Wetland (Peatland) Ecologist / Research Assistant

**Discipline of Geography and the Ryan Institute**

**Ref. No. NUIG RES 126-22**

Applications are invited from suitably qualified candidates for a four year part-time position (0.80 FTE) as a project research assistant / ecologist within the discipline of Geography at the National University of Ireland, Galway.

This position is funded by SSE Renewables, EU LIFE and the DAFM& EPA and is available from July 2022 to contract end date of July 2027

**Context**

The majority of Irish peatlands exist in a degraded state with only 10% considered of conservation value. This results in large net carbon emissions from a landscape that should be a natural carbon sink and increases the difficulty of meeting national and international emissions agreements. Further, differences in land ownership limit effective peatland management and leads to ineffective methods and policies to combat degradation and promote recovery. These projects are establishing baseline data and documenting recovery of peatlands.

**The Projects**

This position will be in cooperation with two ongoing research projects: “Multipeat” and Re-Peat”. ‘Multi-Peat’ is an EU LIFE project that will demonstrate innovative technologies that achieve net emissions savings from novel restoration techniques for managing and monitoring carbon reduction from peatlands. It involves collaborators from Belgium, Germany, Poland, and the Netherlands. The project will monitor and follow peatland restoration activities associated with 217 ha of blanket bog restoration in County Galway. The candidate will be required monitor environmental change associated with restoration works. This includes performing baseline ecological surveys (e.g., vegetation quadrats), demonstrating environmental changes (via hydrology and soil characteristics using sensor networks), measuring greenhouse gas exchanges along various degradation states and restoration trajectories, and helping to coordinate volunteer citizen groups to assist in restoration efforts.

The Re-Peat project will use advanced geospatial techniques to extract boundary data from high-resolution historical maps and use them to identify their former -and current- boundaries to assist quantification of carbon rich soils that have undergone land use change. In the early 1800s a large-scale survey was completed to assess the spatial extent of peatlands. This survey, The Bog Commissioners (BC) report represents the best estimate of the original extent of many peatlands in Ireland prior to large-scale exploitation. The BC maps cover an area of ~655,500 ha and contain measures of bog boundaries, peat depth, and unique environmental and landscape histories. This extraordinary resource offers a unique opportunity to assess the original extent of peatlands before widespread exploitation, to use these data to assess the extent of land cover and land use change in those areas, and to identify and locate areas (esp. grasslands) that may be suitable for rewetting. The candidate will assist project postgraduates with field mapping and georectification of the maps and other field mapping duties as needed. The project is a collaboration between the discipline of Geography at NUI Galway, the Department of Food, Agriculture and the Marine, and Trinity College Dublin.

**Job Description:**

The successful candidate will perform ecological surveys, greenhouse gas monitoring, field mapping, data analysis, and project reporting. Also, as part of the research projects the successful candidate will be tasked with:

1. Annual ecological surveys of the main project area to document and map plant community/ habitats and bog condition and status (peat depth and C-content).
2. Perform monthly greenhouse gas exchange measurements at several locations demonstrating restoration condition.
3. Maintain a network of environmental sensors and manage/analyse the environmental and GHG data for project reporting.
4. Assist with mapping peatland boundaries and identification of organic soils.
5. Assist with project reporting and administrative duties as needed.

**Essential Requirements:**

* Bachelor’s degree in a relevant discipline (e.g., environmental science, conservation, botany, earth or physical sciences, or similar
* Outstanding field credentials.
* Ability and experience identifying and mapping habitats (wetlands preferred) and experience with field monitoring and data collection.
* Demonstrated GIS experience and data management skills with the ability to perform spatial analysis.
* Full-Irish or EU driver’s license.

**Desirable Requirements:**

* Master’s degree (with a first-class or 2:1 grade) in a relevant discipline (e.g., environmental science, conservation, botany, earth or physical sciences, or similar degree).
* Experience with ecological surveys and greenhouse gas sampling and analysis.
* Computer literacy in data management, data manipulation, and statistical analysis (knowledge of the R programming language preferred).
* Understanding of EU directives and policies and national legislation regarding natural areas.

**Employment permit restrictions apply for this category of post**

**Salary**: in the range of €27,380-31,936 per annum

**Start date**: Position is available immediately

**Continuing Professional Development/Training**:

Researchers at NUI Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans.

Further information on research and working at NUI Galway is available on [Research at NUI Galway](http://www.nuigalway.ie/our-research/)

For information on moving to Ireland please see [www.euraxess.ie](http://www.euraxess.ie)

Further information about the projects can be found [HERE](https://sites.google.com/site/terryrmorley/Home)

Informal enquiries concerning the post may be made to Dr. Terry Morley

**To Apply:**

Applications to include a cover letter, CV, and the contact details of three referees should be sent, via e-mail (in word or PDF only) to Terry Morley at [terry.morley@nuigalway.ie](mailto:terry.morley@nuigalway.ie)

All applicants must ensure they meet the essential criteria to be considered further.

Please put reference number **NUIG RES 126-22** in subject line of e-mail application.

**Closing date for receipt of applications is 5.00 pm 16 June 2022**

Interviews are planned to be held the following week

We reserve the right to re-advertise or extend the closing date for this post.

National University of Ireland, Galway is an equal opportunities employer.

All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment

'NUI Galway provides continuing professional development supports for all researchers seeking to build their own career pathways either within or beyond academia.  Researchers are encouraged to engage with our Researcher Development Centre (RDC) upon commencing employment - see [www.nuigalway.ie/rdc](http://www.nuigalway.ie/rdc) for further information.'

