

MSc Project

Closing date: 31-Jan-24

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Understanding Willow Tit habitat in Wales

Timescale: Spring or summer field work, some desk work

Location: mid-Wales

Resources available: data, equipment

Limitations: Own transport essential

Background

The Willow Tit is the UK's fastest declining resident bird species. Trial management has been piloted in England, but preferred habitats in Wales are likely to differ in character (more upland sites, fewer brownfield sites), and we wish to understand where best to target management.

A national survey in 2020-21 covered multiple tetrads (4 x 4 km) in Wales, and we have additional data from more recent intensive surveys. We wish to collect habitat data to understand why tetrads are occupied or unoccupied, and why particular parts of woodlands are occupied, so that we can predict where likely suitable habitat occurs throughout Wales.

Brief Aims and Methods

The student will carry out habitat surveys using established methods, measuring habitat structure and soil moisture, in a subset of tetrads where Willow Tits were present or absent. Analysis will test whether variables differ between occupied and unoccupied tetrads, and between Willow Tit territories and random locations in occupied woods.

If time allows, the student may be able to relate the results of the field survey to nationally-available data sets (eg soil moisture, LiDAR), to predict the presence of suitable habitat elsewhere in Wales.