

TOM FAYLE

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Date of birth

1st June 1981

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EDUCATION

- 2005-2009 **PhD**
Insect Ecology Group, University Museum of Zoology, University of Cambridge, UK
- 2004-2005 **MPhil**
Conservation Biology Group, Department of Zoology, University of Cambridge, UK
- 2000-2003 **MA (Hons) Natural Sciences (Zoology)**
Gonville and Caius College, University of Cambridge, UK 1st (Rank 5/87)

RESEARCH ACTIVITY

- Apr '10- **Entomology Group, Natural History Museum, London**
Quantifying interaction networks between ants and termites in tropical forests by extracting and sequencing termite DNA from ant guts. Postdoctoral researcher supported by NERC small project grant (Eight months).
- Jan-Apr '10 **Royal Society South East Asia Rainforest Research Program, Sabah, Malaysia**
Postdoctoral researcher for the Stability of Altered Forest Ecosystems project. Advising during the setup phase of a unique large-scale habitat fragmentation project in the field in Borneo and conducting pre-clearance sampling of ant communities in experimental fragments (Three months).
- Oct '05-Jun '09 **Insect Ecology Group, University Museum of Zoology, Cambridge**
PhD research on the ant communities of epiphytic ferns using a range of approaches including observations, laboratory experiments and computer-based simulations. Twelve month's field work in tropical rain forest in Sabah, Malaysia, including tree climbing to heights of 40m. Gained expertise in SE Asian ant taxonomy. Funded by NERC with a CASE studentship.
- Jun '05-Aug '05 **Department of Biology, University College London**
Helped run a project investigating the costs of nest digging and provisioning in the wasp *Ammophila pubescens* in Surrey, UK. Funded by the Balfour-Browne fund (Two months).
- Apr '04-Apr '05 **Conservation Science Group, Department of Zoology, University of Cambridge**
One-year MPhil project investigating the conservation value of abandoned arable farmland. Gained experience in the survey methods and identification of various taxa. Funded by the Eranda Foundation.
- Aug'02-Mar'04 **Aquatic Ecology Group, Department of Zoology, University of Cambridge**
Research assistant position. Studied the impacts of human activities on freshwater biodiversity (three separate periods, four months total).

PUBLICATIONS

- Fayle T.M.**, Chung A.Y.C., Dumbrell A.J., Edwards D.P., Eggleton P. Turner, E.C. & Foster W.A. (In preparation). Hyper-diverse fern- ant communities: commensalism or a hotbed of mutualistic evolution?
- Yusah K.M., **Fayle T.M.** & Foster W.A. (In preparation). What is the best way of sampling ants in the high canopy of tropical rain forest?
- Foster W.A., Ellwood. M.D.F., Turner E.C., Snaddon J.L., **Fayle T.M.**, Yusah K.M., Cockerill T.D., Chey V.K. & Chung A.Y. (Invited submission in preparation) Establishing the evidence base for the maintenance of ecosystem function in oil palm landscapes. *Philosophical Transactions of the Royal Society B*
- Woodcock P., Edwards D.P., **Fayle T.M.**, Chey V.K., Hamer K.C. (Invited submission in preparation) Diverse but depleted: The consequences of an early and intensive second logging cycle for tropical ants. *Philosophical Transactions of the Royal Society B*
- Fayle T.M.** & Manica A. (In press). Reducing potential over-reporting of deterministic co-occurrence patterns in biotic communities. *Ecological Modelling*
- Fayle T.M.** (In press) "Go to the ant thou sluggard..." *Trends in Ecology and Evolution*
- Fayle T.M.**, Turner E.C., Snaddon J.L., Chey V.K., Chung A.Y., Eggleton P.E. & Foster W.A. (2010). Oil palm expansion into rain forest greatly reduces ant biodiversity in canopy, epiphytes and leaf litter. *Basic and Applied Ecology* 11: 337-345.

- Fayle T.M.** & 27 co-authors (2010). A positive relationship between ant biodiversity and predatory function across a disturbance gradient in a SE Asian rain forest. *Myrmecological News* 14: 5-12.
- Edwards D.P., Ansell F.A., Woodcock P, **Fayle T.M.**, Chey V.K. & Hamer K.C. (2010) Can the failure to punish promote cheating in mutualism? *Oikos* 119: 45-52.
- Fayle T.M.**, Chung A.Y.C., Dumbrell A.J., Eggleton P. & Foster W.A. (2009). The Effect of Rain Forest Canopy Architecture on the Distribution of Epiphytic Ferns (*Asplenium* spp.) in Sabah, Malaysia. *Biotropica* 41: 676-681.
- Fayle T.M.**, Ellwood M.D.F., Turner E.C., Snaddon J.L., Yusah K.M. & Foster W.A. (2008). Bird's nest ferns: islands of biodiversity in the rainforest canopy. *Antenna*, 32: 34-37.
- Turner E.C., Snaddon J.L., **Fayle T.M.** & Foster W.A. (2008). Oil Palm Research in Context: Identifying the Need for Biodiversity Assessment. *PLoS ONE*, 3: e1572.
- Fayle T.M.** (2008). Book Review of *Ants of North America: A Guide to the Genera* by Brian Fisher & Stefan Cover. *Zoological Journal of the Linnean Society*, 152: 847.
- Disney R.H.L. & **Fayle T.M.** (2008). A New Species of Scuttle Fly (Diptera: Phoridae) Parasitizing an Ant (Hymenoptera: Formicidae) in Borneo. *Sociobiology*, 51: 327-332.
- Field J., Turner E., **Fayle T.M.** & Foster W.A. (2007). Costs of egg-laying and offspring provisioning: multifaceted parental investment in a digger wasp. *Proceedings of the Royal Society B*, 274: 445-451.
- Fayle T.M.**, Sharp R.E. & Majerus M.E.N. (2007). The effect of moth trap type on size and composition in British Lepidoptera. *British Journal of Entomology and Natural History*, 20: 221-232.
- Aldridge D.C., **Fayle T.M.** & Jackson N. (2007). Freshwater mussel abundance predicts biodiversity in UK lowland rivers. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 17: 554-564.

SELECTED PRIZES AND SCHOLARSHIPS

- **Thomas Henry Huxley Award and Marsh Prize 2009** from the Zoological Society of London.
- **Alfred Russell Wallace Award 2008/9** from the Royal Entomological Society.
- **Student Talk Prizes** from the Royal Entomological Society (1st 2008, 2nd 2006) and the International Union for the Study of Social Insects (1st 2008).
- **Swann Prize for Biology, Legg Scholarship** (2005, 2006) and election to **Senior and College Scholarships**, Gonville and Caius College, Cambridge.

OUTREACH AND COMMUNICATION

Presented work at international conferences in Washington D.C. (USA), Kuching and Kota Kinabalu (Malaysia) and Durban (South Africa). Have also presented as an invited speaker at the University of Plymouth and the University of Bristol, UK. Act as scientific adviser and canopy access instructor for Canopy Access Ltd., a company providing canopy access training and services for scientists, film makers and tourists. Helped run a stand at the Royal Society Summer Exhibition and a "Forest" exhibition at the University Museum of Zoology, Cambridge. Interviews with the BBC online, BBC Radio 6 and Malaysian national television. Photography featured on front covers of *Science*, *TREE*, *Biotropica* and *Biology 2 for OCR* (an A-level text book).

TEACHING ACTIVITY AND ADMINISTRATION EXPERIENCE

Taught on five residential undergraduate field courses in various parts of the UK. Supervised over 20 undergraduate student projects. Demonstrated in third-year undergraduate statistics computing practicals and first year Evolution and Behaviour practicals. Organised lab meetings for the Conservation Biology Group for 12 months, including presenting papers and arranging talks. Helped run the Student Conference on Conservation Science in 2004 and 2005. Assistant course organiser for second year undergraduate module "Ecology". Duties included assigning of projects and supervisors to students, and organisation of student project talks. Taught on a Tropical Biology Association field course in Sabah, Malaysia (October 2009, 4 weeks).