

DR. ANDREW CHRISTOPHER SMITH

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Qualifications

August 2005 Anglia Ruskin University
PGCert Learning and Teaching (HE)

October 1997 The University of Reading
PhD - *Comparative ecology of saddleback (Saguinus fuscicollis) and moustached (Saguinus mystax) tamarins*

July 1993 The University of Reading
BSc (Hons) Psychology & Zoology: Upper Second Class degree

Current Employment

Senior Lecturer: Animal Behaviour and Ecology
Anglia Ruskin University, Cambridge

Membership of Professional Bodies

- Institute for Learning and Teaching
 - Zoological Society of London (Scientific Fellow)
 - Primate Society of Great Britain (Council member)
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Skills

- Fluent Spanish
 - Clean driving licence
 - First Aid at Work certified
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Referees

Prof. M. Cole
Head of Department, Dept. of Life Sciences, Anglia Ruskin University,
East Road, Cambridge, CB1 1PT
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Dr. S. Pankhurst
Director of Studies, Dept. of Life Sciences, Anglia Ruskin University,
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Dr. H. M. Buchanan-Smith
Dept. of Psychology, The University of Stirling, Stirling, FK9 4LA
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tel. 01786 467674

Employment History

- November 2003 – Present **Senior Lecturer:** Animal Behaviour and Ecology
Anglia Ruskin University, Cambridge
Teach various modules on wildlife management, behaviour and ecology
- January 2002 - June 2003 **Assistant lecturer:** Animal behaviour course
Department of Psychology, University of Stirling, Stirling, *United Kingdom*
Taught various aspects of animal behaviour and wildlife ecology
- June - September 2002, 2003, 2004 **Senior primatologist:** Undergraduate & MSc Dissertations
Operation Wallacea, Sulawesi, *Indonesia*
Supervised UK undergraduate & MSc dissertation students.
- August 1999 – Dec 2002 **Post doctoral research fellow:** The University of Stirling
The functional utility of colour vision: Effects of polymorphism on behaviour of callitrichids. Inc. 13 months at the Estación Biológica Quebrada Blanco, *Peru*
- October 1998 - July 1999 **Terrestrial Science Co-ordinator:** Coral Cay Conservation,
UK and The Philippines
Development, implementation and management of comprehensive terrestrial conservation programmes. Faunal surveys included mist-netting for bats and birds, and remote camera traps mammals
- January - April 1998 **Wildlife Biologist:** Huemul (deer):
Huemul Project, Raleigh International, Coyhaique, *Chile*
Organisation and day-to-day running of huemul population survey in remote areas of Patagonia, including management of small teams of volunteers.
- October 1993 - November 1997 **PhD Student:** Comparative ecology of saddleback and moustached tamarins
tamarins: Inc. 15 months at the Estación Biológica Quebrada Blanco, *Peru*
- January 1995 **Research Assistant:** Pink and gray river dolphins,
Reserva Nacional Pacaya-Saimiria, *Peru*
Collection of population and behavioural data.
- June - October 1993 **Field guide & Education Officer:** Loggerhead turtles
Ionian Natural History Tours & Marine Turtle Research Project, *Greece*
Guided groups around marine reefs and presented public lectures on turtles.
- March - June 1993 **Research Assistant:** Common marmosets
Nucleo de Primatologia, Universidade Federal do Rio Grande do Norte, *Brazil*
Preparation of a group of marmosets for observation, involving trapping, sedating, marking (collar & tattoo) and taking morphometric data, prior to subsequent habituation.
- October 1993 - October 1998 **Teaching assistant:** Biology of behaviour and other courses
Department of Psychology, University of Reading, Reading, *United Kingdom*
Variety of teaching and administration duties within the department.
- October 1992 - March 1993 **Research Assistant:** Common marmosets
Primate Biology Unit, Dept. Psychology, The University of Reading, *UK*.
Collection of behavioural data and management of resulting database.
- July - October 1991 **Field Assistant:** Loggerhead turtles
Marine Turtle Research Project, Cephalonia, *Greece*
Surveyed nesting beaches, tagged and collected of morphometric data from adults and hatchlings. Radio tracked adult turtles.

University Teaching

Year 1	Introduction to Animal Behaviour & Welfare; Animal Form & Function; British Wildlife & Conservation; Biodiversity and Evolution; Biomeasurement
Year 2	Animal Behaviour in Context; Concepts in Animal Behaviour; Applied Ethology and Animal Welfare; Practical Biology; Readings in Animal Behaviour
Year 3	Wildlife Management & Conservation; Mammalogy; Behavioural Ecology; Advanced Topics in Behavioural Ecology; Behaviour and Management of Zoo Animals; Reproduction and Sexual Conflict; Domestication & the Behaviour of Domestic Animals; Behaviour of Marine Animals; Project
Course Innovation	Wildlife Management & Conservation: designed & implemented module Vertebrate Biology: designed & implemented module Practical Biology: designed & implemented module Behaviour of Marine Animals: designed & implemented module
Post-graduate	PhD - member of supervisory team: Fowler C (2007) Behavioural ecology of the mara. Anglia Ruskin University MPhil - member of supervisory team: Stelman A (2006) Investigating the effects of climate and group size on the time budgets of yellow baboons (<i>Papio cynocephalus</i>) in Mikumi National Park, Tanzania. Anglia Ruskin University MPhil - member of supervisory team: Thomson R (2006) Demographic and Ecological Effects on Space Use in Yellow Baboons, <i>Papio Cynocephalus</i> , at Mikumi National Park, Tanzania. Anglia Ruskin University MRes - primary field supervisor: Williams S (2004) Studies of tropical vertebrates: ecology, behaviour and morphology. University of Manchester MSc - primary field supervisor: Parkinson R (2003) A population and habitat survey of the Buton macaque (<i>Macaca ochreata brunnescens</i>) comparing abundance in protected and unprotected areas on Buton Island, South East Sulawesi. Oxford Brookes University MSc - primary field supervisor: Carroll (2003) Activity Budgets of the Buton Macaque (<i>Macaca ochreata brunnescens</i>): an Endemic Primate of Buton, Southeast Sulawesi. Oxford Brookes University

Responsibilities	Pathway leader: BSc Wildlife Biology Module leader: Wildlife Management & Conservation, Vertebrate Biology, Mammalogy, Practical Biology, Animal Form & Function External Examiner: Anthropology, Oxford Brookes University
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Qualifications & Training

August 2005	Anglia Ruskin University PGCert Learning and Teaching (HE)
January 2005	Anglia Ruskin University Post-Grad Supervisor Support Programme

Research Interests

- Colour vision**
- Evolution and advantages of trichromacy
 - Maintenance of colour vision polymorphism in New World monkeys
- Ecology**
- Specialisation, and niche partitioning; mixed-species associations
 - Spatio-ecology; inter-individual distances and group leadership
 - Influence of predation pressure
- Nutrition**
- Mineral requirements; exudates; temporal patterns of feeding
- Conservation**
- Primate habitat use and resource requirements, distribution and populations
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- Collaborations**
- The Universities of Cambridge, Sussex, and Durham (UK)
 - The Universidad Nacional de la Amazonia Peruana (Peru)
 - The Natural History Museum (UK),
 - The Deutsches Primatenzentrum (Germany)
 - The Wildlife Conservation Society (USA)
 - The Smithsonian Institution (USA)
 - Operation Wallacea (UK)
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- Journal referee**
- African Journal of Ecology; American Journal of Primatology, Anthrozoös; Behavioural Ecology and Sociobiology; Folia Primatologica, Journal of Zoology; Primates
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Invited lectures

- January 2007 School of Social Sciences and Law, Oxford Brookes University:
Primate colour vision
- January 2001 Feeding and colour vision workshop, Dept. Anatomy, University of Hong Kong, *China: Prey foraging and a polymorphic colour vision system*
- March 2001 Scottish Primate Research Group, Edinburgh Zoo, Edinburgh, *UK: Enrichment in captive primates*
- October 2000 Departamento de Biología, Universidad Nacional de la Amazonia Peruana, Iquitos, Peru: *The functional utility of colour vision*
- November 1996 Wildlife Conservation Society, Bronx Zoo, New York, *USA: Comparative ecology of saddleback and moustached tamarins*
- April 1993 Departamento de Psicologia, Universidade Federal do Rio Grande do Norte, Brazil: *Biodiversity and the tropical rainforest*
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- Field work**
- 2004, 2003 & 2002 – Indonsesia: Buton macaques
 - 2000, 1999, 1995 & 1994 – Peru: saddleback & moustached tamarins
 - 1998 – Chile: Huemul deer
 - 1995 – Peru: pink and gray river dolphins
 - 1993 – Brazil: common marmosets
 - 1993 & 1991 – Greece: loggerhead turtles

Publications

- Smith, AC**; Knogge, C; Huck, M; Löttker, P; Buchanan-Smith, HM; Heymann, EW (2007) Long term patterns of sleeping site use in wild saddleback (*Saguinus fuscicollis*) and mustached tamarins (*S. mystax*). *American Journal of Physical Anthropology* 134: 340-353.
- SurrIDGE, AK, Suárez SS, Buchanan-Smith, HM, **Smith AC**, & Mundy NI (2005) Distribution of colour vision phenotypes in wild tamarins (*Saguinus* spp.). *American Journal of Primatology* 67: 463-470
- Smith, AC**; Buchanan-Smith, HM; SurrIDGE, A & Mundy, N (2005) Factors effecting group spread within wild mixed-species troops of saddleback and moustached tamarins. *International Journal of Primatology*: 26: 337-355
- Prescott MJ, Buchanan-Smith HM, **Smith AC** (2005) Social interaction with non-averse group-mates modifies a learned food aversion in single- and mixed-species groups of tamarins (*Saguinus fuscicollis* and *S. labiatus*). *American Journal of Primatology*: 65: 313-26
- Osorio, D; **Smith, AC**; Vorobyev, M & Buchanan-Smith, HM. (2004) Detection of fruit and the selection of primate visual pigments for color vision. *American Naturalist*.164: 696-708
- Smith, AC**; Kelez, S & Buchanan-Smith, HM (2004) Factors affecting vigilance within wild mixed-species troops of saddleback (*Saguinus fuscicollis*) and moustached tamarins (*S. mystax*). *Behavioural Ecology & Sociobiology* 56:18-25.
- Smith, AC**; Buchanan-Smith, HM; SurrIDGE, A & Mundy, N (2003) Factors affecting group leadership within wild mixed-species groups of saddleback and moustached tamarins, with special emphasis on color vision and sex. *American Journal of Primatology* 61: 145-157.
- Smith, AC**; Buchanan-Smith, HM; SurrIDGE, A; Mundy, N & Osorio D (2003) The effect of colour vision status on the detection and selection of fruits by tamarins (*Saguinus* spp.). *Journal of Experimental Biology* 206: 3159-3165
- Smith, AC**; Tirado, ER; Buchanan-Smith, HM & Heymann, EW (2002) Multiple breeding females and allo-nursing in a wild group of moustached tamarins (*Saguinus mystax*). *Neotropical Primates*. 9 (2): 67-69.
- SurrIDGE, A; **Smith, AC**; Mundy, N & Buchanan-Smith, HM (2002) Single-copy nuclear DNA sequences obtained from non-invasively collected primate feces. *American Journal of Primatology*. 56 (3): 185-190.
- Smith, AC** (2000) Composition and proposed nutritional importance of exudates eaten by saddleback (*Saguinus fuscicollis*) and moustached (*Saguinus mystax*) tamarins. *International Journal of Primatology*. 21(1): 69-83.
- Smith, AC** (2000) Interspecific differences in prey captured by associating saddleback (*Saguinus fuscicollis*) and moustached (*Saguinus mystax*) tamarins. *Journal of Zoology*. 251(3): 315-324.
- Heymann, EW & **Smith, AC** (1999) When to feed on gums - temporal patterns of gummivory in wild tamarins, *Saguinus mystax* and *Saguinus fuscicollis* (Callitrichinae). *Zoo Biology* 18 (6): 459-471.
- Smith, AC** (1999) Potential competitors for exudates eaten by saddleback (*Saguinus fuscicollis*) and moustached (*Saguinus mystax*) tamarins. *Neotropical Primates* 7(3): 73-75.
- Heymann, EW; Knogge, C; Tirado, ER & **Smith, AC** (1998) Unter Affengnomen im Amazonasregenwald - Freilandforschung an Tamarinen in Peru (Amongst gnome monkeys in Amazon rainforest - Field research on tamarins in Peru). *Zeitschrift des Kvlner Zoo* 41(2): 63-84.

Publications cont.

Smith, AC (1996) Orthopteran prey capture in wild saddle-back and moustached tamarins in north-eastern Peru. *Primate Eye* 59: 17-18.

Submitted

Smith, AC; Williams ST; Parkinson RS & Basset L (Submitted) Population Density and Habitat Preferences of the Buton macaque. *Animal Conservation*

Unwin, T & **Smith, AC** (Submitted) Behavioural differences between provisioned and non-provisioned Barbary macaques (*Macaca sylvanus*). **Anthrozoös**

Smith, AC. (Submitted) Interspecific differences in intergroup encounters in associating saddleback (*Saguinus fuscicollis*) and moustached (*Saguinus mystax*) tamarins. *Behavioural Ecology and Sociobiology*.

Smith, AC. (Submitted) Tamarin mixed-species groups: variation in association. *Behavioural Ecology*.

Buchanan-Smith, HM; **Smith, AC**; Prescott, MJ; Surridge, AK & Mundy, NI. (Submitted) The effect of colour vision status and sex on prey capture efficiency by wild and captive tamarins (*Saguinus* spp.). *Journal of Comparative Psychology*

In preparation

Smith, AC; Osorio, D & Buchanan-Smith, HM. Fruit ripening and primate colour vision: benefits of trichromacy in the detection of fruit signals by tamarins (*Saguinus* spp.) *Biotropica*.

Smith, AC; Carr J. Habitat use and separation in sympatric Hermann's (*Testudo hermanni*) and spur-thighed (*T. graeca*) tortoises in the Eastern Rhodope Mountains, Bulgaria

Vorobyev, M; **Smith, AC**; Buchanan-Smith, HM; Osorio D & Cronin T. Fruits, flowers and the origins of primate trichromacy.

Conference papers

Smith, AC (2008) The role of exudativory in tamarins and marmosets. *The XXIIth Congress of the International Primatological Society, Edinburgh*.

Smith, AC & Buchanan-Smith, HM (2007) Food, Sex & Violence: Influences on intergroup encounters in tamarins (*Saguinus* spp.). *Second Congress of the European Federation for Primatology, Prague, Czech Rep.*

Smith, AC; Knogge, C; Huck, M; Löttker, P; Buchanan-Smith, HM; Heymann, EW (2007) Sleeping sites in primates: The effects of foraging, thermoregulation, predation and resource defence constraints. *International Ethological Conference, Halifax, Canada*

Smith, AC & Buchanan-Smith, HM (2007) Factors influencing intergroup encounters in wild mixed-species troops of saddleback (*Saguinus fuscicollis*) and moustached tamarins (*S. mystax*). *Primate Society of Great Britain, spring meeting - Durham*.

Smith AC, Basset L, Williams S, Parkinson, R (2005) Buton macques: Population and behaviour. *Ecology of Lambusango: Five years of research – University of Hull Scarborough Campus meeting*.

Conference papers cont.

- SurrIDGE AK, Suarez SS, Buchanan-Smith HM, **Smith AC**, & Mundy NI (2004) "Distribution of colour vision phenotypes in wild tamarins" *The XXth Congress of the International Primatological Society, Taurino, Italy*.
- Smith AC**, Buchanan-Smith H., SurrIDGE A., & Mundy N. (2004) Effects of colour vision on group spread within wild mixed-species troops of tamarins (*Saguinus fuscicollis* and *Saguinus mystax*) *The XXth Congress of the International Primatological Society, Taurino, Italy*.
- Smith AC** (2004) From The Amazon to Northern Ireland: Unravelling the Mysteries of Primate Colour Vision. Rank Prize Symposium: The Assessment of Foodstuffs by the Eye and by Instrumentation. Kendal, UK
- Buchanan-Smith, HM; **Smith, AC**; SurrIDGE, A; Mundy, N & Osorio, D (2003) Colour vision and cognition in primates. *Primate Society of Great Britain, spring meeting - St Andrew's*.
- Vorobyev, M; **Smith, AC**; Buchanan-Smith, HM; Osorio, D & Cronin TW (2003) Fruits, flowers and origins of primate trichromacy. *Australian Neuroscience Meeting*.
- Smith, AC**; Buchanan-Smith, HM; SurrIDGE, A; Mundy, N & Osorio, D (2002) The effect of colour vision status on the detection and selection of fruits by tamarins (*Saguinus* spp.). *Primate Society of Great Britain, spring meeting - Oxford*.
- Buchanan-Smith, HM; **Smith, AC**; Prescott, MJ; SurrIDGE, A; Mundy, N & Osorio, D (2002) The effect of colour vision phenotype on foraging success in tamarins (*Saguinus*) spp. *The XIXth Congress of the International Primatological Society, Beijing, China*.
- Smith, AC**; Buchanan-Smith, HM; SurrIDGE, A & Mundy, N (2001) Colour blindness: An advantage for prey capture in primates? *Primate Society of Great Britain, spring meeting - Bolton*.
- Smith, AC**; Buchanan-Smith, HM; SurrIDGE, A & Mundy, N (2001) Does colour vision genotype affect insect capture in tamarins? *The XVIII Congress of the International Primatological Society - Adelaide, Australia*.
- Smith, AC**; Buchanan-Smith, HM & Prescott, MJ (2001) Sex differences in prey capture by tamarins. *The XVIII Congress of the International Primatological Society - Adelaide, Australia*.
- Smith, AC**; Buchanan-Smith, HM; SurrIDGE, A & Mundy, N (2001) Wild Eyes; camouflage, prey capture and colour vision in primates. *Scottish Conference on Animal Behaviour - Edinburgh*.
- SurrIDGE, A.K., Buchanan-Smith, H.M. **Smith, A.C.**, Prescott, M.J. & Mundy, N.I. (2001) Genetic polymorphism at the opsin locus - colour vision and foraging ability in New World primates. *Photopigments, Colour Vision and Evolution Meeting*.
- Smith, AC** (1996) Orthopteran prey capture in wild saddle-back and moustached tamarins in north-eastern Peru. *Association for the Study of Animal Behaviour, spring meeting - Norwich*.
- Smith, AC**; Knogge, C & Puertas, P (1995) Insectivory in the primates. *XXXVI Convencion Nacional de Entomologia, Iquitos, Peru*.
-