

Heronries 1954

Title

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Description and Summary of Results

The Grey Heron *Ardea cinerea* is one of the largest and most widespread bird species in the UK and is a predator at the top of the freshwater food chain. As such it is excellent indicator of environmental health in the countryside. Nesting is typically in colonies in traditional sites, many of which have been occupied by a heronry for many decades. The presence of a heronry is often the basis of designating a site as a protected area.

The Heronries Census grew from what was intended to be a one-off, complete survey in 1928, but is now the longest-running breeding-season monitoring scheme for any bird in the world. The aim is to collect annual nest counts from as many heron colonies as possible in the United Kingdom. Coverage has been variable but for many years well over half the estimated population has been included in each year's count.

In the report of the 1928 census it was recommended that a complete repeat census should be done 10-15 years later. In the event that was postponed until 1954, when one was set up both to attempt to get a complete picture but also to try to validate the index which had been calculated each year from a sample. This 1954 census was the first of four attempts at this -- subsequent ones were in 1964, 1985 and 2003.

Coverage was less complete in Scotland than in England and Wales, and in Ireland it was only partial. Overall in 1954, 6225 occupied nests were reported in the British Isles, distributed in 520 heronries. Of these, 4708 nests in 301 heronries were in England and Wales, an increase of 19% on the total returned in the national census of 1928 with the most in Norfolk, Lincolnshire and Somerset. In Scotland there had also been an increase but the extent was not easily found because of differences in coverage between the two surveys. The average size of heronries in England was about 21 nests (cf 14 in 1928), in Wales about 12 nests (cf 7 in 1928), and about 8 in Northern Ireland (cf 8). Scottish heronries averaged 6 nests in 1954 (cf about 7 in 1928). In England and Wales about half contained 2-10 nests and in Scotland 84% contained less than 10.

Almost all (99% in England, Wales and Ireland, and 90% in Scotland) the nests were reported as in trees but the proportion in each tree species and even the conifer:broad-leaf ratio probably just reflected the relative abundance of each.

Both the main published reports contain a full table of numbers in each heronry.

Methods of Data Capture

Observers were asked to count "occupied nests" in heronries between 15 April and 10 May (but as near the first date as possible) and to record the information on a special census card. If an accurate count was not possible, the space for estimates could be used for recording "probably" or "possibly" occupied nests which were present in addition to the total definitely known to be occupied and recorded in the space for accurate counts. The decision whether a nest was occupied or not was based on: a) presence of adults on nest; b)

young seen or heard in nest; or c) presence of "whitewash" or eggshells beneath the nest. Data on the type of tree or other sites in which nests were situated were asked for, and also the National Grid Reference.

The term "occupied nests" refers to all those reported to have been definitely used during the period of the count, whether or not eggs were laid in them or young raised. If an exact count could not be made then observers were asked to provide a range and their best estimate.

Purpose of Data Capture

To obtain as complete a census as possible of heronries in Britain. This was the first of a series of such attempts (after the initial census of 1928) at a complete census to complement the annual sample.

Geographic Coverage

All of Britain and there were some counts from Ireland, both Northern Ireland and the Republic.

Temporal Coverage

The breeding season of 1954 and was carried out as the first of a series of particular efforts to obtain complete coverage compared to the annual sample census to obtain an index of population.

Other Interested parties

The 1954 census was organised and run as a direct investigation of the BTO with John Burton (a staff member at the time) organising it as part of his job. The Scottish part of the census was run in cooperation with the Scottish Ornithologists' Club. Several observers from within the SOC covered whole counties almost single-handedly.

The publishing of the tabular material from the census in Scotland (rather than just depositing them in an archive) was supported by a grant from the Royal Society to the BTO for publishing *Bird Study* in 1958.

Organiser(s)

John F Burton in England and Wales; Miss E A (Betty) Garden in Scotland

Current Staff Contact

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Publications

The main report of the survey for England and Wales is:

Burton, J.F. 1956. Report on the National census of Heronries 1954. *Bird Study* 3: 42-73.

A few corrections and additions were published in:

Burton, J.F. 1957. Census of Heronries, 1954: additions and corrections. *Bird Study* 4: 50-52.

The report for Scotland is:

Garden, E.A. 1958. The national census of heronries in Scotland 1954 with a summary of the 1928/29 census. *Bird Study* 5: 90-109. (This also contains details of the 1928 census not previously published for Scotland.)

The survey was specifically noticed in *BTO Bulletin* no. 52.

Available from NBN?

No.

Computer data -- location

The definitive data are held on the BTO network Unix system as part of the overall heronries dataset.

Computer data -- outline contents

Files contain the counts from each year at each site which was counted, habitat data from each site and its immediate surrounds and their name and geographical location.

Computer data -- description of contents

The three most important files and their contents are:

yrdata -- the counts (of apparently occupied nests) from each year at each colony.

cols 1-6 site number; cols 8-11 year; cols 13-15 the count (from primary source: -6 occupied, no count; -7 definitely not yet started; -8 extinct; -9 no information); col 17 accuracy (+ =minimum, ? =a guess,) inferred from another year, - =maximum); col 19 primary data source (c=heronries card; p=punchcards; r=bird report; l=letter/note; n=Nest Record Scheme; o=other/unknown ; cols 21-26 source codes (cprlno as for col 19, where relevant); cols 28-57 Notes.

habdata -- the habitat in which the colony occurs.

cols 1-6 site number; cols 8-9 habitat code (Crick system); cols 11-79 Description.

colonies -- geographic location of colonies.

cols 1-6 site number; cols 8-11 county code (GBxx) using BTO standard codes; cols 13-20 2-letter and 6-figure grid reference; cols 22-117 name of site.

Other directories contain some older versions of the data and the programs used to check and analyse the data.

Information held in BTO Archives

Data cards from this survey have been incorporated within the overall set of annual cards.

All have been scanned.

There are also three folders specific to this 1954 census. All have been scanned.

Notes on Access and Use

Other information

Notes on Survey Design

Specific Issues for Analysis