Fenland Biodiversity (Beetles) Project Assistant

Future Leaders Programme 2024

Application form: https://forms.office.com/e/xv7SmEBX2u

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

Position with: Centre for Landscape Regeneration, University of Cambridge
Manager: Neil Mahon, Department of Zoology
Location: Cambridge
Programme dates: 15 July to 13 September 2024

Project Overview

Regenerative agriculture has grown in prominence in recent years as a viable model of sustainable soil management as it holds many promising benefits for biodiversity. However, there is limited knowledge of the response of many arthropod communities to alternative land management strategies and the extent to which producers employ regenerative farming strategies.

This project aims to test whether regenerative approaches to farmland management can enhance farmland insect natural enemy communities through effects on the structure and homogeneity of habitats. Specifically, this project will survey ground beetles (Carabidae, Coleoptera) which are key ecosystem service providing organisms on arable farms.

The key pieces of work the assistant will undertake are:

- Conduct surveys of ground beetles using pitfall traps along transects, on arable farms, solar farms, and nature reserves in the Fenlands of East Anglia, UK.
- Collect measurements of vegetation at study sites.
- Identify collected ground beetle specimens in the laboratory.
- Carry out statistical analyses of field data to relate ground beetle populations (abundance, diversity etc.) and community compositions to land management.

By considering arthropod communities and species-habitat associations, this project will identify drivers of change in ecosystem structure across fenland farms, solar farms, and nature reserves and highlight potential beneficial management practices for ground beetle communities. In turn, this project may help target vulnerable species and communities for conservation.

This research project will involve extensive fieldwork across the Cambridgeshire Fens 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 zoology, environmental sciences, biological sciences or similar.
- Knowledge and/or skills of arthropod identification in the field and and/or using dichotomous keys for species identification is desirable.
- Previous field work experience, for example as part of your studies, is desirable.