The 2023 breeding season was the 96th year of the Heronries Census which began in 1928 as a special survey for *British Birds* co-ordinated by Max Nicholson. The initial survey covered only the Grey Heron but other species have been added to the Census as they have begun to colonise the UK or, in the case of Cormorant, 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 Census now includes Little Egret, Great White Egret, Cattle Egret and Spoonbill. Glossy Ibis also nested successfully for the first time in the UK in 2022, so it will be interesting to see whether this species follows the pattern of rapid colonisation shown by the other species.

As always, we would like to thank all Heronries Census volunteers and Regional Organisers for their efforts to count all species at colonies in 2023 and the latest results are presented in this annual summary report. By the end of 2023, we had received counts (including zero counts) from 901 sites, similar to the number of sites visited in other recent years (Fig. 1). We usually expect additional late returns and hence expect this total to increase although it may not quite reach the levels of coverage achieved in 2022 (currently standing at 1,002 sites visited, the record for a 'standard' Census year, i.e. excluding the 'full survey' years of 2003 and 2018 when enhanced promotion and surveying effort occurred).

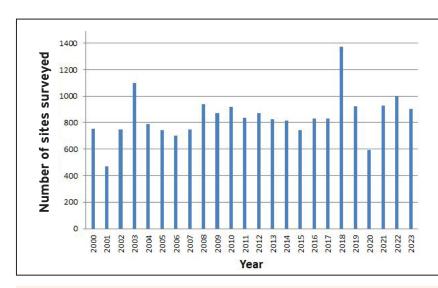


Fig 1: Number of Heronries Census sites surveyed 2000 to 2023. Note that in 2003 and 2018 'full surveys' were carried out with additional effort being made to revisit historical sites.

AVIAN INFLUENZA (HPAI)

After its occurrence in seabird colonies in 2022, the recent widespread outbreak of Highly Pathogenic Avian Influenza (HPAI) continued into the 2023 breeding season, in particular at inland gull and tern colonies. Although HPAI has been confirmed in Grey Herons, the Heronries Census results (see below) seem to indicate that the disease has not had any significant effect on UK heron populations. A few surveyors have reported unexplained sharp declines at colonies and it is possible that HPAI could have had local effects at a small number of heronries, but there was no evidence to confirm this and local fluctuations in numbers can occur for other reasons (e.g. predation or disturbance). If you do observe sick birds or dead birds at your survey site, please submit details to the BirdTrack app for monitoring purposes and all records of dead birds in Great Britain should be sent to Defra or, in Northern Ireland, to DEARA.

GREY HERON RESULTS

The UK population estimate for 2023 is 9,417 apparently occupied nests, down from the revised estimate of 9,617 nests in 2022. The largest Grey Heron colony in 2023 was 113 occupied nests at a site in Wiltshire, a slight increase on the count of 106 nests there in 2022. However, there was a large decrease from 110 nests to 85 at the site in Hampshire which provided the highest count in both 2021 and 2022.

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 (Fig. 2). As discussed in the 2022 summary report, it is unclear why Grey Heron numbers have failed to recover following the decline during the severe winters of 2008/09 and 2010/11. It is possible that Grey Heron could even be considered for Amber-listing when the Birds of Conservation Concern lists are next updated in around four years' time, as the start of 25-year period used in the calculation would coincide with the peak Grey Heron population from 1999 to 2003. Hence, should Grey Heron numbers remain at their current level, the 25-year decline could potentially be just over the 25% threshold for the Amber List. However, whilst the lack of any recovery is concerning, it should also be remembered that despite the recent decreases, the current population estimate is similar to that at the time of the first Heronries survey in 1928 and that there have been times during the last 96 years when numbers have been lower.

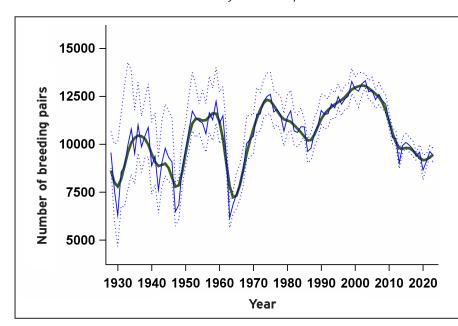


Fig 2: UK Grey Heron population estimates 1928-2023. The bold dark green line represents the smoothed trend, the blue line the unsmoothed trend and the dotted lines the 90% confidence intervals.

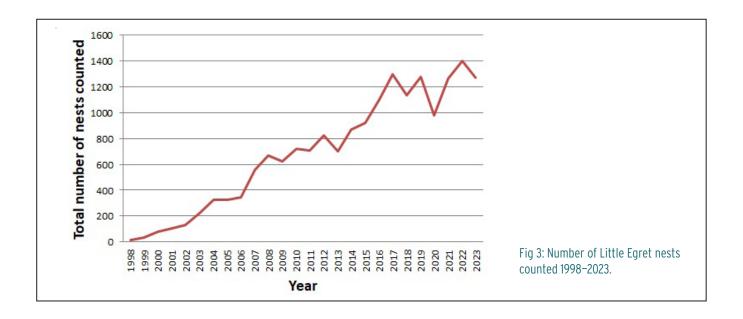
LITTLE EGRET

A total of 1,272 apparently occupied Little Egret nests were counted in 2023, a decrease from the 1,402 nests in 2022 (Fig 3). However, as was the case in previous reports it is important to note that these figures are actual counts rather than population estimates and hence we expect the 2023 figure to increase as additional late counts are received. The count of 1,272 is higher than the 1,205 nests which had been reported for the 2022 season at the same time last year, and a comparison of the 121 colonies for which we have Little Egret counts for both 2022 and 2023 also suggests that a small increase may have occurred this year (1,082 and 1,113 nests counted in the respective years). As mentioned in last year's summary report, we are hoping to be able to produce modelled Little Egret population estimates in the future which will take differences in site coverage between years into account.

The total for 2023 does not include the largest reported colony from 2022, located in Kent and which contributed 107 nests to the 2022 count, as no count was received from this site. The largest Little Egret counts in 2022 came from two colonies in north-west England which recorded 76 and 72 nests (54 and 72 nests respectively in 2022).



PHILIP CROFT / BTO



CORMORANT

A total of 1,666 apparently occupied Cormorant nests were counted at 50 Heronries Census sites in 2023, down slightly from 1,677 nests at 46 sites in 2022 (Fig. 4). However, a comparison of the 40 sites for which counts were received in both 2022 and 2023 suggests that numbers may have increased (from 1,423 to 1,475 nests at these sites). The largest count of 234 occupied nests came from a site in Merseyside with numbers at that site up from 213 nests in 2022. Most of the larger known sites are now being counted by Heronries Census volunteers although we are still missing counts from a few of the more significant tree-nesting and inland nesting Cormorant colonies. As mentioned in the 2022 summary report, BTO now coordinates coverage for the Seabird Monitoring Programme (SMP) as part of a partnership which also includes the Joint Nature Conservation Committee (JNCC), and the RSPB as an associate partner. Cormorant is one of the species for which data are collected for the SMP.



JOHN HARDING / BTO

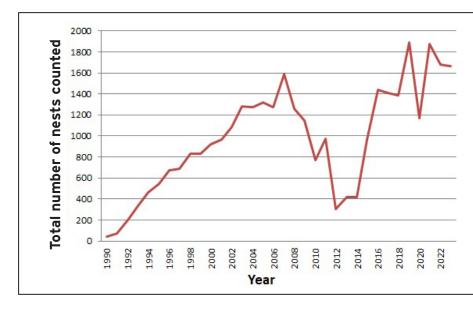


Fig 4: Number of Cormorant nests counted by Heronries Census volunteers 1990–2023. Note that the lower counts between 2007 and 2016 (and also in 2020) are due to reduced coverage in those years rather than a genuine decline in numbers

SCARCER SPECIES

The Heronries Census also collects data on other colonial birds nesting within heronries. We have received records of a minimum of 46 Cattle Egret nests in 2023 at seven sites, 99 Great White Egret nests at nine sites and 53 Spoonbill nests at three sites (Fig. 5). As for Little Egret, these are actual counts rather than population estimates and hence (as in previous years) the apparent decreases for Cattle Egret and Spoonbill compared to 2022 probably do not represent a real decrease. We are yet to receive 2023 data from nine Cattle Egret sites which contributed a total of 26 nests to the Census in 2022 and two Spoonbill sites with 11 nests last year. Assuming that numbers have remained stable across these sites, the Census figures will confirm the ongoing increase of all three species in 2023 once these data are submitted.

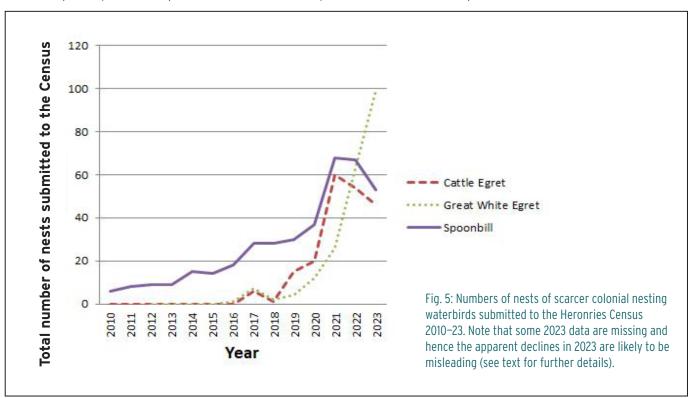


PHILIP CROFT / BTO

Whilst the colonisation of Spoonbill and Great White Egret seems to be focused on a relatively small number of sites, records of Cattle Egret seem to be more widespread with breeding already reported to the Census from 22 sites across southern England. Incredibly, flocks of over 600 Cattle Egret were recorded at one site in September. Although there are a couple of sites with larger colonies of Cattle Egrets, including a site with 29 apparently occupied nests counted in 2023, the majority of Cattle Egret records in the Census involve between one and three pairs often appearing in colonies later in the breeding season. This seems to be the most likely of the scarcer species to appear within heronries and we would again encourage Census volunteers to undertake visits later in the season to look for this species as well as for Little Egrets, if you can do so without causing disturbance to the colony. Further guidance about considering the possible presence of rarer species when surveying heronries can be found within the Survey Resources.

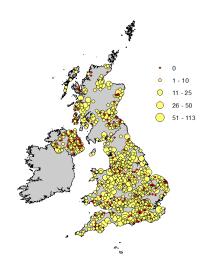
We know that the Census figures do not give the full picture for these species as some records are not reported to us. However, it is encouraging that the latest Rare Breeding Birds Panel (RBBP) report for 2021 (*British Birds* **116**: 615–676) gives 2021 totals for Spoonbill (71–73 pairs) and Cattle Egret (63–77 pairs) which are close to the Census figures. These records from the early years of colonisation will be particularly useful in the future to enable accurate population estimates and trends to be produced in future years.

We would welcome late submissions of missing data for scarcer species for 2023 and earlier years: all records which have not already been publicised by the land owners will be kept confidential and will only be shared with the RBBP.



FILLING IN THE GAPS

Although they nest communally, Grey Herons compete for favoured feeding sites and previous research has found that adult herons can sometimes fly up to 20 km or more from their breeding colonies to foraging sites, so a bird seen on your local park lake will not necessarily be nesting locally. However, analysis of the UK Census data suggests a recent trend towards smaller (more local) colonies rather than the much larger colonies seen historically. The average colony size has dropped from around 15 nests when numbers peaked in the early 2000s to fewer than ten nests. Intriguingly, this trend towards smaller heronries has also been noted in France where a long-term national Census has taken place ten times since 1962 (Marion 2021). It is unclear what may have driven this change in both countries, but one benefit to individual herons may be that they are able to nest closer to feeding sites and hence avoid long commutes.



Of course, many large heronries continue to exist and thrive so there are presumably still some protective or other benefits in remaining within larger breeding communities. The map above shows the location of the heronries for which we have received data in 2023, with the larger circles representing larger Grey Heron nest counts and hence larger expected foraging ranges (though the sizes of the circles are arbitrary and do not represent known foraging distances).

Gaps on the map may represent missing or late data for 2023 (as in Essex) or absence of nesting Grey Herons where there is little or no suitable foraging and/or nesting habitat (as in Shetland, Orkney and many upland areas). However, some gaps will be in areas where herons are nesting but yet to be found. In much of Scotland, for example, there are extensive wooded areas where small (or larger!) heronries could easily remain undiscovered. The low population density (and hence low number of birdwatchers) makes it even harder to find and cover these colonies regularly, so we would welcome any casual nest counts from anyone who visits or lives in any of the areas with gaps. Even if you live in a well-covered region, new heronries may still appear so please check our vacant sites map if you do come across a colony or even 'just' a single occupied nest.

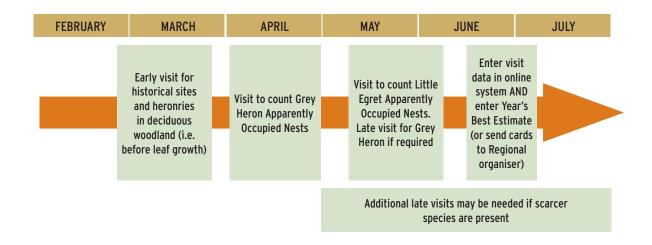
*Marion, L. 2021. Dixième recensement national des colonies de Héron Cendré *Ardea cinerea* en France en 2014 et comparaison avec celui de 2007. *Alauda* **89**: 29–38.

SURVEY TIMETABLE AND TASKS USEFUL LINKS

Log in and enter data: https://app.bto.org/colonies/login/login.jsp

Heronries vacant sites map: https://app.bto.org/colonies/public/vacant-sites.jsp

Survey resources: https://www.bto.org/our-science/projects/heronries-census/taking-part



SPECIAL THANKS

We would like to thank all surveyors and Regional Organisers for their work on the 2023 Census. Space does not permit all observers to be acknowledged individually, but we would especially like to thank the ROs for their efforts



HERONRIES CENSUS REGIONAL ORGANISERS IN 2023

	M	^	I A	M	n
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Durham

Essex (North-East)

Essex (North-West)

Essex (South)

Avon Eve Tigwell Bedfordshire Phil Cannings Berkshire Sean Murphy Birmingham & West Midlands Steve Davies Buckinghamshire Phil Tizzard Cambridgeshire Charlie Kitchen Cheshire (Mid, North-East, South) **VACANT** Cleveland Michael Leakey Cornwall Simon Taylor Cumbria Colin Gay Derbyshire (North, South) **VACANT** Alex Banks Devon Dorset Greg Lambe

Gloucestershire Michael Smart Hampshire Robin Findlay Herefordshire Chris Robinson Hertfordshire Murray Orchard Huntingdon & Peterborough **VACANT** Isle of Wight Jim Baldwin Isles of Scilly Will Wagstaff Kent Brian Watmough

Lancashire (East)
Lancashire (North)
VACANT
Lancashire (South)
VACANT

Leicestershire & Rutland Dave Wright (now Russ Malin)

David Sowerbutts

Steve Hallam

VACANT

VACANT

Lincolnshire (East, North, South, West) Barrie Wilkinson

London (North) Sabrina Schalz (now Ben Hillier)

London (South)Richard ArnoldManchesterNick HiltonMerseysideVACANTNorfolk (North-East)Chris Hudson

Norfolk (North-West) VACANT (now Russ Malin)

Norfolk (South-East)Rachel WarrenNorfolk (South-West)Vince MatthewsNorthamptonshireBob BullockNorthumberlandTom Cadwallender

Nottinghamshire

Oxfordshire (North)

Oxfordshire (South)

Shropshire

Somerset

VACANT

Frances Buckel

John Melling

Jonathan Groom

Eve Tigwell

Staffordshire (North, South, West) VACANT (now Ben Reavey)

Suffolk Mick Wright
Surrey Ray Phillips
Sussex Helen Crabtree
The Wirral VACANT

Warwickshire Annette Jarratt-Knock

Wiltshire (North) John Sealy

Wiltshire (South) Phil James (now VACANT)

Worcestershire VACANT Mike Denton Yorkshire (Bradford) Yorkshire (Central) Mike Brown Yorkshire (East, Hull) Brian Walker Yorkshire (Leeds & Wakefield) **VACANT** Yorkshire (North-East) Nick Gibbons Yorkshire (North-West) **VACANT** Yorkshire (Richmond) **VACANT**

Yorkshire (South-East) Grant Bigg (TEMP)
Yorkshire (South-West) Grant Bigg
Yorkshire (York) Rob Chapman

SCOTLAND

Aberdeen VACANT
Angus Steve Willis
Argyll (Mull, Coll, Tiree & Morven) Ewan Miles
Argyll (mainland & Gigha) & Bute Nigel Scriven
Arran James Cassels

Ayrshire Susan McCourt (now VACANT)

Benbecula & The Uists Yvonne Benting Borders Malcolm Ross Caithness Donald Omand Central **Neil Bielby Andy Riches Dumfries** Paul Blackburn Fife & Kinross Inverness (East & Speyside, West) **Hugh Insley** David Wood Islay, Jura & Colonsay Kincardine & Deeside Claire Marsden

Kirkcudbright: Andrew Bielinski Lanark, Renfrew & Dumbarton Gordon Brady

Lewis & Harris raig Ferries (now Emma Niederberger)

Lothian Stephen Metcalfe Moray & Nairn Melvin Morrison

Orkney Colin Corse (now VACANT)

Perthshire Mike Bell
Rhum, Eigg, Canna & Muck Bob Swann
Ross-shire Simon Cohen

Shetland Dave Okill (now VACANT)

Skye Carol Hawley Sutherland VACANT

Wigtown Andrew Bielinski (TEMP)

WALES

Anglesey Ian Hawkins
Brecknock Andrew King
Caernarfon Rhion Pritchard
Cardigan Naomi Davis

Carmarthen VACANT (now Clare Bishop)

Clwyd (East) Anne Brenchley Clwyd (West) Mel ab Owain

Glamorgan (Mid, South) Wayne Morris (now Strinda Davies)

Glamorgan (West)

Gwent

Merioneth

Montgomery

Lyndon Jeffrey

Richard Clarke

Dave Anning

VACANT

Pembrokeshire Annie & Bob Haycock

Radnorshire Carlton Parry (now Gethin Jenkins-Jones)

NORTHERN IRELAND

All regions Ian Enlander

CHANNEL ISLANDS

Channel Islands (excl. Jersey) Chris Mourant Jersey Tony Paintin

ISLE OF MAN

Isle of Man Pat Cullen

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 2023.

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