Rook 1980

Title

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Description and Summary of Results

The BTO organised surveys of nesting Rooks *Corvus frugilegus* in the 1940s and in 1975 and, in conjunction with records from county bird reports, it was evident that numbers increased steadily until the 1950s (or in some cases the 1960s) but had declined substantially since then. The decline was being blamed primarily on the changes in agricultural practices but between 1975 and 1980 there was also a major change in availability of potential nest sites with the felling of elm trees *Ulmus* spp. which had died from Dutch Elm Disease. The scale of the decline to 1975 was such that it was considered desirable to get an idea of any further changes which might have taken place during the five years since that national survey. Hence a sample survey was organised for the breeding season of 1980, using a random sample of 10-km squares which had been surveyed in 1975 and using the same methods.

Comparison with 1975 data for the same squares showed that, overall, the number of rookeries had declined by 8% but the number of nests had increased by 7%. Birds had therefore become concentrated into slightly larger colonies since 1975, due primarily to a reduction in the numbers of very small rookeries (those containing fewer than 25 nests). In 1980 Rooks were still mainly decreasing in arable dominated regions, eg parts of East Anglia, and central and southern England, but there had been increases in livestock-dominated areas, eg parts of SW England, Wales and Scotland, but this split was certainly not universal. Eleven rookeries containing more than 500 nests were reported in 1980, all except one being in Scotland; in 1975 six of these colonies had held fewer than 500 nests each.

Assuming that the sampled squares were indeed representative of the national trend, the British total in 1980 was a little over 850000 nests. (Note that this excludes Northern Ireland, where there were an additional 108,837 nests in 1975 but no sample survey in 1980.)

Methods of Data Capture

The methods used for this sample repeat were the same as for the complete survey of 1975. A rookery was defined as a group of nests 100m or more from the next nearest group. This is an arbitrary definition but it is relatively easy to apply in the field. The difficulties of counting nests in rookeries are well known, the most obvious being the counting of nests in conifers, counting multiple nests, the difficulty (in large rookeries) of arriving at a similar total each time, and the inaccuracies that can result from counting nests from a distance.

A total of 482 10-km squares of the National Grid in Britain was randomly selected for survey during the 1980 breeding season. Northern Ireland was excluded from this 1980 sample census.

Observers were asked to count all the nests in all the rookeries in the selected 10-km squares. They were asked to make the counts as late in the season as possible, but before the trees came into leaf, in order to include late nesters. However, this was not always possible and some counts were made fairly early in the breeding season. It was also recommended that no attempt should be made to differentiate between occupied and unoccupied nests, as it is difficult to do and can be time consuming. Amongst the information that observers were asked to record was the six-figure national grid map reference of each rookery, the date of counting, the number of nests and, if possible, the number of nests in each species of tree used.

Purpose of Data Capture

To provide an update on the numbers of Rooks in 1980 compared to 1975, especially as the nest site availability had potentially declined with the removal of many elms as a result of Dutch Elm Disease.

Geographic Coverage

A random sample of 482 10-km squares from those surveyed in 1975. These covered all of Britain but, unlike in 1975, the 1980 survey excluded Northern Ireland.

Temporal Coverage

The breeding season of 1980.

Other Interested parties

The survey was organised, run and funded by the BTO.

Organiser(s)

Bryan Sage and Rae Vernon.

Current Staff Contact

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Publications

The main report of the survey is:

Sage, B. & Whittington, P.A. 1985. The 1980 sample survey of rookeries. *Bird Study* 32: 77-81.

The survey was noticed in BTO News 104, 106 and 113.

Available from NBN?

No.

Computer data -- location

BTO Unix network central area.

Computer data -- outline contents

One data file contains the counts from the 1980 survey -- and the 1975-76 and 1996 survey data files are in the same directory.

Computer data -- description of contents

The main data file -- ro80.mst has the format:

cols 1-4 -- 10-km square; 6-13 -- grid reference (2 letters and 6 numbers); 15-20 -- date (as DDMMYY although in practice most are80); 22-25 -- count of nests; 27-31 -- card number; 33-34 -- colony number in 10-km square.

(Note: this format is identical to the 1975 survey file.)

Information held in BTO Archives

2 Transfer Cases containing data cards and letters. All have been scanned.

Notes on Access and Use

Other information

Notes on Survey Design

Specific Issues for Analysis