

MSc Project

Closing date: 31-Jan-24

Contact: ian.johnstone@rspb.org.uk

Analysing 30 years of vegetation monitoring data

Timescale: Summer field work, potentially some flexibility to fit around student's availability

Location: Lake Vyrnwy

Resources available: access to RSPB reserves

Limitations: Must have or be able to rappidly develop good plant ID skills. Must be happy working in remote upland habitats in sometimes poor weather.

Background

The uplands of Wales are undergoing changes, including intensification, afforestation, abandonment, and conservation management. All of these are likely to have impact on upland vegetation in different ways, and we wish to understand the likely implications of the adoption of alternative management, as this will feed into changes in key upland bird species.

Moorland vegetation community has been surveyed four times since 1993 across a set of twenty-seven 20 x 20 m plots stratified by three habitats at the RSPB's Lake Vyrnwy Reserve in mid Wales. Six plots have been protected from grazing after collection of baseline data while others have been subject to varied grazing regimes. This rare 30-year dataset provides the opportunity to contrast community change between prescribed conservation grazing and 'abandonment'.

Brief Aims and Methods

We wish to carry out a further repeat survey mid-late summer 2024 along with a multivariate analysis to detect key patterns in community change across years and among treatments to inform reserve grazing plans.

The student will carry out field surveys, and have access to historical data, and will analyse the changes over time based on grazing regime. Good botanical skills are required with additional training provided. Experience of upland of upland habitats is also desirable.