

CANDIDATE BRIEF

Research Fellow in Dairy Systems Sustainability,

School of Geography, Faculty of Environment



Salary: Grade 7 (£33,797 – £40,322 p.a.) Due to funding limitations an appointment will not be made above £36,914 p.a Reference: ENVGE1125 Full Time Fixed term until 31 Dec 2021 We will consider job share / flexible working arrangements

Research Fellow in Dairy Systems Sustainability School of Geography, Faculty of Environment

Do you want to be part of a project aiming to improve the sustainability of the UK dairy sector?

The UK has the tenth largest dairy sector in the world, producing 14 percent of the EU's milk and representing over two percent of global milk production. The UK has had low prices for milk over a period of 20 years leading to the UK dairy farmers suffering from low and sometimes negative profit margins, worsened by high input costs, competition between retailers, global oversupply and, since 2014, Russian dairy import bans. The prospects of unequal competition from EU farmers post-Brexit, recent weather variability and the drop in milk demand during the Covid-19 pandemic all add to the uncertainty facing UK dairy sector.

Dairy production depends on the natural environment but, if poorly managed, dairy production can erode the natural capital upon which it depends, for example by polluting rivers. However, effective management of soils in dairy grasslands has the potential to boost carbon sequestration, helping to mitigate the risks of climate change.

Within the overall research activities of the Resilient Dairy Landscapes project, funded under the Global Food Security (GFS) programme, the University of Leeds is collaborating with Frist Milk and Nestle UK to better understand how dairy farmers may increase soil organic carbon, and decrease nutrients loss into air and water. The Resilient Dairy Landscape project consortium also includes Newcastle University, University of Liverpool and 3Keel.

We are looking for an enthusiastic Post-Doctoral researcher with a background in agriculture systems and data analysis to join the Resilient Dairy Landscapes team in the University of Leeds and contribute to the development of statistical models and recommendations to farmers based on large number of soil samples and management history data collected by our industrial partners.

You should have a PhD (or be very close to obtaining a PhD) in Agricultural Science, Geography, Ecology, Mathematics/Statistics, Physics – or a related discipline with a significant component of data analysis – and be able to demonstrate a combination of enthusiasm and expertise in statistical modelling.



What does the role entail?

Contributing to the development of improved understanding of the impact of field management on soil health for dairy farms

- Quantitatively reviewing peer-reviewed and grey literature on causal relationships between field-level management and soil health;
- Performing statistical analysis combining soil data and field management data collected by the project's industrial partners;
- Linking with other GFS projects to explore potential synergies, data sharing and dissemination of findings;
- Contributing new ideas and perspectives to Resilient Dairy Landscapes team and Leeds project investigator's research group in Leeds;
- Producing high quality research papers for publication in academic journals;
- Disseminating findings from the research project by preparing and delivering research presentations at conferences, stakeholder workshops or other forums;
- Contributing to the development of new research funding applications, either in a leading role or as a co-investigator;
- Planning and managing your own research activity in collaboration with the project investigator and other members of the Resilient Dairy Landscape team;
- Working both independently and as part of a larger team of researchers in Resilient Dairy Landscape consortium, 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, where appropriate, 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 Research Fellow you will have:

- A PhD (or be very close to obtaining a PhD) in Agricultural Science, Geography, Ecology, Mathematics/Statistics, Physics – or a related discipline with a significant component of data analysis and statistical modelling;
- Good knowledge of agricultural systems and challenges farmers face in their management;
- An ability to think creatively when standard techniques or libraries are not suitable, in order to develop novel, innovative solutions to complex problems;
- Expertise in a range of data analysis and statistical modelling approaches;
- An ability to write high-quality research papers with an emerging track record in the publication of scholarly articles in peer-reviewed journals;
- Excellent communication skills including evidence of having presented work at a high academic level and an ability to explain complicated technical work to colleagues and stakeholders e.g. farmers, First Milk, Nestle and others in the dairy sector;
- A proven ability to work closely with a small group of scientists and collaborate with a wider, multidisciplinary team;
- A strong commitment to your own continuous professional development;
- Ability to use initiative to develop and pursue new research ideas and algorithms in line with the requirements of the project;
- Willingness to travel within the UK and internationally to attend residential international conferences, project meetings and dissemination events.



You may also have:

- Experience with dairy sector challenges and/or farmers working in the dairy sector;
- Evidence of giving conference presentations;
- Experience with working in a collaborative project involving remote partners.

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:

Prof. Guy Ziv, Chair in Socio-Environmental Systems Tel: +44 (0)113 343 7994 Email: <u>G.Ziv@leeds.ac.uk</u>

Additional information

Find out more about the Faculty of Environment

Find out more about the School of Geography

Find out more about our research and associated facilities

Find out more about Athena Swan in the Faculty of Environment

Find out more about our Faculty initiatives



A diverse workforce

The Faculty of Environment has received a prestigious Athena SWAN silver award from <u>Advance HE</u>, 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 <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.

