

Grey Heron, by Philip Croft / BTO

BTO HERONRIES CENSUS 2024 SUMMARY REPORT

Birtles, G.A., Balmer, D.E., Massimino, D., Walker, J. & Woodward, I.D. 2025. BTO Heronries Census 2024 Summary Report. BTO, Thetford.

INTRODUCTION

The 2024 breeding season was the 97th year of the Heronries Census, which began in 1928 as a special survey for *British Birds*, co-ordinated by Max Nicholson (who went on to be a leading contributor to the formation of BTO in 1933). The initial survey covered only Grey Heron with other species added to the Heronries Census as they have begun to colonise the UK or – in the case of Coromorant – started to nest in trees well away from their traditional coastal colonies, often within or close to heronries. In addition to Grey Heron and Cormorant, the Heronries Census now includes Little Egret, Great White Egret, Cattle Egret and Spoonbill.

2024 saw Gill Birtles, from the Wetland Bird Survey team, take on the role of Heronries Census Organiser from lan Woodward. Ian has been at the helm of the Heronries Census since 2016, so we'd like to thank him for his expert leadership and we're very pleased that his knowledge and skills are remaining within the Heronries Census team, as he will be remaining in a supporting role.

As always, we would like to thank all Heronries Census volunteers and Regional Organisers for their effort in 2024 and the latest results are presented in this annual summary report. By the end of 2024, we had received counts (including zero counts) from 877 sites (Figure 1), which is slightly less than last year, with the revised number of sites covered in 2023 being 984 following late submissions (which is up from 901 originally reported in the 2023 Summary Report). So hopefully it is the case that 2024 data that were not entered in time for the analysis will be inputted and reflected accurately in next year's summary report also.

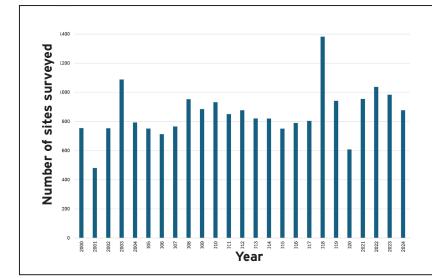




Figure 1. Number of Heronries Census sites surveyed from 2000 to 2024. Note that in 2003 and 2018 'full surveys' were carried out with additional effort being made to revisit historical sites.

Grey Heron, by Edmund Fellowes / BTO

RESULTS

GREY HERON

The UK population estimate for 2024 is 9,557 Apparently Occupied Nests, up from the revised estimate of 9,433 nests in 2023. The largest Grey Heron colony in 2024 was 100 occupied nests at a site in Wiltshire. This was also the largest site in 2023, with a count of 113, meaning there was a slight decrease of Apparently Occupied Nests in 2024.

As highlighted in recent Heronries Census summary reports, the population still remains well below the levels seen at the peak in the early 2000s, when there were around 13,000 nests in the UK (Figure 2) and it is unclear why Grey Heron numbers have failed to recover following the decline during the severe winters of 2008/09 and 2010/11. One possibility is that the absence of any recovery

could relate to increased instances of severe weather caused by climate change. Winter storms appear to be increasing in number and anecdotally, storms in early 2024 seemed to have had an impact on Grey Heron colonies, with many colonies being seen to be blown away/down early on in the breeding season which may have had an effect on Grey Heron productivity for the season.

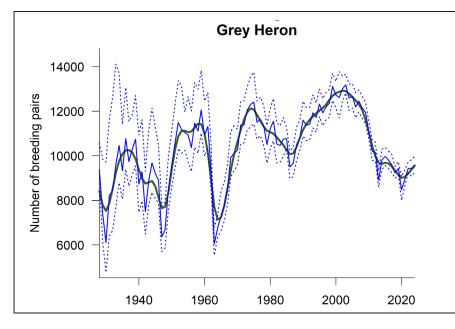




Figure 2: UK Grey heron population estimates, 1928–2024. The bold dark green line represents the smoothed trend, the blue line the unsmoothed trend and the dotted lines the 85% confidence intervals.

Grey Heron, by Gary Haigh / BTO

	Estimated number of Apparently Occupied Nests (85% confidence intervals)	Estimated % change over five years (95% confidence intervals)	Estimated % change over 10 years (95% confidence intervals)	Estimated % change over 25 years (95% confidence intervals)
United Kingdom	9,557 (9,257 – 9,975)	1 (-3 – 5)	-3 (-7 – 1)	-25 (-29 – -20)
England	6,097 (5,872 - 6,414)	0 (-4 - 4)	-1 (-6 – 4)	-25 (-29 – -21)
Northern Ireland	694 (654 - 750)	-2 (-13 – 10)	-10(-22 – 2)	Insufficient data
Scotland	2,327 (2,035 – 2,771)	3 (-15 – 19)	-12 (-37 – 8)	-13 (-39 – 13)
Wales	703 (636 – 793)	2 (-14 – 17)	-3 (-21 – 17)	-29 (-4913)

NOTE: The population estimates are run separately for the UK and for the four constituent countries of the UK and hence the summed totals for four countries do not sum up to the UK total. The calculated UK total is considered to be a more reliable estimate than the summed total. The percentage changes excludes the first and last year with data from the change periods as these changes are calculated using the smoothed index, whose estimate is not very stable at the extremes.

LITTLE EGRET

A total of 1,480 apparently occupied Little Egret nests were counted in 2024, an increase from 1,426 nests in 2023, which is unsurprising given the trend in recent years (Figure 3).

The largest count of 101 occupied nests came from a site in Merseyside with numbers at that site up from 76 nests in 2023. This colony exceeds the largest colony seen in 2023, which was a count of 90 nests at a site in Kent. For this Kent colony in 2024, we received a count of 75 nests. Looking across the whole of the UK, nests were recorded at 121 sites in England, 13 sites in Wales, five sites in Northern Ireland, four sites in Scotland and two sites in Jersey.

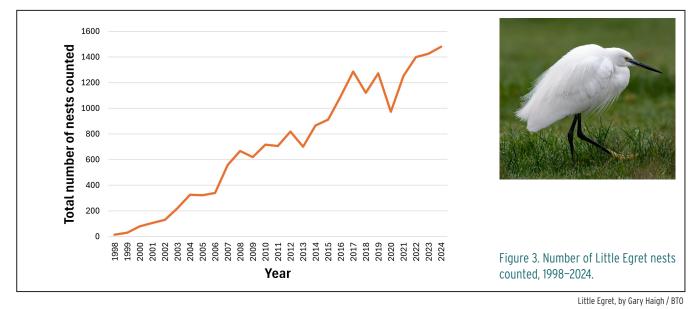
It is always worth emphasising that all totals are actual counts rather than estimates, so do not take variation in site coverage into account. We are still assessing whether we can now use the Heronries Census model to produce population estimates for Little Egret by following a similar method to the one we use to produce the Grey Heron population estimates. This would enable us to assess and interpret Little Egret trends more robustly in the future, as the estimates would take into account differences in site coverage between years.

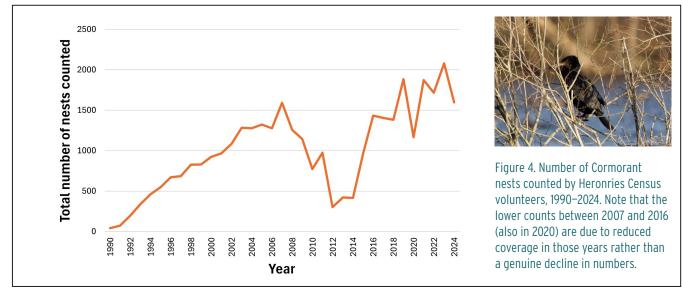
CORMORANT

A total of 1,596 apparently occupied Cormorant nests were counted at 49 Heronries Census sites in 2024. This is down from 2,078 nests at 53 sites in 2023 (Figure 4). The largest count of 217 occupied nests came from a site in Merseyside with numbers at that site down from 234 nests in 2023. Across the UK in 2024, nests were recorded at 46 sites in England, one site in Jersey, one site in Scotland and one site in Wales.

Table 1: Grey Heron population estimates for 2024, and associated changes

Submissions of Cormorant nests to the Heronries Census still likely represent a relatively small population of the inland nesting Cormorant population. We would therefore encourage observers to count and report nesting Cormorants to the Census, including sites which are not within a heronry, to ensure that the inland nesting Cormorant population can be monitored in the future. This will help ensure we can get an accurate understanding of Cormorant population trends.





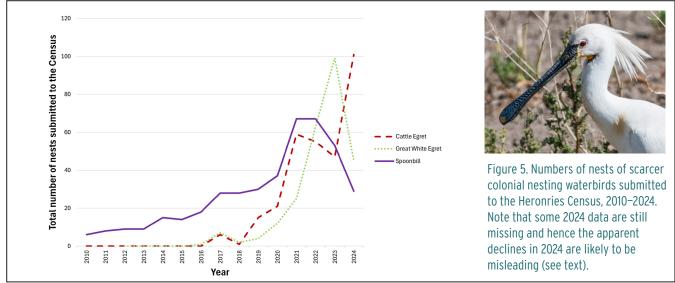
Cormorant, by John Harding / BTO

SCARCER SPECIES

The Heronries Census also collects data on other colonial birds nesting within heronries, to help keep track of the population growth of these species if, as expected, they continue their recent range expansion across the UK. We have received records of a minimum of 101 Cattle Egret nests in 2024 at 20 sites, all in England, which is up from 47 at eight sites in 2023. For Great White Egret, 45 nests were recorded at eight sites (seven in England, one in Scotland) which is down from 99 at nine sites in 2023. And for Spoonbill, 29 nests were recorded at five sites (all in England), which is down from 53 at three sites in 2023 (Figure 5). As for Little Egret, these are actual counts rather than population estimates and hence (as in previous years) the apparent decreases in Great White Egret and Spoonbill compared to 2023 probably do not represent a real decrease. In the case of Spoonbill, the recent increase has almost certainly continued as we have not yet received a 2024 count from the main UK site which held 46 nests last year.

We know that these records do not give the full picture for these species as some records are not reported to us. However, it is encouraging that the latest Rare Breeding Birds Panel (RBBP) report for 2022 (*British Birds* **117**: 585–660) gives 2022 totals for Cattle Egret (62 pairs at 15 sites), Great White Egret (62 pairs at 13 sites) and Spoonbill (69 pairs at nine sites) which are close to the Heronries Census figures for that year.

We would welcome late submissions of missing data for scarcer species for 2024 and earlier years: all records which have not already been publicised by the landowners will be kept confidential and will only be shared with the RBBP.



Spoonbill, by Edmund Fellowes / BTO

CONFIRMING RETIRED HERONRIES

It is quite common for us to receive emails letting us know about colonies which are no longer active and therefore should be retired from the system. However, many of these colonies have not had data submitted in recent years and therefore don't fit within the criteria of retiring a colony. A colony can be retired if it either:

- has three consecutive years of visits that report back no colony (zero counts);
- the habitat has changed e.g. clear-felled;
- a colony has not been visited for many years and a re-visit shows there is no colony.

Therefore, even if you are aware that a colony is no longer in use, especially if it hasn't been visited in many years, we ask that a visit be carried out and zero counts and a Year's Best Estimate of zero be entered so that we can retire the colony when it comes to the sites review at the end of the year. Such visits do occasionally find that the heronry is still present but may have moved so please check suitable habitat close to the colony rather than assuming a zero count if the former location of the heronry is empty.

SURVEY TIMETABLE AND TASKS



USEFUL LINKS

Log in and enter data: <u>https://app.bto.org/colonies/login/login.jsp?event=auth_fail>l=private%2Fdata-home.jsp</u> Heronries vacant sites map: <u>https://app.bto.org/colonies/public/vacant-sites.jsp</u> Survey resources: <u>https://www.bto.org/our-science/projects/heronries-census/taking-part</u> Heronries Census team contact: Email: herons@bto.org. Tel: 01842 750050

SPECIAL THANKS

We would like to thank all the volunteers and Regional Organisers for their work on the 2024 Heronries Census. Space does not permit all observers to be acknowledged individually, but we would especially like to thank the Regional Organisers for their efforts.

HERONRIES CENSUS REGIONAL ORGANISERS IN 2024

FNGI AND

Avon Bedfordshire Berkshire Birmingham & West Midlands Buckinghamshire Cambridgeshire Cheshire (Mid) Cheshire (North & East) Cheshire (South) Cleveland Cornwall Cumbria Derbyshire (North) Derbyshire (South) Devon Dorset Durham Essex (Northeast) Essex (Northwest) Essex (South) Gloucestershire Hampshire Herefordshire Hertfordshire Huntingdon & Peterborough Isle of Wight Isles of Scilly Kent Lancashire (East) Lancashire (Northwest) Lancashire (South) Leicestershire & Rutland Lincolnshire (East, North, South & West) Barrie Wilkinson London (North) London (South) Manchester Merseyside Norfolk (Northeast) Norfolk (Northwest) Norfolk (Southeast) Norfolk (Southwest) Northamptonshire Northumberland Nottinghamshire Oxfordshire (North) Oxfordshire (South) Shropshire Somerset Staffordshire (North, South & West) Suffolk Surrey Sussex The Wirral Warwickshire Wiltshire (North & South) Worcestershire Yorkshire (Bradford) Yorkshire (Central) Yorkshire (East & Hull) Yorkshire (Leeds & Wakefield) Yorkshire (Northeast) Yorkshire (Northwest) Yorkshire (Richmond) Yorkshire (Southeast & Southwest) Yorkshire (York)

Eve Tigwell Phil Cannings Sean Murphy **Steve Davies** Phil Tizzard Charlie Kitchin VACANT VACANT VACANT Michael Leakey Simon Taylor Colin Gay VACANT VACANT Alex Banks Greg Lambe David Sowerbutts John Fell VACANT VACANT Michael Smart **Robin Findlay** Chris Robinson Murray Orchard VACANT Jim Baldwin VACANT Brian Watmough Bernard Bracken (now VACANT) Graham Hulme Mark & Heather Walsh Russ Malin Ben Hillier **Richard Arnold** Nick Hilton VACANT Chris Hudson Russ Malin Rachel Warren Vincent Matthews Bob Bullock Tom Cadwallender VACANT (now Julia Thrush) Frances Buckel John Melling Jonathan Groom Eve Tigwell Ben Reavev Mick Wright **Ray Phillips** Helen Crabtree VACANT Annette Jarratt-Knock John Sealv VACANT Mike Denton Mike Brown Brian Walker VACANT Nick Gibbons VACANT VACANT Grant Bigg

Rob Chapman

SCOTLAND

Aberdeen Angus Argyll (Mainland, Bute & Gigha) Argyll (Mull, Coll, Tiree & Morvern) Arran Ayrshire and Cumbrae Benbecula & the Uists Borders Caithness Central Dumfries Fife & Kinross Inverness (East, Speyside & West) Islay, Jura & Colonsay Kincardine & Deeside Kirkcudbright Lanark, Renfrew & Dunbarton Lewis & Harris Lothian Moray & Nairn Orkney Perthshire Ross-shire Rum, Eigg, Canna & Muck Shetland Skye Sutherland Wigtown WALES

Anglesey Brecknock Caernarfon Cardigan Carmarthen Clwyd (East) Clwyd (West) Glamorgan (Mid & South) Glamorgan (West) Gwent Meirionnydd Montgomery Pembrokeshire Radnorshire

NORTHERN IRELAND All regions

CHANNEL ISLANDS

Channel Islands (excl. Jersey) Jersey

ISLE OF MAN Isle of Man

We would be grateful for help organising the Heronries Census in regions currently without a Regional Organiser (marked VACANT), or those currently being covered on a temporary basis (marked TEMP) If you live in one of these regions and would be interested in taking on the role, please let us know.

Many thanks are due to the ROs listed who stepped down during 2024.

Finally, we would like to thank all the landowners who kindly allow volunteers access to their land to carry out Heronries Census visits.



VACANT Steve Willis Nigel Scriven Ewan Miles Jim Cassels VACANT Yvonne Benting Malcolm Ross Donald Omand Neil Bielby Andy Riches Paul Blackburn Hugh Insley David Wood Claire Marsden Andrew Bielinski Gordon Brady Emma Niederberger Stephen Metcalfe Melvin Morrison VACANT Mike Bell

Simon Cohen Bob Swann VACANT Carol Hawley VACANT Andrew Bielinski

Ian Hawkins Andrew King **Rhion Pritchard** Naomi Davis Clare Bishop Anne Brenchley (now lan Spence) Mel Ab-Owain Strinda Davies Lyndon Jeffery **Richard Clarke** David Anning VACANT Annie & Bob Haycock Gethin Jenkins-Jones

lan Enlander

Chris Mourant **Tony Paintin**

Pat Cullen (now Robert Fisher)