

Wood Warbler 1984

Title

Wood Warbler 1984

Description and Summary Results

The Wood Warbler *Phylloscopus sibilatrix* is a summer visitor to Europe where it breeds primarily in mature deciduous woods in northern and western Britain (though not in Ireland). With such a distribution, the Wood Warbler was poorly represented in the BTO's bird monitoring projects -- at the time primarily the Common Birds Census (CBC) -- although some knowledge of its relative abundance in woods came from a small number of mapping censuses and from some more extensive transect results which had been reported in books by W.B. Yapp and Eric Simms. In lowland England, the species was generally uncommon, and was known to have fluctuated in numbers from year to year, and may have declined in recent decades.

Hence a survey of the species was carried out in 1984 and 1985 with the aim of estimating how many there were. Sample units were 10-km squares of the National Grid and only those which had contained the species as probable or confirmed breeding in the 1968-1972 Breeding Atlas were included in the sample. It was assumed that squares with possible breeding or no records would hold only at most a few birds if distribution had not changed markedly since the *Atlas* survey. It would have been wasteful to direct the limited field effort to these squares. In fact, some records did come from such squares and these were allowed for in analyses.

Wood Warblers have a very distinctive and far-carrying song, and other readily detected calls, so they lend themselves to a single species survey based on a single or few visits and do not require a full mapping census.

Overall coverage of selected squares was about 80% -- highest in Wales but only 63% in England and 68% in Scotland. In particular in Scotland a large block of selected squares in the north-west was not covered. It is not known why squares were not covered. If it was because of lack of manpower and the available effort was randomly spread, it is not serious. However if, in areas with few Wood Warblers, the effort was deliberately targeted at known likely sites then the numbers will be over-estimated by assuming that they occur in similar numbers to those in the counted squares.

The estimated total number of breeding males in Britain was 16170 birds (95% confidence limits 14850-17560). (Northern Ireland was not included although 16 birds were reported from nine 10-km squares, which was the highest number ever known in the province.)

Analyses of the consequences of the exclusion of those without probable or confirmed breeding from the atlas suggested there could have been about another 1000 or so birds leading to an overall estimate of about 17200 singing males.

Occupied 10-km squares ranged from having only a single bird to over 100 (and in 3 cases over 200). Highest densities occurred in SW England, Wales, parts of Scotland, and the New Forest. Numbers were not correlated with woodland area overall although Wood Warblers tended to be more abundant in higher altitude woods and, with the exception of Gwynedd

and Argyll, purer oakwoods were preferred to those with a greater variety of other tree species. The most consistent and powerful association was with high canopy cover.

Methods of Data Capture

In northern and western regions where full cover was not thought to be achievable, the objective was to count all breeding male Wood Warblers in a random sample of a third of the 10-km squares with proved or probable breeding in the 1968-1972 Atlas. For the rest of England, it was intended to count birds in all such squares. Counts were done in either 1984 or 1985.

Observers were asked to make a single visit to all suitable habitat in each selected 10-km square between 15 May and 10 June, the time of maximum detectability. Counts were returned as totals in each tetrad, or tetrads were recorded to be unsuitable. (A by-product of an unrelated study showed that single visit counts were similar to actual numbers of males because some birds may be counted more than once. Song output was fairly constant for the period of the survey because males sing while their mates incubate.) No information on habitats was requested because of the difficulty of making useful habitat descriptions within woods and the extra time that such an attempt would have imposed. However, some information on habitats was collected during surveys conducted by the RSPB between 1982 and 1987 and which was made available to the survey.

Purpose of Data Capture

The aims were to describe Wood Warbler numbers and distribution in Britain to establish a baseline from which future changes could be measured. It would also provide information of potential use in site assessment for nature conservation.

Geographic Coverage

The geographic range of the species in Britain, in practice primarily northern and western oakwoods.

Temporal Coverage

Surveys were conducted in the summers of 1984 and 1985 although any one square was only surveyed in one of these.

Other Interested parties

The survey was organised, run and funded by the BTO.

Organiser(s)

Adrian Cawthorne (died January 1985) and Colin Bibby.

Current Staff Contact

archives@bto.org

Publications

The main report of the survey is:

Bibby, C.J. 1989. A survey of breeding Wood Warblers *Phylloscopus sibilatrix*. *Bird Study* 36: 56-72.

The survey was also noticed in *BTO News* numbers 129, 131 and 137.

Available from NBN?

No.

Computer data -- location

No computer data are known although it is thought that the data were computerised for the original analysis.

Computer data -- outline contents

N/A.

Computer data -- description of contents

N/A.

Information held in BTO Archives

2 Transfer Cases containing photocopies of all the data cards. All have been scanned. The original data cards are stored at RSPB.

Notes on Access and Use**Other information****Notes on Survey Design****Specific Issues for Analysis**