

Lapwing Habitat Enquiry 1937

Title

Lapwing Habitat Enquiry 1937

Description and Summary of Results

The Lapwing *Vanellus vanellus* is a widespread species over the British Isles at all seasons and occupies open habitats which can be classified quite easily. As such it was deemed a suitable species for the BTO to study to try to widen their range of survey types – most previous ones had covered habitats and several species rather than a more detailed study of an individual species and its habitat. The Lapwing was also a well-loved species whose habitat preferences were uncertain and thought to change through the year, and which had some economic importance due to hunting and collecting of eggs. Hence a survey designed to find out its preferred habitats was launched for 1937 and covering all four seasons.

In the event 55 different observers or societies sent in 56 completed schedules covering part of 26 counties in England and 1 in Wales – the majority in Surrey, Berkshire and Buckinghamshire and also in Cheshire, Lancashire and West Riding of Yorkshire. The schedules and other data submitted were of very varying completeness -- very small areas or for a part only of the year to intensive studies of large numbers of birds in areas up to 100 square miles (ca 250 sq.km).

Lapwings were not found breeding freely much above 350m asl, and in winter they were infrequent even that high. And, although steep slopes were avoided, the soil type seemed to have no effect except indirectly through associated vegetation types, moisture, slope, exposure and altitude.

Of the 45 habitat types distinguished those occurring most frequently in the sample areas were newly ploughed land, fallow or stubble, and permanent pasture. Breeding was recorded most frequently on newly ploughed land, permanent pasture and rushy fields. Summer flocking was most frequent on fallow or stubble, permanent pasture and arable under green crops. September and December flocks were most frequent on permanent pasture, followed in September by newly ploughed land and fallow or stubble and in December by fallow or stubble and river-levels, floodland and water meadows.

Farming changes were found to have major effects and birds moved extensively to follow or avoid preferred habitats. However disturbance seemed to have minimal effect on breeding birds. Livestock were not found to have an appreciable direct effect in attracting or repelling Lapwings, although there was reason to believe that indirectly, through grazing and dung deposition, they may have been an important factor. The species's distribution was found to be closely linked with agriculture, but sufficiently catholic not to depend on any particular types. The report also discusses detailed links to other animals, both livestock and wild mammals and other birds, and also points to several areas which would repay further more detailed study.

Methods of Data Capture

Counts of Lapwings were made at sites at four periods of the year: 20 March to 15 April (spring), 20 June to 10 July (summer), 15-30 September (autumn) and 15-30 December (winter). The survey was not designed as a census but to investigate what types of ground were preferred at the different seasons.

The main part of the form listed 45 habitat types and asked for the occurrence in the area, and the use made by Lapwings in each of the four periods. The habitat types specified were:

Tidal Beach or Shore (divided into stony, muddy etc); Margins of salt or brackish standing water; Margins of fresh standing water; Margins of canals; Margins of slow-flowing fresh water; Margins of torrents or fast-flowing water; Salt marsh; Dry shingle tracts; Sand dunes; Rushy fields; Marshes; River-levels, floodland and water meadows; Moorland bogs and swamps; Moorland with coarse grasses; Moorland with heath or ling; Moorland with bracken; Alpine, bare stony mountain; Low heath and common, lately burnt; Low heath and common not lately burnt; Bare peat; High hill pastures and rough grazing; Rough lowland pasture; Fair permanent pasture above alluvial level; Hayfields above alluvial level; Arable laid down to grass; Arable under green crops; Market gardens and allotments; Fallow or stubble; Newly ploughed land; Aerodromes; Playing fields outside towns; Urban public parks and recreation grounds; Golf courses; Rabbit warrens; Heath scrub with trees and bushes; Grassland with scrub; Sites of felled woodland; Woodland clearings; Parks with scattered trees; Rubbish dumps; Sewage farms; Other habitats.

Observers were asked whether they found Lapwings to be associated with any particular crops, livestock, other birds or mammals, soil, climate, exposure or disturbance; and to make specific notes on any nests found.

It was noted that the spring period of 1937 was cold and wet, with some birds prevented from nesting by floods or being exceptionally late in laying; the September period was rather dry in a number of areas but not markedly abnormal; and in December there was severe frost and in some parts snow.

Purpose of Data Capture

There were three main aims: 1) to indicate factors governing distribution and numbers of the Lapwing at four seasons; 2) to develop techniques for habitat study; and 3) to create a nucleus of trained observers for this branch of field ornithology.

Geographic Coverage

England and Wales.

Temporal Coverage

1937 with observations requested during four periods: 20 March to 15 April, 20 June to 10 July, 15-30 September and 15-30 December.

Other Interested parties

Max Nicholson organised and ran the survey for the BTO.

Organiser(s)

E Max Nicholson

Current Staff Contact

archives@bto.org

Publications

The main report of the survey is:

Nicholson, E.M. 1938-1939. Report on the Lapwing Habitat Enquiry, 1937. *British Birds* 32: 170-191; 32: 207-229; 32: 255-259.

An associated paper is: Lister, M.D. 1939. An account of the lapwing population on a Surrey farm. *British Birds* 32: 260-271.

The survey was noticed in *BTO Annual Report* numbers 3, 4, and 5 (1 4 page summary); and in *BTO Bulletin* number 5 and 8.

Available from NBN?

No.

Computer data -- location

None.

Computer data -- outline contents

N/A.

Computer data -- description of contents

N/A.

Information held in BTO Archives

1 box containing data sheets, letters and draft report. The data and letters have been scanned.

Notes on Access and Use

Other information

Notes on Survey Design

One of the objects of the enquiry was to find out what observers were willing and able to record with sufficient precision. Hence it involved several experiments in the technique of organized investigation, in particular as to how much habitat information could be obtained from untrained observers. The Lapwing was considered an ideal species to try this out, being generally distributed, well known, and sufficiently conspicuous and approachable to be readily observed in all conditions, and living in habitats which are not only open but are readily described and classified without special ecological, geological or botanical knowledge.

In drawing up the schedule questions regarding numbers, increases, decreases, distribution and general habits were so far as possible excluded, in order to concentrate attention on the habitat aspect. A specific list was drawn up of 45 possible or known types of habitat in which Lapwings might occur and observers were asked to relate all habitats found to one or other of these types, entering records under two or more types in case of a mixture, and indicating the general nature of the area surveyed by crossing out all habitats not met with. Four specific periods of 15 to 25 days were chosen to reduce variation and the onus on the observers.

The formidable-looking schedule did put some observers off at first glance, but those who completed their returns seemed with one or two exceptions to have used them smoothly according to plan. The habitat list contained almost everything but the four time periods were made less useful because of the odd weather which affected three of them. However an all-year survey was considered to be impossible for most observers and four survey periods was deemed a suitable compromise.

Specific Issues for Analysis