

# **Candidate Information**

Position: Research Fellow (Northern Ireland Countryside Survey)

School/Department: School of Biological Sciences

**Reference:** 24/112229

Closing Date: Monday 25 November 2024
Salary: £39,922 to £41,112 per annum
Anticipated Interview Date: Friday 6 December 2024

**Duration:** Fixed term, available for 3 years or until 31 March 2028, whichever is

soonest

#### JOB PURPOSE:

We are seeking an enthusiastic and skilled Postdoctoral Researcher to join our dynamic team at the DAERA-funded Co-Centre for Climate + Biodiversity + Water. The successful candidate will be embedded in a collaborative research environment, working closely with experts from the UK Centre for Ecology and Hydrology, the Agrifood and Biosciences Institute, and Queen's University Belfast.

Your primary focus will be to analyse data from the Northern Ireland Countryside Survey, leveraging your expertise in community and ecosystem ecology with a focus on habitat and botanical data, spatial data analysis, GIS, and statistics to gain valuable insights into land use change and the impacts of agriculture and agrienvironmental schemes, including the Environmental Farming Scheme. This role offers a unique opportunity to contribute to important research that will inform policy development and environmental management practices in Northern Ireland.

You will play a critical role in assessing how the state of nature in Northern Ireland relates to agriculture and land use policy. This involves assessing the effectiveness of nature-based solutions at landscape scales, understanding their role in enhancing ecosystem services, and promoting sustainable land management practices. Your work will be essential in developing strategies that integrate agricultural productivity with biodiversity conservation, ensuring a resilient and thriving countryside.

The Co-Centre for Climate + Biodiversity + Water is an exciting new tri-jurisdictional initiative spanning Northern Ireland, Great Britain and the Republic of Ireland, which is managed jointly by QUB and Trinity College Dublin and funded by the Science Foundation Ireland (SFI), DAERA and UKRI. The Co-Centre aims to be the home of research, innovation, and policy development across the interlinked challenges of climate change, biodiversity loss, and water degradation on the islands of Ireland and Britain, with the goal of integrating research across both islands to address these crises.

The post will be part of the School of Biological Sciences at QUB but will work as part of a multi-disciplinary team delivering the NI Countryside Survey and will be based in the dedicated Co-Centre Hub. The successful candidate will have responsibilities in research, supervision, planning, collaborations, and outreach and the post is available immediately.

# **MAJOR DUTIES:**

- 1. Analyse extensive co-registered datasets from the NI Countryside Survey and Environmental Farming Scheme (EFS) datasets to assess land use changes and their ecological impacts.
- 2. Utilize GIS and spatial data analysis tools to map and interpret changes in the distribution of habitats and landscape features.
- Present regular (quarterly) progress reports on research to members of the research group, DAERA funders and the EFS team
  or to external audiences to disseminate and publicise research findings. Provide direct feedback on reporting/outcomes of EFS
  as required.
- 4. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.

- 5. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
- 6. Carry out occasional undergrad course demonstrating within the post holder's area of expertise, and contribute to student supervision under the direct guidance of a member of academic staff.
- 7. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

#### **ESSENTIAL CRITERIA:**

- Have or be about to obtain\* a relevant PhD in Ecology, Environmental Science, Geography, or a related field (\*must be obtained within three months of commencement of employment).
- 2. Proven track record of managing and analysing large ecological datasets.
- 3. Experience in publishing research findings in peer-reviewed scientific journals.
- 4. Familiarity with agro-ecology and the impacts of agricultural practices on biodiversity and ecosystems.
- 5. Ability to work in a multi-disciplinary environment as part of a research team.
- 6. Proficiency in using statistical software such as R or Python for data analysis.
- 7. Advanced skills in GIS software, including ArcGIS and QGIS.
- 8. Demonstrated experience with spatial data analysis and modelling.
- 9. Experience in supervising and mentoring junior researchers and students.
- 10. Ability to develop training materials and sessions to enhance team members' skills in data analysis and software tools.
- 11. Ability to contribute to broader management and administrative processes.
- 12. Demonstrated ability to deliver outreach activities through relevant stakeholder, community or civic groups.
- 13. Evidence of project management and record keeping.
- 14. Sufficient knowledge in the research methods and techniques to work within established research programmes.
- 15. Excellent IT skills e.g. Microsoft Office suite.
- 16. Excellent oral and written communication skills.
- 17. Ability to communicate complex information clearly.
- 18. Ability to build contacts and participate in internal and external networks.
- 19. Excellent inter-personal skills.
- 20. Ability to assess and organise resources.
- 21. Ability to work independently and on own initiative.
- 22. Demonstrate commitment to equality, diversity and inclusion through continuous development and modelling of inclusive behaviours.
- 23. Irregular hours including evening, weekend and other out-of-hours work may be a component of the research at times.
- 24. Must be willing to travel to national and international meetings and other opportunities for collaborative research as required on an ad-hoc basis.

## **DESIRABLE CRITERIA:**

1. Experience of research interactions with industry / community and voluntary sector.

### **ADDITIONAL INFORMATION:**

Informal inquiries may be directed to: Neil Reid (neil.reid@qub.ac.uk).