

CANDIDATE BRIEF

Research Fellow in Tropical Forest Climate Sensitivity, School of Geography



Salary: Grade 7 (£33,797 – £40,322 p.a.)

Reference: ENVGE1107

Closing date: 26 January 2020

Fixed-term for 24 months (due to external funding)

We will consider job share / flexible working arrangements

Post is only available from April 2020

Research Fellow in Tropical Forest Climate Sensitivity, School of Geography, Faculty of Environment

Are you an ambitious researcher looking for your next challenge? Do you have skills in analysing ecological datasets and a particular interest in tropical ecology, biogeography, and global change? Do you want to further your career in one of the UK's leading research intensive Universities?

The Ecology and Global Change research cluster at Leeds conducts world-leading research in tropical ecosystem ecology and change. We are looking to recruit a highly skilled and ambitious Postdoctoral Research Fellow to lead analyses for two new projects led by our group: the Royal Society – Global Challenges Research Fund project FORAMA ("For a Climate Resilient Amazon"), and the NERC – Newton Fund Latin American Biodiversity project ARBOLES ("A trait-based Understanding of LATAM Forest Biodiversity and Resilience"). The central aim of FORAMA is to understand how climate changes will impact Amazon trees and use this to inform climate-proof restoration of ecosystems that contributes to livelihoods of marginalised people. ARBOLES has highly complementary aims, focused on understanding the functional basis of trait of forest climate sensitivity and resilience.

You will be responsible for leading analysis of ecological change datasets, and associated publications, with support from the project PIs and a wider team of collaborators in Leeds and beyond. You will be analysing data on forest change and dynamics (associated with our highly collaborative RAINFOR and ForestPlots.net initiatives), as well as plant distributional data (e.g. BIEN), and rich and growing datasets on Amazon forest functional traits and heating experiments in the south-eastern margins of Amazonia where ecosystems and climate are changing rapidly. Key objectives are to (1) develop independent frameworks to predict impacts of climate change on Amazon trees, (2) evaluate these against new experiments and/or observations of climate sensitivity, and (3) exchange and integrate new knowledge into restoration practice with local communities and restoration specialists. Ultimately, these novel frameworks and analyses will provide new insights into which Amazon forests and plant taxonomic groups will be most affected by changes in climate.

Delivering on both these projects is core, but we will expect the successful candidate to contribute in other ways, including helping with advanced analysis for our PhD students and others including Latin American visitors who use data in ForestPlots.net.



You will be based in Leeds throughout, but will work interactively with colleagues elsewhere in the UK and in South America, and is likely to involve some project meetings and other stakeholder engagement events in South America. You will have excellent existing skills in statistical analysis using R, a willingness to collaborate widely with colleagues in Latin America, as well as a track-record of publishing high-quality papers from your previous research.

What does the role entail?

As a Research Fellow, your main duties will include:

- Analysing biogeographic climate range limits and favoured climates for Amazon tree species, with species-distribution modelling;
- Further assessing climate sensitivity of taxa, especially for the critical moist/dry transition zones, using long-term plot records;
- Analysing long-term floristic, growth, and mortality change of forests in South America with RAINFOR partners;
- Leading and contributing to research papers for publication;
- Contributing to advising a Brazilian PhD student on S. Amazon plot climate impact analyses;
- Training students in the U.K. and Brazil in techniques for 'big-data' ecological analyses;
- Participating in and contributing to project meetings;
- Applying knowledge acquired from FORAMA and ARBOLES by presenting research papers at conferences and scientific meetings;
- Developing collaborations with colleagues at the University of Leeds and with external organisations/other Institutions to develop new external research links;
- Contributing to the development of further research funding applications.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.



What will you bring to the role?

As a Research Fellow you will have:

- A PhD or near completion i.e. the initial thesis needs to have been handed in at the point of application in ecology, statistical ecology, biodiversity science or a closely allied discipline;
- Strong quantitative data analysis skills in general;
- Specific expertise in statistical analysis in at least one of the following areas: ecological dynamics, macroecology, species distribution models;
- Advanced coding skills in R;
- Ability to work effectively with others in a team environment;
- The ability to communicate your work well locally as well at national and international conferences, and write high quality articles for publication;
- Initiative to explore new ideas and contribute to the development of the research, both conceptually and in practice;
- An ability and willingness to participate for a few weeks each year at project meetings, stakeholder events, and student training activities, in the UK and/or South America;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- A developing track record of peer-reviewed publications in international journals;
- Excellent written and verbal communication skills including presentation skills;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Specific, advanced knowledge of Latin American forest ecology and biodiversity;
- Communication skills in Portuguese and/or Spanish;
- Experience of working independently in one or more tropical countries;
- Knowledge of the rationale for the project, e.g. the challenges facing the Amazon region with climate change and deforestation;
- Knowledge and professional interest in forest restoration.



How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Professor Oliver Phillips, Professor in Tropical Ecology

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<u>Dr David Galbraith</u>, Associate Professor

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Additional information

Find out more about the **School of Geography**

Find out more about our Faculty

Find out more about our Research and associated facilities

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our <u>Working at Leeds</u> information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk.</u>



Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our <u>Criminal Records</u> information page.

