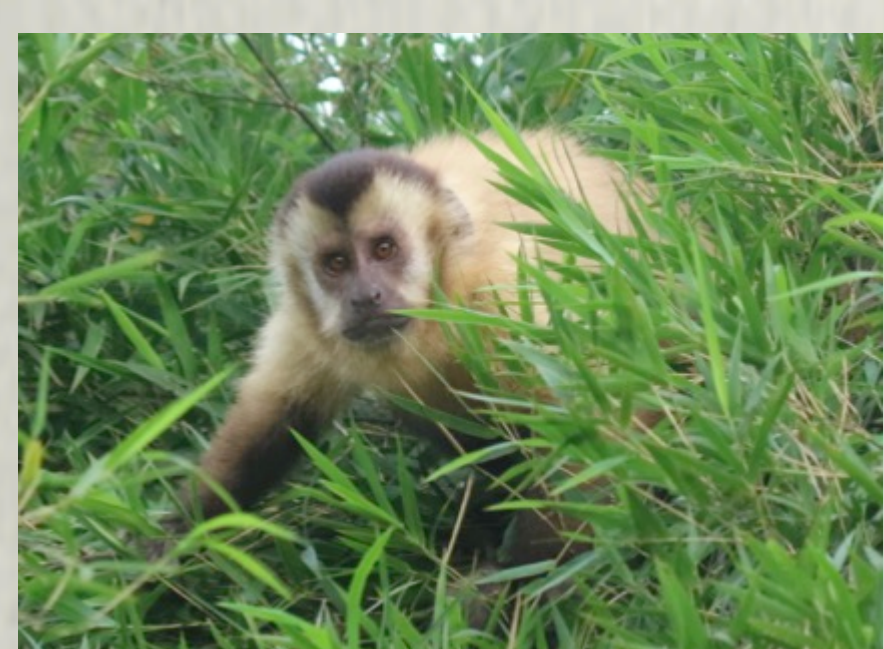
Objective 1: Determine the ecological requirements of hooded capuchins in the Paraguayan Atlantic Forest & hunting pressures in San Rafael.

Objective 2: Evaluate local knowledge of primates & the effectiveness of environmental education projects as a conservation tool.

Compare group demographics, ranging behaviour, feeding ecology & social behaviours in capuchins living in pristine and degraded Atlantic Forest. Conduct semi-structured interviews in communities around San Rafael to evaluate hunting pressure.



Assess knowledge & attitudes of local communities with semi-structured interviews before and after the implementation of an environmental education program.



References.

Acknowledgements.

Alfaro, J. W. L., Izar, P. & Ferreira, R. G. 2014. Capuchin Monkey Research Priorities & Urgent Issues. *Amer J Primatol.* 76: 1-16.
Oppenheimer, J.R. & Lang, G.E. 1969. Cebus monkey: effect of branching on *Gustavia* trees. *Science*. 165: 187-188.
Russo S.E. & Chapman, C.A. 2006. Primate Seed Dispersal: Linking Behavioural Ecology with Forest Community Structure. In: *Primates in Perspective*. Eds: Campbell, J., Fuentes, A.F., MacKinnon, K.C. & Bearder, S. Oxford University Press.
Rylands, A. B., Mittermeier, R. A., Bezerra, B. M., Paim, R. P. & Queiroz, H. L. 2013. Family Cebidae (Squirrel Monkeys and Capuchins). In: *Handbook of The Mammals of the World Volume 3*, R. A. Mittermeier, A. B. Rylands and D. E. Wilson (eds), pp. 348-413. Lynx Edicions, Barcelona.

I am extremely grateful to the National Geographic Society for funding the capuchin research (Grant Number: NGS-299C-18). We are grateful to Hans and Christine Hostettler for supporting the primate research at PLT and to the directors and forest guards of PRO COSARA. Sincerest thanks must be extended to all Para La Tierra primate volunteers & interns who have assisted in the habituation and study of capuchins at Laguna Blanca & Nueva Gambach. Thanks to Jorge Ayala, Karina Atkinson & Joe Sarvary for their endless support & Paul Smith for his invaluable advice.

