

Nightjar 1981

Title

Nightjar 1981.

Description and Summary of Results

The Nightjar *Caprimulgus europaeus* is a red-listed species that is protected under Annex 1 of the EC Birds Directive, and numbers and range were thought to have declined in Britain over the greater part of the 20th century. The species breeds mainly in southern England, but there are scattered populations as far north as central Scotland. The 1981 survey was the second of four specific surveys carried out by the BTO -- others were 1957-58, 1992 and 2004 -- and the two breeding atlases (1968-1972 and 1988-1991) also provided information on the range.

The 1981 survey was designed to determine the current status of the species and how much the range might have changed since the 1968-1972 Breeding Atlas.

The survey located 1784 calling males in 764 sites with birds recorded in 241 10-km squares. The population was estimated to be a maximum of 2100 calling ("churring") males, a lower total number than expected. The distribution also showed a contraction of the species' range from the north and west compared to the 1968-1972 Breeding Atlas. The main cause of the decline was probably a change in climate leading to reduced breeding success, but habitat destruction and disturbance were likely also involved. Information obtained on habitat preferences from the survey showed that conifer plantations had become the major habitat type; followed by lowland heath, open bracken areas, other woodlands and raised bogs or mosses.

In all, over 2000 prospective sites were visited by observers, many of whom did not find any Nightjars to reward their efforts. The cold spring and early summer of 1981 were not encouraging to Nightjars or their observers, and a number of reports mentioned that churring was depressed compared with other seasons, particularly in May and June.

Methods of Data Capture

The unit for survey coverage was the 10-km square. Observers were asked to look first at known or formerly occupied sites, and then to investigate other potentially suitable habitats within each square, particularly new forestry or felled and restock areas. For each site observers recorded a site name, six-figure grid reference, area, altitude, visit dates, the numbers of calling males located, and a standardized habitat description. Habitat information considered worth recording included such as vegetation types, burnt areas (if any), and percentage of scrub or tree cover.

A minimum of two visits per site was recommended between mid-May and mid-August, ideally in June and July, the optimum times for locating calling males. It was appreciated that some May and August records might refer to passage birds, but it was decided to include these since there was no consistent way to recognise and exclude such migrants.

Publicity in *BTO News* drew attention to the optimum times for locating churring males and the assistance afforded by tape recordings. (Unlike later surveys the use of these with playback was not discouraged.)

Purpose of Data Capture

The stated aim was to assess the population size and range of the Nightjar and to gather information on its use of different habitat types.

Geographic Coverage

The stated aim was to survey the entire UK population of the species. However the actual coverage did not reach this ideal. 241 10-km squares in Britain were surveyed, but several were poorly covered because of lack of observers, poor weather, and because they contained large areas difficult to survey in the dark. The latter included the New Forest (Hampshire), the forests of Galloway, and the Cornish coast where the number of derelict mines pose a special hazard.

A full survey was not possible in Ireland, but 30 observers who had participated in the 1968-1972 Breeding Atlas and who had found Nightjars were contacted again and sent cards; of seven replies, six were nil returns. Thirty cards were sent to Northern Ireland, but none were returned.

Temporal Coverage

The fieldwork was concentrated in 1981, but a few supplementary records from 1982 were included for localities not checked in the previous year. Also, Hampshire figures include twelve additional sites (50 birds) located in 1979 but not revisited in 1981 due to lack of manpower.

A minimum of two visits per site was recommended, mid May to mid August and ideally in June and July.

Other Interested parties

The survey was organised and funded by the BTO with help from the Nightjar Study Group (which has since ceased to exist).

Organiser(s)

Frank Gribble, as a volunteer on behalf of BTO, and with help from David Glue as BTO staff member.

Current Staff Contact

archives@bto.org

Publications

The full report of the survey is published as:

Gribble, F.C. 1983. Nightjars in Britain and Ireland in 1981. *Bird Study* 30: 165-173.

It was noticed in *BTO News* numbers 105, 108, 113, 114, and 120.

Publicity was also obtained through the journals *British Birds*, *Scottish Birds*, *Country Life*, *Farmers Weekly*, and the Forestry Commission's newspaper *The Slasher*.

Available from NBN?

Yes -- as part of the dataset containing the surveys of 1981, 1992 and 2004.

(Note that in the NBN dataset only the 1642 birds with geographic locations are included -- the other 142 recorded individuals did not have sufficient location information.)

Computer data -- location

BTO Windows network central area.

Computer data -- outline contents

The file TEN.TXT is a summary of total numbers of males in each 10-km square.

There are 7 (comma-delimited) Regional files with the main data from the visits.

Computer data -- description of contents

The file TEN.TXT is a summary of total numbers of males in each 10-km square.

File is 10-km square in cols 1-4 and total number of males in cols 7-8 left justified.

The 7 regional files are comma-delimited containing the following fields:

(The first line of each file contains titles for fields.)

Site Number; Site Name; County; OS 6 figure grid reference; 10 km square; Total number of males; Total number of visits; Date of Visit A; Time of Visit A (DU=dusk, DW=dawn); Number of males noted on visit A; Date of Visit B; Time of Visit B; Number of males on Visit B;; (Visit C as A and B if done);; (Visit D as A and B if done);

Forestry: Number of males in Unplanted Broadleaved < 1m tall; 1-2 m tall; 2-4m tall; > 4m tall; Conifers < 1m tall; ...etc; Mixed < 1m tall ...etc; Stand - number of standard trees; Heath: Number of males in Dry Heath; Wet Heath; Pine/birch scrub; Woodland: Number of males in Broadleaved; Conifers; Mixed; Rides; Edge; Aspect; Height of site (Altitude); Query -- queries on records; Other -- general comments

The file NIGHTJAR.81 is a fixed format file:

cols 1-30 site name mostly blank; cols 31-38 grid reference; 39-68 county; 69-78 date; 79-84 number; 85-86 unit (S = singing male, T = territory, N = nests, P = pairs, I = individuals); 87-89 type (N = number, C = estimate); 90-94 accuracy (+/- this number, mostly 0); 95-96 breeding status (B1 (possible), B2 (probable), B3 (confirmed), U = unknown); 97 sex; 98-153 comments (mostly blank); 154-179 species name.

Note that these data have not been checked and so duplicate records may exist.

Information held in BTO Archives

1 Transfer Case with data sheets. All have been scanned.

Notes on Access and Use

Other information needed

Notes on Survey Design

Specific Issues for Analysis