PhD studentship competition

Fully funded 3.5 year PhD studentship available

**Title:** Human impacts on Amazon peatlands

**Supervisors:** Dr Katy Roucoux, Prof Nina Laurie (School of Geography and Sustainable Development), Dr Lera Miles (UN-World Conservation Monitoring Centre)

**Funding:** NERC Industrial CASE Studentship

**Project description:**

Research by our team has helped to show that large peatlands exist in Amazonia, storing globally significant quantities of carbon and making a unique contribution to biodiversity. Amazonian peatlands are thought to be largely intact, although they are used by local communities as a source of food, medicinal plants, and building materials. The nature, intensity and distribution of these peatland activities is not yet well known and their impact on peatland ecosystem function has not yet been studied.

This project aims to investigate the human uses of Amazonian tropical peatlands and identify their consequences for peatland ecosystem properties. The project will focus on the largest known peatland complex in Amazonia, the Pastaza-Marañón Foreland Basin in Peru, and will make a significant contribution to our understanding of human impacts on peatland function, improving our ability to model these systems as part of the global carbon cycle, while also providing the socio-cultural knowledge essential to successful conservation and sustainable development schemes in the region and beyond.

The project will employ a range of both natural and social science methods: vegetation census and down-core analysis of peat properties to investigate peatland ecosystem properties and long-term dynamics, and participatory mapping, focus groups and interviews to explore the human use and value of peatlands. This interdisciplinary approach will be supported by training in both social and physical science through one-to-one supervisions; internship periods with the CASE partner will provide training in transferring academic findings into policy settings. The different perspectives,
priorities, and means of communication in each discipline will provide exposure to a wide range of experiences and opportunities for learning and place the student in a strong position with regard to possible future career paths.

The CASE partner, the UN Environment World Conservation Monitoring Centre (UNEP-WCMC), is the UN’s specialist biodiversity centre based in Cambridge. WCMC is also a member of the Cambridge Conservation Initiative (CCI), a prestigious collaboration between the University of Cambridge and several biodiversity conservation organisations based in the area. The student will take up two six to eight-week placements at WCMC in the first and third years of the project, initially to shape the project research questions and subsequently to test and refine the project’s policy relevance in Peru and in tropical peatlands elsewhere. The student will be directly involved in the ongoing work of the Climate Change and Biodiversity Programme and will also learn about the wider work of the WCMC, as well as benefitting from the learning and networking opportunities arising from its membership of the Cambridge Conservation Initiative.

This project represents an opportunity to pursue a postgraduate research degree in tropical peatland science in a top UK university as part of a research team at the forefront of the field. The School of Geography and Sustainable Development (SGSD) at St Andrews was rated third in the UK for research in its panel in the 2014 REF, and first for research impact. The focus of SGSD on interdisciplinary, international sustainable development offers strong support and an excellent training environment for this project. The student will join a wider cohort of PhD students within the Scottish Alliance for Geosciences (SAGES) and thus benefit from additional training opportunities and peer-to-peer learning and support events. Collaboration with the world-leading UNEP-WCMC as the CASE partner provides a unique opportunity to embed academic research in an applied, policy-facing context, using the research findings directly to feed into major international conservation and development initiatives, and ensuring that the research is designed to answer questions relevant to national and international decision-makers.

Eligibility & funding amount: We invite UK/EU applicants with a suitable undergraduate and/or Masters degree to apply. The successful candidate will receive an annual stipend in line with RCUK levels and payment of UK/EU tuition fees. This studentship is open to all candidates who qualify for NERC awards (UK applicants are eligible for full funding [fees and stipend] and applicants from EU countries other than the UK are generally eligible for a fees-only award. We strongly suggest that EU applicants check the eligibility criteria under “Terms and conditions of training grants” here: http://www.rcuk.ac.uk/documents/documents/Termsconditionstraininggrants-pdf/

How to apply: Please complete our online PhD Application and ensure that you do the following:

- Apply to the “School of Geography and Sustainable Development”.
- Apply to the programme “PhD Geography (Science)”.
- Note on the application that you are applying for NERC Industrial CASE Studentship.
- Note that the title of the project is “Human impacts on Amazon peatlands”.
- Name your principal supervisor Katy Roucoux.
- Please upload a sample of academic writing (minimum of 500 words).

Successful shortlisted candidates will be interviewed in February. For informal enquiries, contact Dr Katy Roucoux (khr@st-andrews.ac.uk). The deadline for applications is 31 January 2018.