



Scottish Peatlands Project Assistant

Future Leaders Programme 2024

Application form: <https://forms.office.com/e/v5V9fYFXwa>

Application deadline: 11:59pm GMT on Monday 11 March 2024

Position with: [Centre for Landscape Regeneration](#), University of Cambridge

Manager: Aland Chan, Department of Plant Sciences

Location: Cairngorms, Scotland*

*Please note that all project assistants on the Future Leaders Programme must be in person in Cambridge for the week commencing 15 July and the week commencing 2 September.

Programme dates: 15 July to 13 September 2024

Project Overview

This project aims to enhance our understanding of peatlands in Scotland. Soils are a crucial part of carbon storage, with an estimated 3688 Mt of carbon in soils in Scotland alone. Peatland habitats are also home to many plants that are nationally or globally threatened.

This project will work closely with [Cairngorms Connect](#), which is the biggest habitat restoration project in Britain. Much of the restored area is currently covered by peatland. Given its significance in both carbon storage and biodiversity conservation, there is a need to accurately assess the condition of the peat in the region to enable appropriate management of the landscape.

The key objectives include:

1. *Mapping Peat Depth*

Peat depth measurements and soil sampling will be conducted. Data will be combined with remote sensing data (lidar/radar/aerial imagery) to generate detailed peat maps of the area.

2. *Assessing Peatland Health*

Peatland conditions will be assessed by analysing peat samples. Methods may include carbon isotope analysis, evaluating peat ash content, and Synthetic Aperture Radar (SAR) imagery.

3. *Improving Root Biomass Measurements*

Traditional methods for measuring fine root biomass are time consuming and inaccurate. The project will trial methods to estimate root biomass biochemically.

4. *Studying Root-Soil Relationships*

Habitat restoration will change vegetation composition. We will investigate how root properties in peatlands vary with vegetation, topography, and nutrient conditions.

This research project will involve extensive fieldwork in the Cairngorms throughout the placement. You will be part of a small team working in the field. You should be willing to be outdoors for long periods, possibly in adverse weather conditions. We are committed to ensuring an inclusive approach to fieldwork.

We strongly encourage and welcome applications from those who are reflected in widening participation criteria below, as part of our commitment to improving diversity and inclusion and widening access to conservation and environmental science careers.

- Those who come from an under-represented ethnic group
- Those who are care experienced
- Those who have been granted refugee status in the UK
- Those who are estranged from both primary carers (e.g. both parents/carers)
- Those who were eligible for the 16-19 Bursary/ Pupil Premium and/or those who were in receipt of Free School Meals
- Those who are a young carer, defined as being the primary carer for a parent or sibling
- Those who have experienced disruption to their education, for example due to health issues, family circumstances or homelessness.

Person Specification

Essential criteria

- Applicants must have a knowledge of climate, conservation and/or environmental issues as well as a passion for the subject.
- You should be willing to work in the field under variable weather conditions.
- Good analytical skills; able to collate, understand and draw conclusions from quantitative and qualitative information.
- Good interpersonal skills; confident in meeting and working with people from a range of backgrounds and disciplines.
- Well-developed organisational and timekeeping skills and the ability to manage projects.
- Ability to prioritise own workload and plan effectively as part of a small team.
- Competent in standard software packages e.g. Word, Excel, Powerpoint.

Desirable criteria

- Studying, or have completed a degree in a relevant subject such as conservation, environmental sciences, biological sciences or similar.



- Knowledge or skills, for example as part of your studies, of soil sampling and analysis, peatland ecosystems, carbon sequestration and/or effects of habitat restoration would be beneficial
- Previous field work experience, for example as part of your studies, is desirable.