Semer Water Waterbird Counts

YORKSHIRE DALES
National Park Authority



Photo: Helen Keep

Semer Water

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- A Site of Special Scientific Interest (SSSI) designated for its aquatic plants & valuable fossil and geochemical record of changes since the last glaciation.
- An increase in nutrients and sediment in recent years has reduced the water quality and range of aquatic plants, invertebrates and fish species.
- Lake has failed the most recent SSSI condition assessment, with it remaining as *Unfavourable - No change.*



Semer Water

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- In some cases swans, geese, and gulls can add significant nitrogen and phosphorus to waterbodies.

- This survey was to try and assess the contribution that any waterbird populations may make to nutrient levels in Semer Water.



Survey Method

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- Monthly visits were undertaken between November 2023 and December 2024 to count the number of waterbirds present.
- The results would be used in predictive models to help determine the cause of high nutrient levels within the lake.



Survey Method

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- As roosting birds may leave a site before sunrise, an observation point was chosen near Countersett to be able to see and count any birds in poor light.
- A 2nd observation point was used to the east of the lake.

Survey Results

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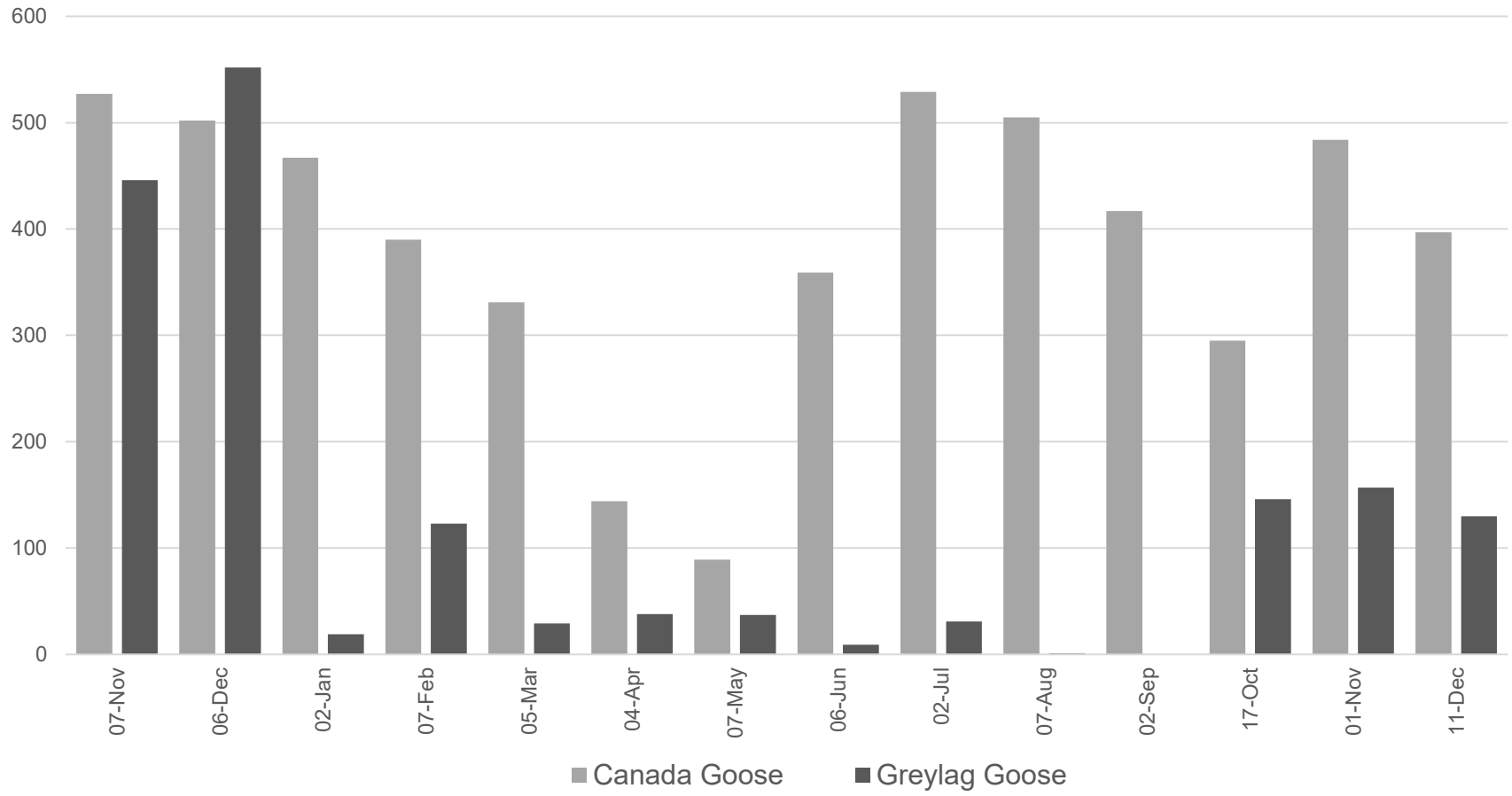
- No regular roosting gulls were recorded, c. 250 Black-headed Gulls on 5 March 2024, with most leaving before first light.
- Whooper Swans also on two dates but presumed to be passage birds as well.
- Pink-footed Geese present on two dates but did not linger.





Numbers of Geese

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Breeding Canada Geese

- On 7 May there were 16 AON of Canada Geese plus a possible pair. Two pairs with three small young on the East Shore.
- On 6 June two crèches of Canada Geese were present totalling 61+:
  - 37+ young on the West Shore and,
  - 24 young on the East Shore.



Breeding Greylag Geese

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On 7 May No AON of Greylag were observed but there were two broods noted:

i) three young and

ii) at least two small young.



Productivity

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Breeding productivity was assessed on 26 June 2024.

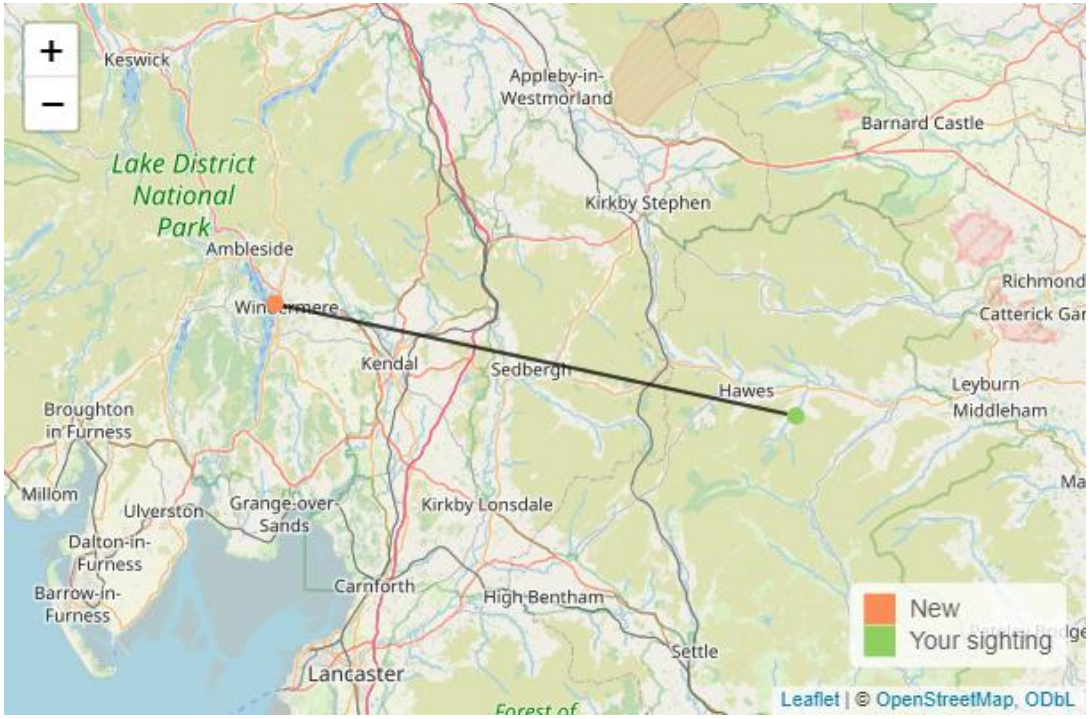
- There was a group of 84 adults and at least 12 juvenile Canada Geese along the West Shore.
- A total of 33 adult Greylags were present with seven juveniles.



Moulting Birds

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506 Canada Geese but no influx of Greylag Geese



	Record type	Species	Darvic	Age	Date	Location	County
HVL							
1	New	Greylag Goose	HVL	4	2022-06-26	Millerground, Windermere	Cumbria
2	Your sighting	Greylag Goose	HVL		2024-11-01	Semer Water	North Yorkshire

Population Changes

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The Number of Breeding Pairs of Canada Geese and Greylag Geese on the Yorkshire Wildlife Trust Semer Water Reserve Between 2011 and 2023.

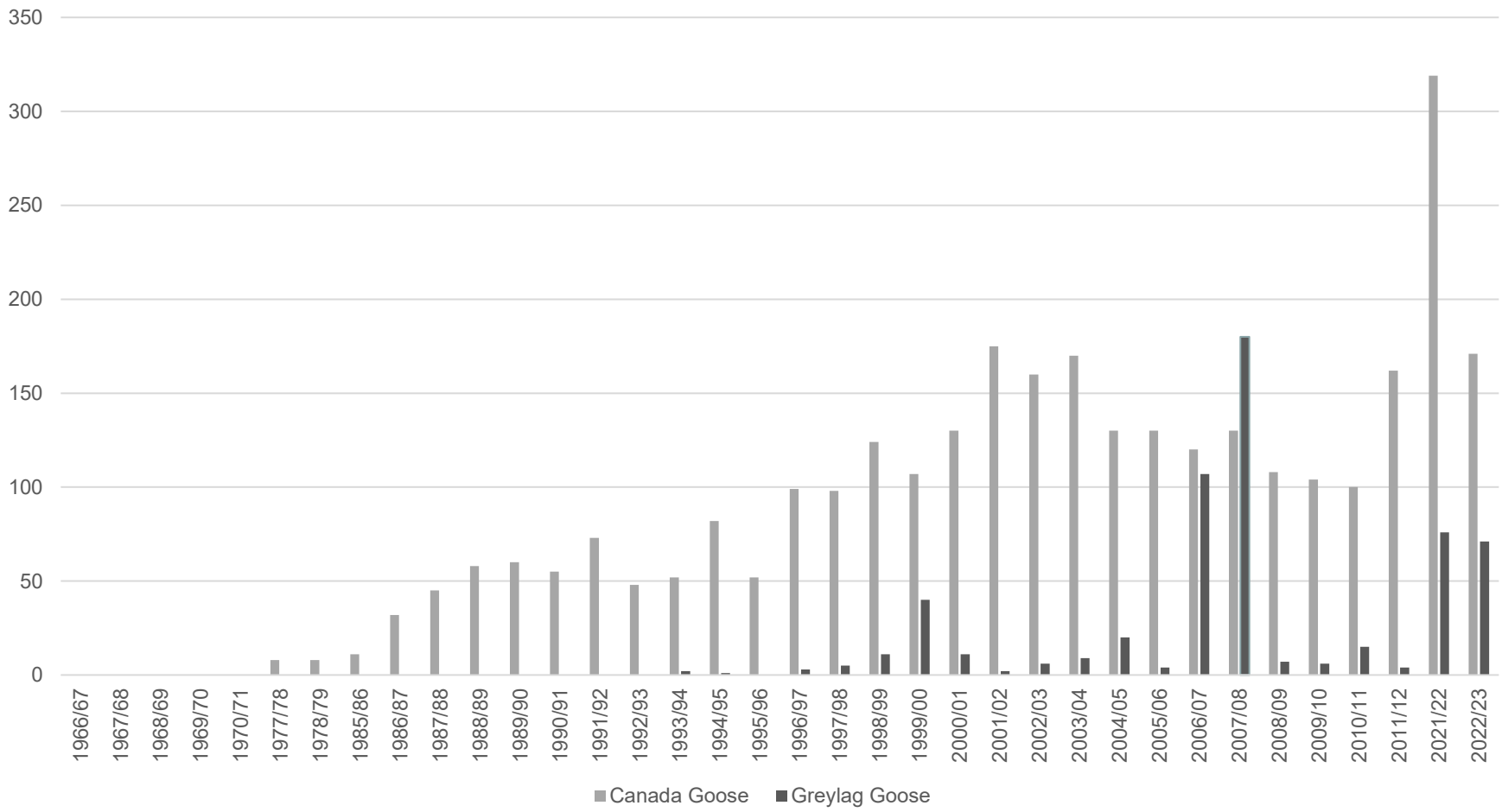
Year	No. pairs of Canada Geese	No. Pairs of Greylag Geese
2011	7	2
2012	1	0
2013	3	0
2014	2	0
2015	3	0
2016	4	2
2017	8	6
2018	6	1
2019	8	4
2020	0	0
2021	10	0
2022	8	0
2023	11	0

Information supplied by Yorkshire Wildlife Trust

Population Changes

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The Annual Maximum Number of Canada and Greylag Geese Recorded on WeBS Counts at Semer Water.



Summary

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- The use of the lake by Canada and Greylag Geese varies significantly both daily and seasonally.
- Many Canada Geese spend time feeding in fields upstream from the lake so could still contribute to nutrient enrichment.
- They also spend time feeding downstream so cannot contribute to nutrient enrichment.
- The number of Canada Geese present also varies between months, with fewer birds present in April and May, when they are likely to be nesting, than in July when some birds may be coming to the site to moult, and in November and December when some birds may be coming to winter.
- During the moult period in June and July when the birds are flightless, they will be spending all day on, or adjacent to, the lake.

Summary

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- **The number of Greylag Geese varied considerably during the study period with c. 500 birds roosting in November and December 2023, with virtually all birds leaving before first light to feed away from the site. This compared to a maximum of 157 in the same period in 2024.**
- **These results show that the figures use in predictive models need to be carefully determined, in order to account for the differences in the time that both Greylag and Canada Geese are present on site on both a daily and monthly basis.**