

Peregrine 1971

Title

Peregrine 1971

Description and Summary Results

The survey of the numbers, distribution and food habits of the Peregrine *Falco peregrinus* breeding in Great Britain in 1961-1962 coincided with the later phase of a dramatic decline in the historically stable population of this species. Declines had begun in 1956-1957 in southern England and spread northwards over the next few years. The annual sample censuses through the 1960s had given indications of recovery in numbers in certain areas, but stable numbers or even further decline in others. It was therefore thought timely to repeat the full census of the Peregrine population in Britain in 1971.

Further information after 1962 had increased the number of territories known to be occupied since 1930 to a Great Britain total of 805, excluding the Channel Isles, which have been omitted from the enquiry owing to lack of information. In 1971, 726 of these 805 territories were examined, giving 90 per cent coverage nationally. It was thought that 50 pairs at most were not found and it may well have been less. Of the 726 territories examined, 341 were occupied, either by a single Peregrine or a pair, and at least 265 were certainly pairs. A large number of territories were still deserted in the southern half of Britain – only 36 of 233 territories in southern England and Wales combined were occupied. In contrast territory occupation was higher in 1971 in all inland districts north of Wales, and approached 100 per cent of pre-war levels in certain parts of Scotland. Occupation in coastal districts was appreciably lower in 1971 in northern England and through much of the Highlands, and only in southern Scotland had there been an improvement compared with 1962.

A total of 157 eyries with young was seen, ie 46% of the 341 occupied territories were capable of hatching young. This compared to the 1962 figure of 92 (38% of occupied territories). However, there was a marked decrease in coastal territories hatching young, contrasting with an even more marked increase for inland territories in northern Britain. In both years it seemed likely that the majority of hatched broods actually fledged, but most of the known failures of nests with young were inland, and the ease of access of the eyrie sites leading to robbing by falconers was likely to be the major cause.

Methods of Data Capture

As in 1961 an attempt was made to examine as many as possible of the known Peregrine breeding territories in Britain within the one breeding season, from April to July. The established network of Peregrine watchers was used, the BTO canvassed extra field assistance through Regional Representatives and Atlas Organisers, and the Nature Conservancy provided a contract which allowed the BTO to employ three full-time field surveyors to operate where cover was thin.

Field observers were asked to ascertain, by visits to nesting cliffs, whether Peregrines were present in a territory, whether they were breeding and, if so, with what result. Details of

clutch size, brood size and causes of breeding failure were also requested. Six fresh or incubated eggs, and all obtainable addled eggs (14) were collected for analysis of chemical residues. Data on food were collected mainly by the professional field team. Field survey was more efficient than in 1961-1962 largely due to the experience and knowledge gained during that survey and subsequently.

Observer competence, the nature of the nesting cliff, the number of alternative cliffs, date of visit(s), weather, and the behaviour or state of nesting of the occupying Peregrines (if any) are all known to affect records. As many territories as possible were visited more than once, to increase reliability. A successful pair can usually be established reliably by a single visit late in the season, but if the pair failed, a visit at this same time may fail to reveal the presence of Peregrines at all. Proving absence of Peregrines is often more difficult than establishing presence. If birds are simply present but not nesting, the attachment to the breeding cliffs is often weak, and it may be entirely a matter of luck if they are seen there, so that the chances of a bird being seen increase with the number of visits, and it can be especially difficult to be certain that an apparently single bird is really un-mated.

These and other complications meant that the census data were reduced to two basic categories, 'occupied breeding territories' and 'broods of young hatched', and it was noted that the main observational errors would lead to underestimates rather than overestimates of the true state. Comparisons between years are even more robust than absolute figures for one year as any errors are likely to be similar in both.

Purpose of Data Capture

To update knowledge of the numbers and status of the species following the 1961 survey and subsequent legislation governing the use of various chemicals in agriculture which had been blamed for much of the decline recorded during the late 1950s and early 1960s.

Geographic Coverage

All of Britain.

Temporal Coverage

The breeding season of 1971.

Other Interested parties

The survey was organised and run by the BTO as a Trust-aided enquiry with help from the Nature Conservancy who made the full census possible by the award of a contract to employ three full time field workers for the whole breeding season. David Wilson, John Morgan and John E. Davis covered 270 territories between them, a third of the British total.

Organiser(s)

Derek Ratcliffe

Current Staff Contact

archives@bto.org

Publications

The main report of the survey is:

Ratcliffe, D.A. 1972. The Peregrine population of Great Britain in 1971. *Bird Study* 19: 117-156.

The survey was noticed in *BTO News* numbers 43, 47 and 49.

Available from NBN?

No.

Computer data -- location

BTO Windows network central area.

Computer data -- outline contents

Derek Ratcliffe's spreadsheet contains all details of this and other BTO Peregrine surveys as well as many details of nestsites between surveys.

Computer data -- description of contents

The spreadsheet contains:

County, Grid Reference, Site Name, Nest Site Description (Aspect, Altitude etc), Habitat, Records of Visits (Date, Signs of Activity, Nest Contents, Status Codes, Summary, Notes).

Information held in BTO Archives

1 small folder of correspondence stored with the 1961-62 census.

Notes on Access and Use

The Peregrine is a very sensitive species for several reasons. Hence access to the data is strictly controlled and by special application only.

Other information**Notes on Survey Design****Specific Issues for Analysis**