

CANDIDATE BRIEF

Research Fellow in Aeroecology, Faculty of Biological Sciences



Salary: Grade 7 (£33,199– £39,609 p.a.) Due to funding limitations it is unlikely an appointment will be made above £35,211 p.a.

Reference: FBSBY1097

Closing date: 09 January 2019

Fixed-term for 30 months (external funding)

Research Fellow in Aeroecology School of Biology

Are you an ambitious researcher looking for your next challenge? Do you have an established background in aeroecology, ecology or entomology? Do you want to further your career in one of the UKs leading research intensive Universities?

Technological approaches to large-scale biological monitoring are essential to catalog the changing responses of the natural world to human activity. We are seeking an excellent, dynamic and skilled ecologist to use weather radar to map aerial biodiversity in the UK (with application worldwide). This project, funded by the Natural Environment Research Council (NERC), will combine our institution's research strengths in atmospheric physics and biodiversity conservation to produce a step change in the way in which biodiversity is monitored. You will join a small but growing number of interdisciplinary scientists working at the interface of technology and biodiversity

The wider project will involve a combination of techniques that are brought together to deliver a high impact, novel approach to biological monitoring. These will include biological imaging and electromagnetic modelling, taxonomic research on existing collections of insects, desk-based spatial analyses based in geographical information systems (GIS), and field collection of specimens. The core output of the project will be the delivery of a web portal to showcase the findings as a useful tool for policymakers, researchers, and the general public. The project team is diverse and will tackle different aspects of the work, with the intention of additional training in the whole range of approaches that are being employed.

The work has the potential to revolutionise the way in which biological diversity and the abundance of aerial insects are monitored, with a high degree of impact through UK (and international) monitoring schemes.

You will have a PhD (or close to completion) in aeroecology, entomology, ecology, environmental science or a closely allied discipline, strong invertebrate taxonomic skills and experience of data analysis. As part of this role, you will join a thriving research group where you will have opportunities to contribute to undergraduate teaching, and the supervising of undergraduate and postgraduate research projects.



What does the role entail?

As a Research Fellow your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with <u>Dr Christopher Hassall</u>, <u>Dr Elizabeth Duncan</u>, and <u>Professor</u> <u>Bill Kunin</u>;
- Generating independent and original research ideas and methods in radar and biodiversity monitoring with an aim to extend the <u>Ecology and Evolution</u> research portfolio;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals, and by presentation at national and international meetings;
- Working independently and as part of a larger team of researchers, both internally and externally to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- Contributing to the supervision of junior researchers and PhD students and acting as a mentor to less experienced colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations to your own research;
- To contribute to, and to encourage, a safe working environment.

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) in aeroecology, entomology, ecology, environmental science or a closely allied discipline;
- Experience in invertebrate taxonomy (preferably across a number of different invertebrate groups);
- Experience of working in the field;
- Experience in or an interest in learning genomic techniques and bioinformatics;
- Strong analytical skills (including GIS and statistical analysis, preferably in R), with the ability to work accurately and carefully, designing, executing and writing up research independently;



- A developing track record of peer reviewed publications in international journals;
- Excellent communication skills, both written and verbal and the ability to communicate your research at national and international conferences;
- The ability to work well both independently and as part of a team;
- Strong initiative and a pro-active approach, with excellent organisational, planning and self-management skills, including the ability to prioritise workloads to meet deadlines/demand and deliver high quality under pressure;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience in programming in Python, open science methods (Git, Github, Jupyter, R);
- Knowledge of aeroecology and the use of radar in biological research;
- Experience of 3D image processing (e.g. Blender, microCT scanning), interest and experience of working in an interdisciplinary team;
- Evidence of pursuing external funding to support research.

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 <u>closing date</u>.

Your application should include:

- A supporting statement providing evidence to support each requirement listed on the 'What will you bring to the role' section of the Candidate Brief (no more than two sides of A4, minimum font size 11);
- An academic curriculum vitae, including a list of your publications.

Contact information

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

Dr Christopher Hassall, Lecturer in Animal Biology

Tel: +44 (0)113 343 5578 Email: <u>c.hassall@leeds.ac.uk</u>



Additional information

Find out more about the Faculty of Biological Sciences and the School of Biology

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.

A diverse workforce

The University of Leeds and the Faculty of Biological Sciences are committed to providing equal opportunities for all and offer a range of family friendly policies. The University is a charter member of Athena SWAN (the national body that promotes gender equality in higher education), and the Faculty of Biological Sciences was reawarded a Bronze award in 2017. We are proud to be an inclusive Faculty that values all staff, and are happy to consider job share applications and requests for flexible working arrangements from our employees. Our Athena SWAN webpage provides more information. <u>http://www.fbs.leeds.ac.uk/equality-and-diversity/athena-swan/</u>

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.

