



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Tropical Forest Carbon Balance, School of Geography



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

Reference: ENVGE1111

Fixed-term for 5 months (due to external funding)

We will consider job share / flexible working arrangements

Research Fellow in Tropical Forest Carbon Balance, School of Geography, Faculty of Environment

Are you an ambitious researcher looking for your next challenge? Do you have skills in analysing large environmental datasets and a particular interest in the carbon balance of Amazon forests? 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 produce and conduct analysis on state-of-the-art biomass maps for South American forest ecosystems and maps of critically important carbon cycle processes (woody productivity and biomass mortality) for Amazonia. These maps will be largely derived from inventory data housed within the forestplots.net database, the world's largest database of repeat-census tropical forest plots. These new maps and analyses will allow for an updated understanding of spatial variation in key Amazon carbon cycle components. The project will also involve the analysis of land use change datasets from Amazonia (e.g. deforestation from PRODES and degradation from DETER) to better understand the role of anthropogenic disturbance on the Amazon carbon cycle. This post will be funded by the Met Office Brazil-CSSP Programme.

You will be responsible for construction of the biomass, productivity and mortality maps and for leading analysis of the resultant spatial patterns with support from PIs in Leeds and collaborators in South America. You will also explore the potential of integrating remote sensing data streams to better interpolate plot-based estimates. An important part of the project will be to liaise with forestplots.net partners across South America in the map development process. You will also be expected to work closely with Brazilian students from collaborating institutes who will visit Leeds and to present the results of your work in project meetings. Although you will be based in Leeds, you may also be expected to deliver training to early career researchers in South America.

You will have a demonstrated ability to analyse large datasets, preferably in Google Earth Engine, highly developed statistical skills and an understanding of carbon cycling in tropical forests and a track record of publishing high-quality publications on topics of relevance to this post.



What does the role entail?

As a Research Fellow, your main duties will include:

- Generating and pursuing independent and original research ideas in the appropriate subject area;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Interpolation of inventory data using advanced geostatistical techniques;
- Integration of inventory data and remote sensing datasets in Google Earth Engine;
- Liaising with forestplots.net partners across South America;
- Contributing to advising Brazilian students on spatial analysis of carbon cycling;
- Training Latin American students in the use of Google Earth Engine;
- Presenting results at project 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;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

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 close to completion - i.e. the initial thesis needs to have been handed in at the point of application, preferably in remote sensing or ecosystem ecology or a closely allied discipline;
- Strong quantitative data analysis skills in general;
- A large-scale understanding of the tropical forest carbon balance;
- Previous experience performing large-scale analyses in Google Earth Engine, preferably on a topic related to this post;
- 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 no more than 2 weeks, at project meetings and training courses in 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 proven track record of peer-reviewed publications in high impact factor 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:

- An understanding of the forestplots.net database;
- Communication skills in Portuguese and/or Spanish;
- Previous experience of training others in analysis of large-scale datasets (e.g. with Google Earth Engine);
- Experience of working independently in one or more tropical countries.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) 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:



[Dr David Galbraith](#), Associate Professor

Tel: +44 (0)113 34 32730

Email: D.R.Galbraith@leeds.ac.uk

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.

A diverse workforce

The Faculty of Environment has received a prestigious Athena SWAN silver award from [Advance HE](#), the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

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 [Working at Leeds](#) information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk.

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 [Criminal Records](#) information page.

