

Heronries Survey 2018

Title

Heronries Survey 2018

Description and Summary of Results

The Grey Heron *Ardea cinerea* is one of the largest and most widespread bird species in 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 began in 1928 and 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.

The Heronries Census grew from what was intended to be a one-off, complete survey in 1928. In the following years a growing sample of heronries were counted each year and the census grew into an annual, long-running sample survey. There have been several subsequent attempts at full coverage, in 1954, 1964, 1985, 2003 and then this one in 2018, which marked the 90th anniversary of the initial survey. These periodic attempts at more complete coverage have served to boost coverage for the ongoing Heronries Census. These days, far more heronries are counted annually in the UK than were counted in the 1928, 1954 and 1964 special surveys. The application of modern modelling techniques allows the estimation of national population sizes for every year in the sequence, and estimates for the early special-survey years are much higher than those made at the time.

Heronries Survey 2018 provided the most complete coverage ever recorded in any one year with over 1,250 sites visited, although the total count of active nests in 2018 was lower than the number counted during the previous full survey in 2003 (which occurred at a time when population levels peaked).

The 2018 survey produced a population estimate (at the time) of 10,262 apparently occupied Grey Heron nests. Results from the 2018 Heronries Survey are fully integrated within the ongoing Heronries Census and the population estimate for 2018 is updated annually and has subsequently been influenced by heronries counts made in later years as well as late submissions for 2018 and earlier years.

The Heronries Census also covers scarcer nesting species in heronries, and a total of 1,064 apparently occupied Little Egret *Egretta garzetta* nests were counted in 2018.

Methods of Data Capture

The methods employed for the 2018 survey were the same as for the ongoing Heronries Census in that volunteer observers were asked to count 'apparently occupied nests' at all heron colonies. The only difference was that the extra publicity was geared towards trying to obtain counts at a much larger number of colonies and to try to find any new ones. Observers were also encouraged to visit historical colony sites, some of which had not been visited for many years and many of which were empty at the time of the last visit, in order to confirm whether these sites were still active (or had been re-occupied) and to enable the active site lists for each region to be updated by removing sites where there was no sign of recent occupation.

Purpose of Data Capture

The primary aim was to increase the accuracy and precision of the Heronries Census population estimates for 2018. A further aim was to re-visit historical sites to review their current status.

Geographic Coverage

All of the UK with the stated aim of counting all nests in all colonies.

Temporal Coverage

The breeding season of 2018.

Other Interested parties

The annual Heronries Census is funded entirely by the BTO.

Organiser(s)

Ian Woodward

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Publications

Summary results were published in the 2018 Heronries Census Summary Report

(<https://www.bto.org/sites/default/files/heronries-census-summary-2018.pdf>).

Prior to fieldwork, an article publicising the survey was published in BTO News in Winter 2017.

Available from NBN?

No.

Computer data — location

The data for the 2018 survey are held as part of the overall annual dataset on the online Oracle database.

Computer data — outline contents

Since the Heronries Census online recording system went live in 2015, files contain the counts from each visit at each site for each heron species which was counted, and the “Year’s Best Estimate” (YBE) of the number of apparently occupied nests at each site. Habitat data from each site and its immediate surrounds and their name and geographical location are also recorded. For years prior to and including 2014, the files contain the YBE for each year that a site was counted (i.e. computerised data from each survey visit are not available prior to 2014)

Computer data — description of contents

Information held in BTO Archives

All original cards from observers are held sorted by year. The periodic more complete surveys are included within the dataset.

Since 2014, data have been input directly by observers into the online Heronries Census data entry system, and only a very small proportion of the data are received on census cards and hence stored in the BTO archives.

Notes on Access and Use

Data may be available on request (<https://www.bto.org/our-science/data/data-request-system>).

Other information needed

Notes on Survey Design

Specific Issues for Analysis