



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Forest Carbon Storage, Faculty of Environment



Salary: Grade 7 (£39,105 – £46,485 p.a. depending on experience)

Reporting to: Dr Cat Scott

Reference: ENVEE1789

Fixed term for 8 months to complete specific time limited work

Please note the post must start between 1 February 2025 and 1 June 2025

Location: University of Leeds campus (with scope for hybrid working)

We are open to discussing flexible working arrangements

Research Fellow in Forest Carbon Storage, School of Earth and Environment, Faculty of Environment

Overview of the Role

Are you a quantitative environmental scientist seeking your next challenge? Do you enjoy analysing large spatial datasets to answer questions about our planet?

We are seeking an experienced Research Fellow to map above and below-ground carbon stocks in European forests, allowing the identification of carbon-rich ecosystems as part of the Horizon funded SafeNet project.

The overall goal of SafeNet is to support the conservation of biodiversity and carbon-rich forest ecosystems across Europe. These forest ecosystems face considerable risks due to climate change and unsustainable land-use, while being expected to meet societal demand for natural resources and ecosystem services.

You will use both remote sensing datasets and ground-based forest inventory data to build a Europe-wide map of above and below-ground carbon density. You will collaborate with researchers from across Europe to combine information on carbon-rich ecosystems with biodiversity metrics to allow identification of primary and old growth forests that may be in need of protection.

You will join the Biosphere Atmosphere Group ([BAG](#)) in the Institute for Climate and Atmospheric Science ([ICAS](#)), part of the School of Earth and Environment.

Main duties and responsibilities

- Assembling and synthesising remote sensing datasets from which above-ground biomass (and therefore carbon) in European forests may be derived;
- Estimating below-ground biomass in European forests based on multiple regression modelling of above-ground biomass and climatic conditions;
- Assembling and synthesising spatially explicit Europe-wide soil carbon datasets;



- Working both independently and also as part of a larger team of researchers across the SafeNet project, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and contributing to the training and mentoring of less experienced colleagues as appropriate;
- Contributing to the research culture of the Biosphere Atmosphere Group and wider School community;
- 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;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- 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.

Qualifications and skills

Essential

- A PhD or near completion - i.e. the initial thesis needs to have been handed in at the point of application in environmental science, atmospheric science, climate science, physical geography, or a closely allied discipline;
- Demonstrated understanding of the carbon cycle and terrestrial biosphere;
- Experience analysing large, satellite datasets including NetCDF and other spatial datasets;



- Strong quantitative data analysis skills;
- Excellent technical expertise in a programming language such as python;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- 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.

Desirable

- Experience in quantifying above and/or below ground carbon stocks in forests;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Experience of pursuing external funding to support research.

Additional information

Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information please visit: www.gov.uk/skilled-worker-visa

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information please visit: <https://www.gov.uk/global-talent>

Find out more about the [School of Earth and Environment](#)

Find out more about the [Faculty of Environment](#)

Find out more about our [Research and associated facilities](#)

Find out more about [Equality in the Faculty](#)



Our University

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Environment we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian, people who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability.

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

We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit 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 foehr@leeds.ac.uk.

Criminal record information

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.

