

WINTERING BIRD SURVEY REPORT

JULY 2024

Sandy Brow RFP

Perimeter Road

Knowsley

L33 3AN

U R B A N
G R E E N



QUALITY MANAGEMENT

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1 Executive Summary

- 1.1.1.1 Balance Power Ltd are proposing to develop land off Perimeter Road in Knowsley (hereafter referred to as 'the site'). The proposals include the development of a battery storage site, with power grid infrastructure and associated hard landscaping
- 1.1.1.2 Urban Green has been appointed to complete Pink-footed Goose surveys of the site and immediate environs. A Preliminary Ecological Appraisal (PEA) was conducted at the site in August 2023. Further surveys, in the form of Pink-footed Goose surveys to identify and assess presence/likely absence of this species was identified by the Local Planning Authority as being required as wintering and passage populations of Pink-footed Geese and Whooper Swans are of national, and in some cases of international importance in this area.
- 1.1.1.3 As the proposed development site is located within and immediately adjacent to areas identified as Pink-footed Goose Main Roost areas by Lancashire Environmental Records Network, and that relevant SPAs are designated for this species it was considered necessary that relevant information is available to enable a Habitat Regulations Assessment to be undertaken.
- 1.1.1.4 Presence/likely absence surveys were undertaken between September and April 2023/24. Methodology was developed based on SNH (now NatureScot) methodology for surveying feeding distribution surveys of Pink-footed Goose.
- 1.1.1.5 No Pink-footed Geese were recorded from within the survey area, and only limited use by common and widespread species recorded within the area.
- 1.1.1.6 It is recommended that the proposed works proceed in a timely manner, without the need for further ecological guidance or survey with respect to wintering birds.

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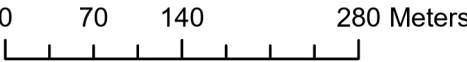
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Legend

- Vantage Point
- Survey Area
- Red Line Boundary
- Blue Line Boundary



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2 Introduction

2.1 Background to the Scheme

- 2.1.1.1 Balance Power Ltd are proposing to develop land off Perimeter Road in Knowsley (hereafter referred to as ‘the site’). The proposals include the development of a battery storage site, with power grid infrastructure and associated hard landscaping.
- 2.1.1.2 Urban Green has been appointed to undertake surveys and a report of the site. A Preliminary Ecological Appraisal was conducted at the site in August 2023. Further surveys, in the form of wintering bird surveys were recommended to further assess the site for likely presence/absence of wintering birds within the site.
- 2.1.1.3 The author of the report is Andrew Whitfield an Associate Ecologist.

2.2 Site Context

- 2.2.1.1 The site is located at National Grid Reference SJ 44170 98325 and comprises a total area of approximately 2.7ha (see Figure 1).
- 2.2.1.2 The site is located in the rural outskirts of the greater Liverpool built-up area, ~2.2km north of Knowsley. The site is bounded west by Perimeter Road, immediately beyond which lies an extensive retail/industrial estate. Expansive rural land dominates the wider landscape to the north, east, and south of site – mostly agricultural land, and notably Knowsley Park & Safari, ~3km to the south.

2.3 Purpose of this Report

- 2.3.1.1 This report has been produced to demonstrate the results of Pink-footed Geese surveys which were undertaken at the site and within 500m of the Site boundary to confirm likely absence or presence of Pink-footed Geese roosting or feeding in these areas. Although the survey was primarily focussed on the potential presence and use of the site and surroundings by Pink-footed Geese, incidental records of other wintering birds were made.

3 Methods

3.1 Wintering Bird Surveys

- 3.1.1.1 A Pink-footed Geese survey was carried out between September 2023 and April 2024 (inclusive).
- 3.1.1.2 The survey methodology was based on SNH (now NatureScot) Guidance that advises that feeding distribution surveys of Pink-footed Goose should be carried out on a fortnightly basis, between and including September to April, where species are likely to be wintering and extend to 500m from the proposed development site.
- 3.1.1.3 This advice has been developed for onshore windfarms, but potential disturbance distances remain appropriate.
- 3.1.1.4** Surveys were undertaken over a two-hour period from dawn and until dusk on an alternating schedule. The survey area was walked such that all areas could be viewed and at Vantage Points the area scanned for a 15-minute period to record any activity (see Figure 1). The surveys aimed to record roosting and feeding locations, flight lines/paths and other incidental bird activity.

3.2 Evaluation

- 3.2.1.1 Due to the absence of Pink-footed Geese within the Survey Area and with no other significant wintering bird records, the site is evaluated as being of Less than Local Importance for wintering birds.

3.3 Limitations

- 3.3.1.1 Ornithological surveys are affected by a variety of factors that affect the presence of birds (e.g. season, weather, food availability, species behaviour and disturbance).
- 3.3.1.2 The absence of any particular species within the survey area should not be taken as conclusive evidence that the species is not present or that it will not be present in the future. The results of these bird surveys give an indication of the use of the survey area by Pink-footed Geese and other wintering bird species at the time of survey.
- 3.3.1.3 The information can be used to draw conclusions about the wintering bird community within the survey area and the potential impacts arising from future development works. Every effort has been taken to provide an accurate assessment of the situation pertaining to this survey area at the time of the survey, but no liability can be assumed for omissions or changes after the survey has taken place.

3.4 Constraints to the Survey

- 3.4.1.1 It is not possible to provide accurate population size without undertaking detailed capture, mark and release surveys which require a substantial effort.
- 3.4.1.2 No constraints were experienced when undertaking the surveys and although individuals can come and go over time, causing the structure of bird communities and population levels to change, this survey provides a sound and reliable representation of the bird activity within the survey area at the time of study.
- 3.4.1.3 The surveys were undertaken throughout the optimal period (September to April) and weather conditions were optimal for the surveys to proceed.

4 Results

4.1 Desk Study

- 4.1.1.1 Consultations with the Local Planning Authority indicated that the Proposed Development Site lies within and adjacent to an area identified as Pink-footed Goose Main Roost Area by LERN (see Appendix 2). The basis and reasons for such Identification are presented in Appendix 1 but relate to the presence of wintering and passage populations of Pink-footed Geese and Whooper Swans being of National and in some instances international importance.

4.2 Pink-footed Geese Survey

- 4.2.1.1 No records of Pink-footed Geese were recorded on the site, within the Survey Area or in any peripheral areas. A total of seven other species were recorded during the field surveys, none of the recorded species were utilising the survey area exclusively for wintering.
- 4.2.1.2 A summary of the results are provided in Table 1.

Table 1. Summary of weather conditions and survey results

Visit number	Date	Surveyor names	Temperature at start	Weather conditions	Results
V1	22/09/23	Andrew Whitfield	10.5°C	Heavy showers, light wind. Cloud cover 6/8 Oktas	No Geese present.
V2	28/09/23	Andrew Whitfield	15°C	Sunny, occasionally cloudy (4/8 Oktas).	No Geese present. Overflying Carrion Crows (2)
V3	14/10/23	Andrew Whitfield	9°C	Bright, occasional cloud. Light wind. 3/8 Oktas	No Geese, small flock of wood pigeon in adjacent fields.
V4	23/10/23	Andrew Whitfield	12°C	Bright, occasional cloud. Light wind. 3/8 Oktas	No Geese present. Blackbird in scrub within Development Site boundary. Overflying Carrion Crows (2)
V5	10/11/25	Andrew Whitfield	10°C	Bright,sunny. Light wind. 0/8 Oktas	No Geese. Carrion Crow within field
V6	22/11/23	Andrew Whitfield	10°C	Mainly overcast, dry. Light wid. 2/8 Oktas.	No Geese present within survey area

Visit number	Date	Surveyor names	Temperature at start	Weather conditions	Results
V7	14/12/23	Andrew Whitfield	8°C	Overcast, raining. Moderate wind. 8/8 Oktas.	No Geese. Fieldfare in hedgerows outside of Survey Area.
V8	22/12/23	Andrew Whitfield	10°C	Sunny with occasional showers. Moderate winds. 5/8 Oktas.	No Geese present. Flocks of Wood Pigeon (c.20) over and in adjacent fields.
V9	09/01/24	Andrew Whitfield	3°C	Clear and bright. Light Winds. 1/8 Oktas.	No Geese seen. Dunnocks, Robins and Blackbirds in scrub and hedges.
V10	24/01/24	Andrew Whitfield	8°C	Bright, occasional cloud. Light winds. 3/8 Oktas.	No Geese. Small flock of Lapwing in flight (c. 15 birds) in distance.
V11	11/02/24	Andrew Whitfield	4°C	Bright, occasional cloud. Light winds. 4/8 Oktas.	No Geese. Crows overhead and Wood Pigeons in adjacent fields.
V12	20/02/24	Andrew Whitfield	12°C	Rain clearing to overcast. Moderate winds. 6/8 Oktas.	No Geese.
V13	06/03/24	Andrew Whitfield	10°C	Bright, occasional cloud. Moderate wind. 3/8 Oktas.	No Geese. Flock Jackdaws (c. 15) overhead.
V14	21/03/24	Andrew Whitfield	8°C	Bright, occasional cloud. Moderate wind. 4/8 Oktas.	No Geese. Carrion Crow within field.
V15	10/04/24	Andrew Whitfield	7°C	Heavy rain. Moderate wind. 8/8 Oktas.	No Geese.
V16	20/04/24	Andrew Whitfield	14°C	Bright, occasional cloud. Moderate wind. 1/8 Oktas.	No Geese. Dunnock, Blackbird and Robin likely breeding in surrounding hedgerows.

4.3 Interpretation and Determination of Wintering Status

- 4.3.1.1 As identified in Section 4.1, the site lies within the LERN Sensitive Waterbird Area and more particularly within Pink-footed Goose Main Roost Area (see Appendix 1). Although the main roosts for these species are on coast and estuaries, two inland sites at Martin Mere (c. 10km north of the Site) and Simonswood Moss (c. 4km north-north-west of the Site) are also noted. Pink-footed Geese utilise considerable tracts of land for feeding and have core foraging areas of 20km from their roost sites. As noted in the Methodology utilised for the identification of Sensitive Waterbird Area “As the boundary of the Waterbird Sensitive Area is defined on a tetrad (2x2km squares) basis it will also contain land that is not regularly utilised by Geese and Swans.” However, it also noted that changes in crops within agricultural areas may also affect usage of such areas between years.
- 4.3.1.2 Based on the results of the surveys undertaken of the area 2023/24 it would appear that the Site, Survey Area and viewable peripheral areas are not utilised by Pink-footed Geese. Even taking into account variation in usage between years, the lack of any evidence of usage of areas within the wider landscape visible from the Study Area and the caveat regarding definition of Waterbird Sensitive Areas covering areas not regularly utilised by target species, it is considered that Site is unlikely to be utilised by Pink-footed Geese.

5 Evaluation and Enhancement

5.1 Summary

- 5.1.1.1 No Pink-footed Geese were recorded within the survey area, and only limited use of the area by common and widespread species recorded.
- 5.1.1.2 Based on the results of the surveys undertaken of the area 2023/24 it would appear that the Site, Survey Area and viewable peripheral areas are not utilised by Pink-footed Geese. Even taking into account variation in usage between years, the lack of any evidence of usage of areas within the wider landscape visible from the Study Area and the caveat regarding definition of Waterbird Sensitive Areas covering areas not regularly utilised by target species, it is considered that Site is unlikely to be utilised by Pink-footed Geese.
- 5.1.1.3 It is recommended that the proposed works proceed in a timely manner, without the need for further ecological guidance or survey with respect to wintering birds.

6 References

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UK BAP | JNCC - Adviser to Government on Nature Conservation

Appendix 1 – Relevant Legislation

Wildlife and Countryside Act 1981 (as amended)

all wild birds, their nests and eggs are protected by law and it is thus an offence, with certain exceptions to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.
- Have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act.
- Have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act.
- Use traps or similar items to kill, injure or take wild birds.
- Have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations.

The Kingfisher is covered under this general legislation provided for all wild birds, but is also listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), meaning additional protection is extended to -

- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Appendix 2- Sensitive Waterbird Area Criteria

Background

In Lancashire and North Merseyside wintering and passage populations of Pink-footed Geese and Whooper Swans are of National, and in some cases, of international significance.

The main roosts are on the coast and estuaries, and at two inland sites: Martin Mere and Simonswood Moss. The majority of the roosts are Special Protection Areas. Whooper Swans and Pink-footed Geese utilise considerable tracts of the land for feeding, and have core foraging ranges of 5km and 20km, respectively, from their roosting site⁽¹⁾.

In Lancashire the foraging areas are often managed for intensive agricultural production. The conservation interest of these sites is, in part, a direct result of this agricultural use. However, in any one year, the birds will tend to use specific fields within a larger area, depending on the crop grown. The fields used by birds will consequently shift from year to year within the larger area.

Data from several consecutive years is essential, not only to establish regular use, but also to determine the boundary of the area within which the birds will move from year to year. The Sensitive Waterbird Area is defined based on tetrad counts over the period winter 2008/09 to winter 2017/18².

N.B. Not all tetrads in Lancashire and North Merseyside have been regularly surveyed during the monitoring period, so there may be additional tetrads which meet the thresholds for inclusion within the Sensitive Waterbird Area.

Methodology

For Pink-footed Geese and Whooper Swans tetrads are classified based on their greatest regular level of use by according to the hierarchy in Table 2. The Sensitive Waterbird Area includes all tetrads with a greatest regular use class of at least '1% Lancashire & North Merseyside Population', plus any adjacent tetrads that are regularly flown over by Geese and Swans.

The Sensitive Waterbird Area only shows where sufficient data exist, birds may also occur in significant numbers in other areas of Lancashire that lie within their foraging range.

As the boundary of the Waterbird Sensitivity Area is defined on a tetrad (2x2km squares) basis it will also contain land that is not regularly utilised by Geese and Swans.

Populations are based on those given in Eaton *et al.*³ and White *et al.*⁴

Table 2. Tetrad Use Classes and Thresholds

Use Class	Pink-footed Goose	Whooper Swan	SWA Mapping Category
Main Roost	All		Main Roost
Internationally Important	3720	210	Major Feeding Area
Nationally Important	3600	110	
0.5% GB Population	>1800	>75	
1% Lancashire & North Merseyside Population	>590	>25	
Regular Flyover Area	Tetrads adjacent to above classes which are regularly flown over by Pink-footed Geese and Whooper Swans.		Regular Flyover Area

Data Sources

Any requests for the data that underlie the Sensitive Waterbird Area should be made to Steve White at steve.white102@btinternet.com

Acknowledgements

The LERN Partnership wishes to express its appreciation to Steve White, County Bird Recorder for Lancashire and Cheshire Fauna Society, for his expert knowledge and assistance given to the development of the Sensitive Waterbird Area.

References

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