

Redpolls (*Acanthis* spp) on migration across Castlemorton Common – origins and destinations

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Redpolls (*Acanthis* spp) have confused taxonomists, and birdwatchers, for years. Many people (including, and until they update their list, the British Ornithologists' Union) say there are three species: Common/Mealy Redpoll *A. flammea*; Lesser Redpoll *A. cabaret*; and Arctic/Hoary Redpoll *A. hornemanni*. A figure of five redpoll species has been suggested on iNaturalist, but no reference has been located to support this. However more recent genetic research has concluded that redpolls are a single species (Funk et al, 2021), but subject to phenotypic variation underlain in part by a chromosomal inversion.

This note however is not about redpoll species variation, although it is likely that the vast number of redpolls contributing to the results below would be classified as 'Lesser'. However for the rest of the article they are all 'redpolls'. This paper looks at movements of redpolls either ringed on Castlemorton Common (henceforth just 'the Common'), or caught on the Common already bearing rings. For this analysis the twelve-month period has been broken down into four quarters ('seasons'): winter (December-February); spring (March-May); summer (June -August); and autumn (September-November).

Redpolls are principally a migrant across the Common, especially in autumn. At this time, they often move in flocks. In spring small numbers are heard passing overhead, but significant flocks are not noted. A variable number of redpolls winter in the local area, but most winter records come from later in the period (principally February), which could well represent early migrants.

In 30 years of ringing on the Common up to 2023, 3,299 redpolls have been trapped in autumn. 50 birds caught in December, possibly late migrants, have been excluded from the analysis, as have 33 birds caught between January and April. Redpolls on autumn migration can be strongly attracted to a tape lure, which can lead to sizeable catches. But the number of redpoll caught each year can fluctuate widely, from a low of 17 in 2007 to a high of 407 in 2010. Since the redpolls are trapped mostly on migration, the recapture rate on the Common is very low: only 19 have been recaptured. Of these, 11 were recaptured within the same autumn period, so discounted from the analysis. Three were caught in the succeeding winter, two in December and one in February. One was caught in the spring (March), and four in a following autumn.

In total 72 longer-distance movements have been recorded, with 45 redpolls ringed on the Common found elsewhere, and 27 ringed elsewhere trapped on the Common in autumn. The ringing location of the birds ringed elsewhere and the recovery location of birds ringed on the Common are plotted by season in Maps 1 to 4.

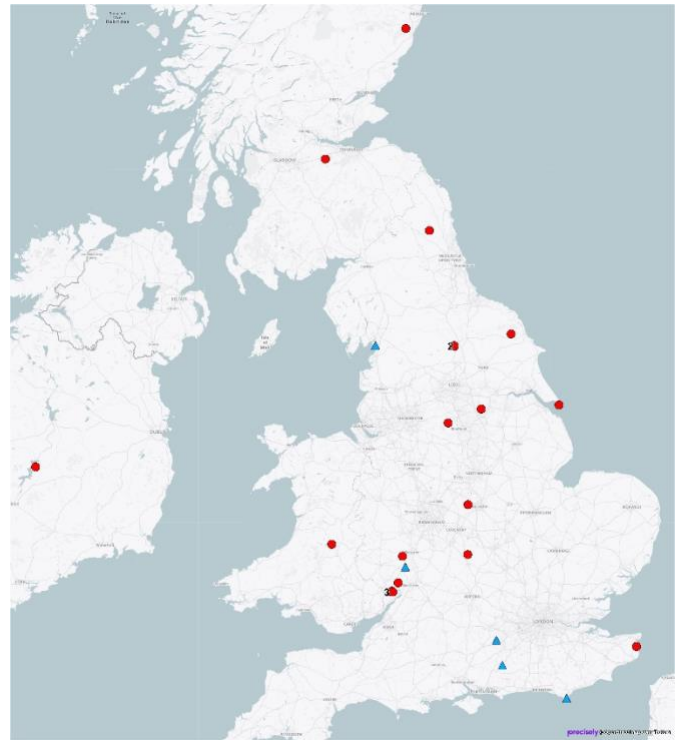
Maps - legend

Blue triangles - birds ringed on the Common; triangle shows where they were recaptured.

Red circles - birds ringed elsewhere and recaptured on the Common; circle shows where they were originally ringed.

Autumn – 28 records

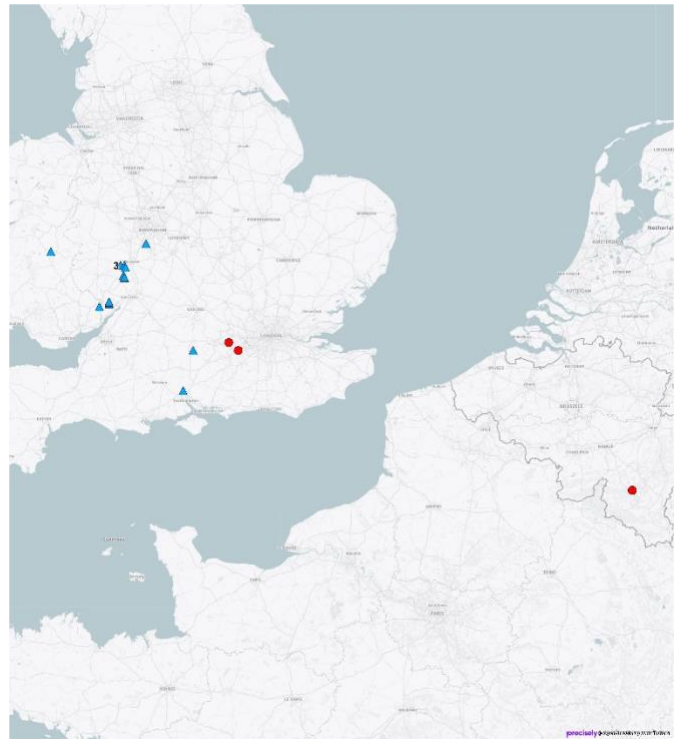
The furthest red circles on the autumn map give an indication of the origins of the redpoll caught on the Common, with birds from as far away as Aberdeenshire, Scotland (552km) and Tipperary in Ireland. All the red dots (including the furthest) could have been birds already on migration when ringed. Only four birds ringed on the Common have been found elsewhere – the three in the south-east of England were in the same autumn, whereas the one in Northumberland was caught the following year. As noted above, two other birds were recorded on the Common in a subsequent autumn.



Map 01. Autumn

Winter – 20 records

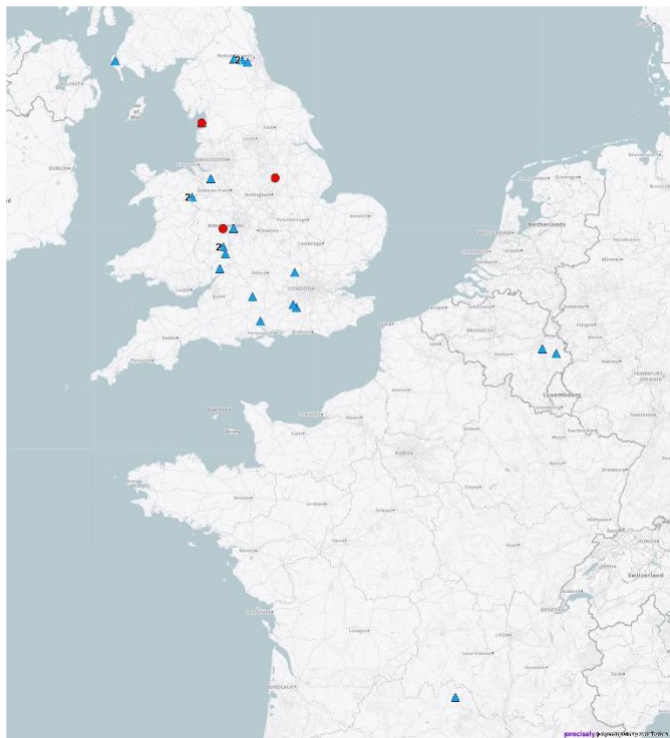
There is a cluster of records of Common-ringed birds still within the Malvern area, plus more around the Forest of Dean. Also, three others were still on the Common. Other records are from further south-east, with one as far as Belgium.



Map 02. Winter

Spring – 26 records

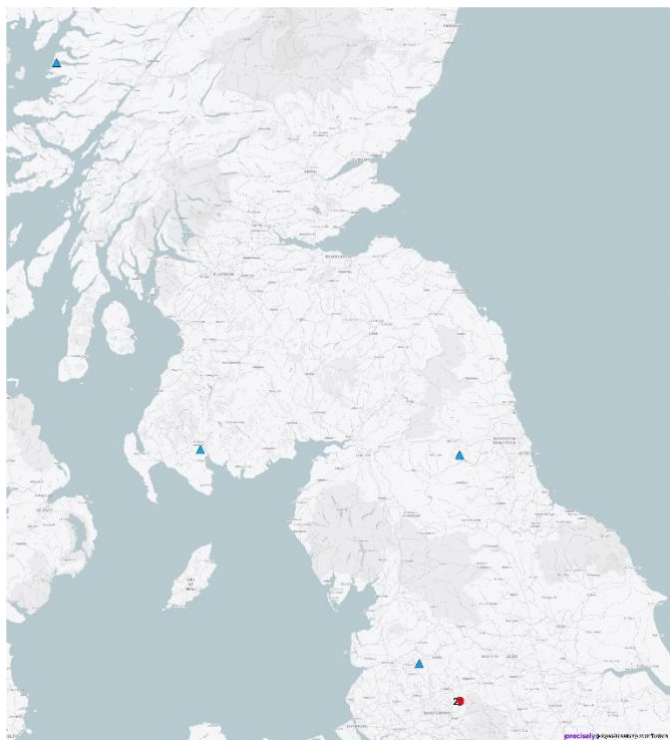
The spring records are by far the most dispersed. Two birds are still in Belgium, and one is still almost as far away as the Mediterranean coast of France. Otherwise most individuals are in a relatively tight band of west-central England/east Wales, with some reaching the Scottish borders.



Map 03. Spring

Summer – 6 records

The summer period has the fewest records. The breeding range recorded spreads from the Manchester area, through Northumberland and Dumfries & Galloway to the Highland region of Scotland.



Map 04. Summer

Most redpolls are ringed on migration, principally autumn, when they are attracted to a taped call. The relative paucity of winter and summer records reflects this. Whilst the range of records is very wide, the south-eastern area of England has only a single movement record from Kent. This is a surprise since birds moving to Belgium are most likely to choose the shortest channel crossing. The maps show that a significant number of individuals originating in the east are instead coming south-westerly, potentially to winter here.

Maps

Blue triangles - birds ringed on the Common; triangle shows where they were recaptured.

Red circles - birds ringed elsewhere and recaptured on the Common; circle shows where they were originally ringed.

01. Autumn

02. Winter

03. Spring

04. Summer

Reference

Funk, E.R., Mason, N.A., Pálsson, S., Albrecht, T., Johnson, J.A. & Taylor, S.A. 2021. A supergene underlies linked variation in color and morphology in a Holarctic songbird. *Nature Communications* 12, Article number: 6833. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8616904/> [Accessed 04.01.2025]