

2023 Waterbird Colour-marking Group Naturalised Barnacle Goose study

The study continues to grow in its third year

Early July saw the start of our third year of catching Barnacle Geese as part of our UK wide study collecting data on movements and survival of the naturalised population. To date we have caught birds at 18 sites across England and Wales with attempts undertaken to catch at a further three new sites in 2023.

During the 2023 moult roundups a total of **625** geese of three different species were captured and ringed. This included **600** Barnacle Geese (our priority species), 17 Greylag Geese (also colour-marked) and 8 Canada Geese. Of the Barnacle Geese, **266** were new birds to ringing, whilst **334** were birds that had previously been caught and ringed.

Whilst we did not attempt to catch at all our sites during 2023, special coordinated ring reading effort was undertaken at the sites where no catches took place, resulting in a further **425** birds being identified separate to the catching work. We thank the ring readers for assisting us with this, their efforts allowing us to document which individuals had returned to moult and contributing data to allow us to study survival.

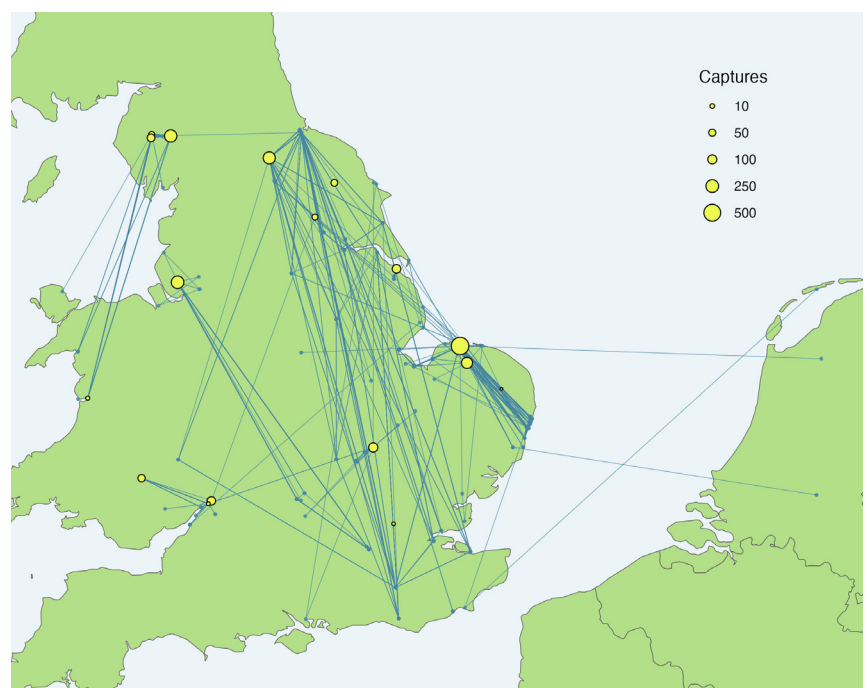
We thank everyone who assists with our study - from landowners, kayakers, bird ringers and ring readers, it truly is a team effort and for without the study would not be able to achieve its aims.. **Thank you!**

The story so far...

With this year's efforts we have now colour-marked **1,917** Barnacle Geese in total, collected over **2,000** individual biometric records (includes recaptures) and have received some **8,300** re-sightings.

The ring reads are providing us with a detailed insight into the annual movements of the population, allowing us to identify which colonies are sedentary all year round, which birds demonstrate high site fidelity between breeding and wintering sites and those birds which appear to have no set pattern to their movements!

Adding to the interest are three birds which have left the UK and have been seen in The Netherlands. We wait to see whether these birds return in future years.



Catch sites and sightings July 2021 to July 2023

The catching week

Catches mainly took place across northern England, along with a single catch in Norfolk at a site we were unable to complete last year. As in previous years, the week featured catching at a mixture of sites including those visited in 2021 and/or 2022, along with some new sites to help increase our understanding of the naturalised population. As the study progresses we will continue to add new ringing sites to our study, along with occasionally catching at existing sites to top up the colour-marked population.



Scorton, North Yorkshire

This year saw the second attempt at this site with two catches undertaken on two different lakes resulting in 133 geese captured of which 32 were new birds.

We were particularly interested in capturing a good number of birds already ringed, especially birds carrying neck collars deployed in 2022. The recapturing of neck collared birds allowed us to assess the collars and in particular how well the birds were carrying them.

32

new birds

101

recaptures

Ullswater, Cumbria

A lovely, early Sunday morning saw us attempting to catch Barnacle Geese at Ullswater for the third consecutive year. Despite a little resistance from the birds, the kayaking team did a tremendous job in bringing in 182 geese of which 66 were new to ringing, 111 were recaptures and 5 had been ringed away from Ullswater (at Ynys-Hir in Wales). Like Scorton, we were keen to recapture a number of birds carrying neck collars, resulting in 52 neck collar recaptures.

66

new birds

111

recaptures

5

control



Derwentwater, Cumbria

We have for a number of years caught adult Barnacle Geese at the Derwentwater colony, however this year we wanted to target getting some of the goslings ringed. We therefore “closed off” a section of the River Derwent with corral netting and sent a team of kayakers upstream to gently encourage a flock of 107 geese downstream. The flock consisting of breeding pairs with their goslings were rounded up with a total of 53 goslings caught and ringed.

63

new birds

42

recaptures

2

control





Flamingo Land, North Yorkshire

Upon learning of a flock of Barnacle Geese moulting at the zoo, an exciting opportunity arose when we teamed up with the zoo's research & conservation team.

An early start for the team saw members of the Waterbird Colour-marking Group meet with zoo staff. Once the geese had been safely locked away, the round up on foot got underway and quickly saw 43 birds caught and safely in the corral.

43
new birds

Pensthorpe Natural Park, Norfolk

A chance opportunity at the last minute saw the group bringing together a small team of bird ringers to undertake this catch. Having missed catching at this site in 2022, due to a delayed start to the flock's annual moult, we were keen to give it another go in 2023. A corral was quickly erected, and a single kayaker managed to roundup and bring into the corral a total of 129 birds, of which 56 were new to ringing and 73 were recaptures from the 2021 catch. A small number of birds were also caught carrying rings placed on at nearby Holkham in 2021.

56
new birds

73
recapture



Other sites visited

York University, North Yorkshire

Towards the end of the week we visited the York University campus in the city where the lake holds a small population of Barnacle Geese. Primarily we visited this site to undertake some ring reading and whilst there we took the opportunity to hand catch five goslings and a single adult to add to the small numbers of birds already colour-marked at this site.

Humber Estuary, East Riding of Yorkshire

We attempted a catch of geese near to Crabley Creek, however sadly failed to catch any geese. We thank everyone who turned up to help at this catch and we're exploring ways to attempt further catches in the future.



The study in numbers

The total number of Barnacle Geese ringed so far as part of the study

1,917

The final results

In all a total of 600 Barnacle Geese were caught at sites across England. All birds carry a BTO metal ring, along with a colour mark in the form of either a leg ring or neck collar. As part of the ringing process all birds were aged, sexed and measured where possible, details of which can be found below.

Site	Ringing totals				Age totals		Totals with biometrics taken *			
	New	Control	Recap	Total	Adults	Goslings	S	T	P	W
Scorton	32	-	101	133	130	3	131	131	131	126
Ullswater	66	5	111	182	182	-	180	180	180	178
Derwentwater	63	2	42	107	54	53	106	107	106	107
Flamingo Land	43	-	-	43	36	7	42	42	42	42
York University	6	-	-	6	1	5	6	6	6	6
Pensthorpe	56	-	73	129	129	-	129	129	129	127
Totals	266	7	327	600	532	68	594	595	594	586

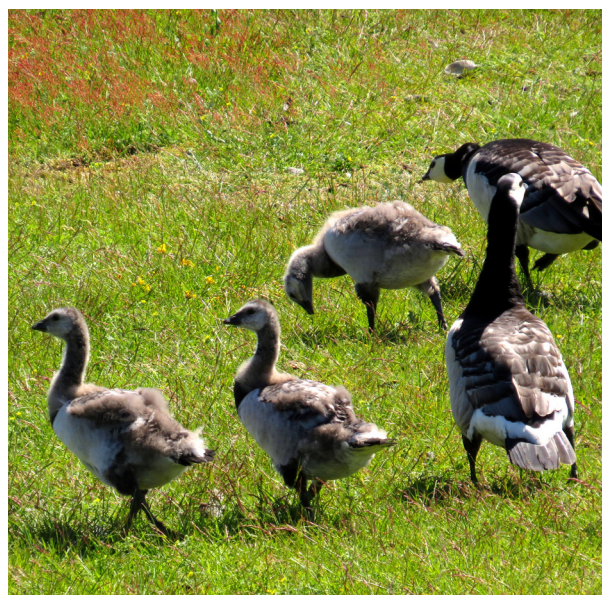
* **Biometrics:** S = Skull (Total head length), T = Tarsus, P = 2nd Primary growth, W = Weight

Monitoring breeding success

Again, this year, we'll continue collecting data to monitor the annual breeding success of the population. The survey is timed to take place before the geese depart from their breeding and moulting locations, and before birds arrive from Svalbard and Greenland.

We have been in touch with various sites who are geared up to help participate, however if you know of a flock of Barnacle Geese and would be willing to help count the number of adults and goslings, please get in touch to check whether the site isn't already being covered. Detailed guidance on the methodology, and how to age Barnacle Geese in the field, will be provided.

Please contact kanebrides@gmail.com if you are would like to help.



Thanks from **Kane Brides**, **Scott Petrek** and **Stephen Vickers**
with Dan Gornall, Aurora Gonzalo Tarodo, Jude Barbour, Jonny Cooper and Heather Warrender