

Tawny Owl 2005

Title

Tawny Owl 2005

Description and Summary of Results

The Tawny Owl *Strix aluco* is known casually to many people but their numbers, status and whereabouts are not so well known, largely because it is nocturnal, sedentary and secretive and therefore not covered well by the more traditional BTO monitoring schemes. Results from the Common Birds Census to the early 1990s showed numbers to be stable, but information from the Breeding Bird Survey showed a 38% decline between 1994 and 2004, although the actual numbers on which these figures were based were not high. Also the distribution shown in the two Breeding Atlases showed some evidence for a contraction of the species' UK range. In contrast detailed information collected through the Nest Record Scheme since the late 1960s showed substantial increases in nest success during the egg stage which could be linked to the declining impact of organochlorine pesticides.

So a specific survey was set up by the BTO in 1989 with the aim to collect information on numbers to provide baseline information for future monitoring and to look at densities of owls in different area and habitats. It involved a single 10-minute point count in the centre of randomly selected tetrads between mid-August and mid-October, and the results were reported by Steve Percival (1990: *BTO Research Report* no. 57).

For the 2005 survey volunteers re-visited the tetrads covered in 1989 and recorded the number of Tawny Owls heard. The aim was to replicate the previous survey to allow direct comparisons.

A total of 2652 tetrads were visited and about a third of observers recorded owls (almost all heard only!) on their first visit to their tetrad. As some observers visited their tetrads more than once it was possible to work out that the chances of hearing an owl if it was present was only just under half so a suitable adjustment means that an estimated 63% of tetrads actually had owls present. Deciduous woodland, predictably, was the most favoured habitat. 1286 of the tetrads were visited in both surveys and these suggested that density had increased very slightly since 1989.

Methods of Data Capture

The methods were broadly similar to those used in the Key Squares Survey of the 1988-1991 Breeding Atlas and also to those used in the 1989 Tawny Owl survey.

The aim was to cover one-in-nine of the 10-km squares throughout Britain. The squares used were the same as the 1988-1991 Breeding Atlas Key Squares. Within these the aim was to carry out a 10-minute point count shortly after dusk within each of the 15 target tetrads and within these as close as possible (at most 300m) to the centre although where possible avoiding areas close to busy roads or where extraneous noise might affect the count.

A single point count was considered adequate, but additional repeat visits during the survey period were useful to estimate the chances of recording a bird if it was present. Observers

were told when any visit had been made during the 1989 survey and, for 2005, they were asked to visit as near to this date (and time) as possible.

Pilot work for the 1989 survey had shown that peak calling activity and territorial behaviour occurred in the early autumn and hence this was the period selected for the survey.

Observers were asked to do their count when the weather was calm and dry as both rain and wind are known to reduce calling activity. All birds seen or heard were recorded and after the ten minutes observers were asked to estimate the number of 'pairs' heard. Some guidelines were issued for this.

Finally observers were asked to record the percentage of the 10-km square occupied by each major habitat type and the specific habitat type at each point. The designations were the standard 'Crick codes' system as used by the BTO for most bird surveys.

Purpose of Data Capture

To provide reliable data on Tawny Owl numbers in sample areas (key squares) using methods which could be repeated in future years, so that population change could be assessed accurately, and to compare numbers in different areas and habitats.

Geographic Coverage

Fifteen tetrads in one in nine 10-km squares were selected for survey covering all of Britain. The same tetrads which had been surveyed in the 1989 survey were used. (The species does not occur in Ireland nor on many of the offshore islands.)

Temporal Coverage

Counts were requested from 15 August to 15 October 2005.

Other Interested parties

The survey was funded by the BTO/CJ Garden BirdWatch Owl Appeal with the help of Anglian Water and several Charitable Trusts (CTs) including the D'Oyly Carte CT, the Hobart Trust, the William Haddon CT and the Cooper CT.

Organiser(s)

Steve Freeman and Dawn Balmer

Current Staff Contact

archives@bto.org

Publications

The main report of the survey was published in *BTO News* as:

Freeman, S., Balmer, D. & Crick, H. 2007. Tawny Owl Survey 2005. *BTO News* no. 268: 6-7.

The survey was also noticed in *BTO News* number 259.

Available from NBN?

No.

Computer data -- location

BTO Windows network central area.

Computer data -- outline contents

A spreadsheet containing all the data submitted.

Computer data -- description of contents

The spreadsheet contains the following columns:

10-km square; Day; Month; Tetrad letter; Time; Number of Tanwy Owls hooting; Number calling; Number of pairs; Hab1 (?); Hab2 (?);

The remainder are the percentage of tetrad occupied by each of: Farmland (tilled); Farmland (grazed); Wood (conifer); Wood (deciduous); Moorland; Other.

Information held in BTO Archives

BTO Offices.

Notes on Access and Use

Other information needed

Notes on Survey Design

Specific Issues for Analysis