

## Dr Jos Barlow

RCUK Academic fellow, School of Biological Science, Lancaster University

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**Website:** <http://www.tropicalforestresearch.org/people/jbarlow.aspx>

**Born:** London, UK (27 December 1973)

**Nationality:** UK

**Research interests:** Conservation science and tropical forest ecology, including tropical fire ecology, the effects of anthropogenic disturbance in tropical forests, the conservation value of forested landscapes, tropical ornithology, neotropical butterflies, fruit-frugivore interactions, human livelihoods, and ecosystem services, and biomass levels in tropical forests.

### AWARDS IN EDUCATION

**1999-2003:** PhD. "Ecological Effects of Wildfires in a Central Amazonian Forest" at the School of Environmental Sciences, University of East Anglia. Supervised by Dr. Carlos Peres, and funded by NERC-UK (National Environment Research Council). Included 18 months of independent fieldwork in Brazil, surveying birds (accruing over 40,000 mist net hours), large vertebrates, tree mortality and phenological patterns. Fieldwork was conducted independently of established field stations, and involved the management of project budget, local politics, logistics, and a team of 3 local field assistants.

**1995-1998:** Ecology BSc 1<sup>st</sup> class (Hons), University of East Anglia. Includes thesis entitled "The effects of human disturbance on the growth and survival of ringed plovers *Charadrius hiaticula*".

**1988-95:** Nine GCSE's, Four A-Levels (Biology, Economics, English & History).

### WORK ACTIVITIES & ACADEMIC RESPONSIBILITIES

**November 2007 – present:** Associate Editor, Journal of Applied Ecology.

**August 2007 – present:** RCUK Academic fellow in terrestrial ecology, School of Biological Science, Lancaster University

**June 2006 – June 2007:** CNPq (Brazilian Research Council) funded Post-Doctoral fellow at the Museu Paraense Emilio Goeldi, Belém, Brazil

**January 2007 – Present:** Member of teaching faculty on the Environmental Science MSc course run jointly between Pará federal University, EMBRAPA and the Museu Goeldi.

**May 2006 – Present:** Joint Principal Investigator on Darwin Initiative (DEFRA/UK) project "Devising strategies to maximize the conservation value of plantations landscapes". Coordinating and participating in data collection, collation and analysis of projects that address 1) the value of tropical forest corridors and 2) the trade off between biodiversity conservation and timber production in commercial plantations.

**December 2004 – Present:** European representative on the board of directors for the Association for Fire Ecology of the Tropics ([www.tropicalfire.org](http://www.tropicalfire.org)).

**May 2003 – May 2006:** Senior Research Associate, School of Environmental Science, University of East Anglia. Field coordinator for a Darwin Initiative (DEFRA/UK) funded research project on the biodiversity and functional value of Amazonian primary, secondary and plantation forests. Role involved organising and maintaining collaborations with 25 specialist taxonomists and ecologists to sample 15 faunal taxa and the vegetation across 15 forest sites. Co-supervised 2 PhD students and 5 MSc students.

**1999-2005:** Part-time teaching at the University of East Anglia. Leading seminars, and giving lectures to undergraduate and MSc students. Courses include Distance sampling methods (MSc level) and an Introduction to Ecology (1<sup>st</sup> yr undergraduate).

**1999-2006:** Fieldwork instructor for undergraduate field trips to Western Ireland and South Devon. Held sole responsibility for teaching woodland ecology and supervising woodlands projects.

**October 1998- March 1999:** Fieldwork in central Amazonia (PhD. pilot study) funded by Margot Marsh foundation.

**1998 and 1999:** Two 5-month periods of fieldwork monitoring a population of ringed plovers *Charadrius hiaticula*. Includes funding from the RSPB and the Norfolk Coast Project.

**RECENT RESEARCH GRANTS:** £126,000 and £80,000 (Joint PI), Darwin Initiative. £25,000 annual award from Grupo Orsa, Brazil. \$15,000, National Geographical Society. \$12,500 Conservation Food and Health society. £3000, British Ecological Society. £2000, Royal Geographical Society Peter Fleming Award.

**OTHER RELEVANT SKILLS** Fluent Portuguese. Working knowledge of Spanish, French & Italian.

## PUBLICATIONS

Gardner, T.A., M. I. M. Hernandez, **J. Barlow** and C.A. Peres. 2008 Understanding the biodiversity consequences of habitat change: the value of secondary and plantation forests for neotropical dung beetles. *Journal of Applied Ecology*. doi: 10.1111/j.1365-2664.2008.01454.x

**Barlow, J.** and Peres, C.A. 2008. Fire-mediated dieback and compositional cascade in an Amazonian forest. *Philosophical Transactions of the Royal Society of London B*. doi:10.1098/rstb.2007.0013

Gardner, T.A., **Barlow, J.**, Araujo, I.S., Avila-Pires, T.C.S., Bonaldo, A.B., Costa, J.E., Esposito, M.C., Ferreira, L.V., Hawes, J., Hernandez, M.I.M., Hoogmoed, M., Leite, R.N., Lo-Man-Hung, N.F., Malcolm, J.R., Martins, M.B., Mestre, L.A.M., Miranda-Santos, R., Nunes-Gutjahr, A.L., Overal, W.L., Parry, L.T.W., Peters, S.L., Ribeiro-Junior, M.A., da Silva, M.N.F., da Silva Motta, C. & Peres, C. 2008 The cost-effectiveness of biodiversity surveys in tropical forests. *Ecology letters*. 11: 139–150

**Barlow, J.**, T. A. Gardner, I. S. Araujo, A. B. Bonaldo, J. E. Costa, M. C. Esposito, L. V. Ferreira, J. Hawes, M. I. M. Hernandez, R. N. Leite, N. F. Lo-Man-Hung, J. R. Malcolm, M. B. Martins, L. A. M. Mestre, A. L. Nunes-Gutjahr, W. L. Overal, L. Parry, S. L. Peters, M. A. Ribeiro-Junior, C. da Silva Motta, M. N. F. da Silva, and C. A. Peres. 2007. Quantifying the biodiversity value of tropical primary, secondary and plantation forests. *Proceedings of the National Academy of Science of the United States of America* 104 (47): 18555-18560

Parry, L., **J. Barlow**, and C. A. Peres. 2007. Large vertebrate assemblages of primary and secondary forests in the Brazilian Amazon. *Journal of Tropical Ecology*. 23:653-662

**Barlow, J.**, I. S. Araujo, W. L. Overal, F. Mendes, T. A. Gardner, and C. A. Peres 2007. Diversity and composition of fruit-feeding butterflies in tropical plantation forests. *Biodiversity and Conservation*.. DOI: 10.1007/s10531-007-9240-0

**Barlow, J.**, T. A. Gardner, L. V. Ferreira, and C. A. Peres. 2007. Litter fall and decomposition in primary, secondary and plantation forests in the Brazilian Amazon. *Forest Ecology and Management*. 247: 91–97

**Barlow, J.**, W. L. Overal, I. S. Araujo, T. A. Gardner, and C. A. Peres. 2007. The value of primary, secondary and plantation forests for fruit-feeding butterflies in the Brazilian Amazon. *Journal of Applied Ecology*. 44:1001-1012

Gardner, T.A., Ribeiro Jr, M.A., **Barlow, J.**, Ávila-Pires, T.A.S., Hoogmoed, M., & Peres, C.A. 2007 The biodiversity value of primary, secondary and plantation forests for a neotropical herpetofauna. *Conservation biology*. 21:775-787

Gardner, T. A., **J. Barlow**, and C. A. Peres. 2007. Paradox, presumption and pitfalls in conservation biology: consequences of habitat change for amphibians and reptiles. *Biological Conservation*. 138:166-179

**Barlow, J.**, L. A. M. Mestre, T. A. Gardner, and C. A. Peres. 2007. The value of primary, secondary and plantation forests for Amazonian birds. *Biological Conservation*. 136: 212-231

Gardner, T. A., **J. Barlow**, L. T. W. Parry, and C. A. Peres. 2007. Predicting the Uncertain Future of Tropical Forest Species in a Data Vacuum. *Biotropica* 39 25-30.

Peres, C. A., **Barlow, J.** & Laurance, W.F. 2006 Detecting anthropogenic disturbance in tropical forests. *Trends in Ecology and Evolution* Vol. 21(5): 227-229

- Barlow, J.**, Peres, C. A., Henriques, L. M. P., Stouffer, P. C. & Wunderle, J. M. 2006. The Responses of Understorey Birds to Forest Fragmentation, Logging and Wildfires: an Amazonian Synthesis. *Biological Conservation*. 128 (2): 182-19
- Barlow, J.**, and C. Peres. 2006. Effects of single and recurrent wildfires on fruit production and large vertebrate abundance in a central Amazonian forest. *Biodiversity and Conservation*.
- Barlow, J.**, and C. A. Peres. 2004. Avifaunal responses to single and recurrent wildfires in Amazonian forests. *Ecological Applications* 14:1358–1373.
- Barlow, J.**, and C. A. Peres. 2004. Ecological responses to El Niño-induced surface fires in central Amazonia: Management implications for flammable tropical forests. *Philosophical Transactions of the Royal Society of London B* 359:367-380.
- Barlow, J.**, C. A. Peres, B. Lagan, and T. Haugaasen. 2003. Large tree mortality and the decline of forest biomass following Amazonian wildfires. *Ecology letters* 6:6-8.
- Barlow, J.**, B. O. Lagan, and C. A. Peres. 2003. Morphological correlates of fire-induced tree mortality in a central Amazonian forest. *Journal of Tropical Ecology* 19:291-299.
- Haugaasen, T., **J. Barlow**, and C. A. Peres. 2003. Surface wildfires in central Amazonia: Short-term impact on forest structure and carbon loss. *Forest Ecology and Management* 179:321-331.
- Peres, C. A., **J. Barlow**, and T. Haugaasen. 2003. Vertebrate Responses to Surface Fires in a Central Amazonian Forest. *Oryx* 37:97-109.
- Haugaasen, T., **J. Barlow**, and C. A. Peres. 2003. Effects of surface fires on understorey insectivorous birds and terrestrial arthropods in central Brazilian Amazonia. *Animal conservation* 6:299-306.
- Barlow, J.**, and C. A. Peres. 2003. Fogo rasteiro: Uma nova ameaça na região amazônica. *Ciencia Hoje* 34:24-29.
- Barlow, J.**, T. Haugaasen, and C. A. Peres. 2002. Effects of ground fires on understorey bird assemblages in Amazonian forests. *Biological Conservation* 105:157-169.
- Barlow, J.**, T. Haugaasen, and C. Peres. 2002. Sympatry of black-faced *Leucopternis melanops* and white-browed hawks *L. kuhli* along the lower rio Tapajos, Para, Brazil. *Cotinga* 18:77-79.

#### BOOK CHAPTERS

- Barlow, J.** and Silveira, J. In review. The consequences of fire for tropical forest fauna. In Mark Cochrane (Ed). *Tropical Fire Ecology*.
- Barlow, J.**, and C.A. Peres. 2006. Consequences of cryptic and recurring fire disturbances for ecosystem structure and biodiversity in Amazonian forests. Pages 225-240 in W. F. Laurance, and C. A. Peres, editors. *Emerging threats to tropical forests*. Chicago University Press.
- Barlow, J.**, and C. A. Peres. 2005. Ecological responses to El Niño-induced surface fires in central Amazonia. Pages 87-96 in Y. Malhi, and O. Phillips, editors. *Tropical Forests and Global Atmospheric Change*. Oxford University Press, Oxford.
- Peres, C. A., and **J. Barlow**. 2004. Human Influences on Tropical Forest Wildlife. in J. Burley, J. Evans, and J. Youngquist, editors. *Encyclopaedia of Forest Sciences*. Academic press, Elsevier Science, Oxford.
- Liley, D., **J. Barlow**, and M. Middleton. 2002. Ringed Plover *Charadrius hiaticula*. Pages 278-280 in C. Chris Wernham, M. Toms, J. Marchant, J. Clark, G. Siriwardena, and B. S., editors. *Migration Atlas: Movements of the Birds of Britain and Ireland*. T & AD Poyser, London.

#### BOOK REVIEWS

- Barlow, J.** 2006 Book review: *Tropical rain forests: An ecological and biogeographical comparison*. *Geographical Journal* 172: 81-81

#### LETTERS

- Gardner, T. A., **Barlow, J.** and C. A. Peres. 2007. *Rainforest Renewed*. *New Scientist* 194: (2607) 26