

Peregrine 1961

Title

Peregrine 1961-1962

Description and Summary of Results

Between 1900 and 1939 the available records suggested that in many parts of Britain the Peregrine *Falco peregrinus* population had remained relatively stable, but during the Second World War the species was outlawed as a killer of carrier pigeons, which resulted in its virtual extermination as a breeding species in the southern counties of England though less so further north. In contrast over much of Scotland, especially the remoter parts, the species even benefitted locally from the absence of gamekeepers. The large population in the Irish Republic was not affected at all.

By the mid-1950s it was evident that several southern districts were showing only a partial recovery to the pre-war population levels, and by 1961, there were clear signs of decrease in southern England, and very few young were being reared by the few remaining pairs. In N Wales, northern England and southern Scotland low nesting success also became prevalent and was associated with the frequent breakage or disappearance of eggs.

However racing pigeon interests disputed the declines and partly as a result of their representations to the Home Office, the Nature Conservancy was asked in 1960 to conduct an enquiry into the numbers and distribution of the species, and the BTO accepted the Conservancy's invitation to carry out the survey. The main purpose was simply to provide accurate data on numbers and distribution to enable the Conservancy to make appropriate recommendations about its future status as a legally protected bird. It was always to be a breeding survey and no attempt would be made to try to count birds in winter.

Since 1930, Peregrines had attempted to nest in at least 718 different territories in Great Britain, and 600 of these were examined during the survey. There were also an estimated 20-30 additional territories to be found in Scotland. Some of these were known only to be used occasionally and, allowing for other slight fluctuations, the average breeding population for 1930-39 was probably about 650 pairs.

The survey showed that only around 60% of the territories which were examined were occupied in 1961 and only about 50% in 1962, and proved breeding success was only 19% (1961) and 13% (1962). It had almost disappeared again as a nesting species in southern England, indeed 69% of the pre-war territories there appeared to be deserted and only three pairs (4%) were known to rear young in 1961. By 1962 92% were deserted and only two pairs raised young. It was similar in Wales, where desertions increased from 69% in 1961 to 80% in 1962, and successful nestings went from eight to two. The once considerable coastal population of Wales was particularly affected, and all the young reared in both years were at inland eyries. In northern England 48% of territories were deserted in 1961 and 59% in 1962 with five (9%) and three pairs successful, though in each year more than twice as many pairs actually laid eggs. Southern Scotland was similar (44% and 50% deserted, and six and two broods successful in 1961 and 1962). In the Scottish Highlands and Islands, the picture varied from one district to another. Some areas, both coastal and inland, had fairly normal nesting seasons, with nearly all regular territories occupied and

most pairs hatching eggs, though not all were successful; but in others, including some of the remotest, there were some deserted territories, many pairs did not attempt to nest, and success was rather low. No part of the Highlands and Islands was completely unaffected by the decline, but the species maintained its numbers far better there than in all regions of Britain farther south. Overall, territory desertions increased from 40% to 50% and successful nestings fell from 19% to 13% from 1961 to 1962.

The relatively few reports from Ireland suggested that numbers in the eastern half declined and breeding success was low, whereas those in the western half showed less signs of such, though even here it did not seem to be at its pre-war levels.

Declines on this scale indicated some extremely widespread influence, and four feasible explanations were suggested: 1) decrease in food supply on an unprecedented scale – perhaps had caused the long-term decline in the western Highlands and Islands, but unlikely to be responsible for the recent and rapid decline in regions to the south; 2) systematic destruction – extremely unlikely to be so widespread; 3) disease – but was unknown in Peregrines; and 4) were secondary victims of agricultural toxic chemicals, as the birds were taking prey carrying sub-lethal doses which then built up.

Circumstantial evidence at the time pointed strongly to the last being the main cause of the decline, and subsequent work showed that these chemicals caused both deaths of adults and much reduced breeding success. However the longer term decline in the western Highlands and Islands was believed to be due to a gradual decrease in overall food supply.

Methods of Data Capture

The census was to occur in the spring of 1961, with a repeat during 1962 to fill in as many of the remaining gaps as possible. So, during the latter part of 1960, general and personal appeals for help were made. An encouraging response was received with over 170 people assisting, either by visiting nesting places or providing information. This network was insufficient to ensure complete coverage of remoter districts, so the organiser and K. D. Smith spent the whole of the breeding season in both years visiting eyries.

Before the survey all the available information on nesting places was compiled and it became obvious that there were some gaps. Each pair seemed to hold a territory with one to several possible nesting cliffs. The territory (breeding pair) was thus the basic unit, and nesting cliffs were grouped accordingly, although inadequate records or conflicting opinions made some decisions on potential sites uncertain. Hence estimates of earlier numbers were approximate.

An effort was then made to visit the maximum number of territories possible, and the field team concentrated their efforts on districts where other helpers were few or absent, notably in the Scottish Highlands and Islands. Here, because nesting pairs were usually spaced out at regular intervals, many previously unknown pairs were found by searching likely localities (suitable crags shown on Ordnance Survey maps) at an appropriate distance from other known pairs.

Observers were asked to record for each territory: a) whether or not Peregrines were present and breeding; b) the number of eggs or young; c) whether young flew successfully; d) the causes of a failure; e) the species taken as prey; e) any other information relevant to breeding biology. Ideally, at least three visits to each territory were deemed necessary to obtain all the desired information, but in many cases only single visits were possible.

Purpose of Data Capture

The main purpose was to provide accurate data on the numbers and distribution. This would allow the Nature Conservancy to make appropriate recommendations about the future status of the species as a legally protected bird.

Geographic Coverage

All of Britain. The original intention was to include Ireland but this proved impractical due to the paucity of observers and that the field team was wholly committed to parts of Britain.

Temporal Coverage

The breeding seasons of 1961 and 1962.

Other Interested parties

The survey was organised and run by the BTO as a Trust-aided enquiry, although the initial request came from the Nature Conservancy which in turn allowed the organiser to interrupt normal duties to participate to the extent he did, and provided some funds.

Organiser(s)

Derek Ratcliffe with help from James Ferguson-Lees.

Current Staff Contact

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Publications

The main report of the survey is:

Ratcliffe, D.A. 1963. The status of the Peregrine in Great Britain. *Bird Study* 10: 56-90.

The survey was noticed in every issue of *Bird Study* from vol.7 (for 1960) December issue to vol.9 (1962) December issue.

Available from NBN?

No.

Computer data -- location

BTO Windows network central area, but with restricted access.

Computer data -- outline contents

A spreadsheet supplied by Derek Ratcliffe contains all details of nestsites which were monitored in each year.

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 box containing 4 folders of miscellaneous letters, copies of reports.

Notes on Access and Use

The Peregrine is a sensitive species for several reasons and access to the data will only be granted on specific application.

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