



Newlands Developments

Land Off Barnsley Road, Goldthorpe

WINTERING BIRD SURVEY REPORT

June 2023

FPCR Environment and Design Ltd

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1.0 NON-TECHNICAL SUMMARY

- 1.1 FPCR Environment & Design Ltd. were commissioned by Newlands Developments to conduct a suite of surveys on land at a proposed development site south of Barnsley Road/Doncaster Road (A635), situated to the west of Goldthorpe. Proposals for the site involve the development of existing arable cropland to employment land uses (B2 & B8) with associated access roads, drainage features and landscaping.
- 1.2 The desktop study identified 52 species afforded legislative protection or listed as species of conservation concern in the UK. The presence of these species was taken into consideration during the surveys and into the proposed mitigation and enhancement measures.
- 1.3 A single scoping Wintering Bird Survey was undertaken in February 2022 with a subsequent full Wintering Bird Survey carried out between November 2022 and February 2023 inclusive. The scoping survey identified 27 species of which 15 were considered 'notable'. The full wintering bird survey identified 43 species of which 25 were considered 'notable'.
- 1.4 The Site did not meet any of the county specific Local Wildlife Site (LWS) selection criteria relating to breeding and/or wintering birds or its assemblages thereof and thus does not qualify for consideration for LWS designation.
- 1.5 The wintering bird assemblages within the Site were typical of those habitats in the region comprising largely common and widespread generalist species, The wintering assemblage associated with the arable land was considered of **Local** nature conservation importance while those of the hedgerows, scrub, trees, and the Carr Dike watercourse were considered of **Site** nature conservation importance.
- 1.6 Habitat loss is expected to incur **Minor Adverse** to **Negligible** effects at the local level for species recorded associated with the farmland and marginal habitats. The retention of the Carr Dike corridor and a suitable riparian buffer of vegetation within the proposed scheme is such that **No Effect** due to habitat loss is expected for species recorded from this habitat.
- 1.7 Disturbance that may affect bird behaviour is expected to be limited to the construction phase and is anticipated to have a temporary **Minor Adverse** impact.
- 1.8 Mitigation measures are recommended to minimise disturbance impacts from construction operations; vegetation clearance should be undertaken outside the bird nesting season (March – August, inclusive), or checked by an ecologist prior to clearance.
- 1.9 A range of enhancement opportunities have been suggested based on the habitats and bird species recorded to achieve biodiversity gains.

2.0 INTRODUCTION

- 2.1 FPCR Environment & Design Ltd were commissioned by Newlands Developments to undertake a full Wintering Bird Survey across four visits, plus species-specific surveys to assess the use of the Site by willow tit *Poecile montanus*, on a site to the west of Goldthorpe and south of Barnsley Road/Doncaster Road (A635) (central OS grid reference SE 442 036), hereafter referred to as ‘the Site’.

Site Location & Context

- 2.2 A full description of the habitats present on-site will be provided in the Ecological Appraisal which should be read in conjunction with this report (FPCR, June 2023).
- 2.3 The Site lies to the west of the town of Goldthorpe on farmland south of the A635 Barnsley Road/Doncaster Road and adjacent to the west of Aldi Goldthorpe Regional Distribution Centre. Carr Dike bisects the Site running in a south-westerly direction from the A635 in the north. Dearne Valley Wetlands Site of Special Scientific Interest (SSSI) lies to the south-west with the land between dominated by large cultivated arable fields.
- 2.4 The Site comprises of five broad compartments of arable cropland; all seeded with cereal crops over the period covered by the surveys, except the north-easternmost parcel which contained oil seed rape. Additionally, there is a narrow belt of plantation deciduous woodland associated with Carr Dike, and a second parcel of plantation woodland along the northern boundary between the arable fields and the A635 road. Several areas of the latter woodland block had been recently felled with chippings left in situ.
- 2.5 Linear habitat features include several hedgerows separating the agricultural compartments, two ditches, one a wet ditch tributary of Carr Dike discharging onto the Site from the distribution centre to the east, and the other a small field drain in the north of the Site which was overgrown with bramble scrub.
- 2.6 The Site is bound by the existing development of Goldthorpe Industrial Estate to the east, further agricultural land to the north and west (predominantly arable land-use), – and an area of woodland-scrub mosaic which forms part of the Dearne Valley Wetlands SSSI (The Mullins SSSI Unit 14) to the south.

Site Proposals

- 2.7 As per the illustrative masterplan for the Site (umc architects drawing. **Environmental Statement Figure 4.1**) the proposed development includes four plots for employment uses, a new link road and associated internal access roads, landscaping, and drainage. Carr Dike will be buffered on either side by a “biodiversity corridor” with other areas of green infrastructure including woodland and scrub planting, individual tree planting and grassland through the Site. A biodiversity and flood alleviation area will be created immediately to the west of the Site and will incorporate grassland and wetland habitats, screened from the development by embankments with grassland and scrub planting. Additionally, Sustainable Urban Drainage Systems (SUDS) will be provided with the creation of a number of attenuation basins and ponds throughout the Site.

Survey Objectives

- 2.8 The Scoping Wintering Bird Survey was carried out across a single visit to the Site in February 2022. The objectives of the survey were to:
- Identify the presence and distribution of wintering birds;
 - Evaluate the conservation importance of wintering bird populations present;
 - Evaluate the importance of wintering bird populations and the anticipated residual impacts of the development, and
 - To identify areas of ornithological interest and make recommendations to minimise the potential impact of the scheme.
- 2.9 The Wintering Bird Survey was carried out across four visits to the Site – one per month between November 2022 and February 2023 inclusive. The objectives of the survey were to:
- Identify the presence and distribution of wintering birds;
 - Evaluate the conservation importance of wintering bird populations present;
 - Evaluate the importance of wintering bird populations and the anticipated residual impacts of the development, and
 - To identify areas of ornithological interest and make recommendations to minimise the potential impact of the scheme.
- 2.10 A willow tit species-specific survey was undertaken concurrently with the final Wintering Bird Survey visit in February 2023. The objectives of this survey were to:
- Identify the presence/absence of willow tit within areas of potentially suitable habitat within the Site;
 - Evaluate the conservation importance of any populations identified;
 - Evaluate the anticipated residual impacts of the development on this species; and
 - To identify any areas of particular interest and make recommendations, should they be required, to minimise the potential impact of the scheme.

3.0 LEGISLATION & STATUS

Legislation

- 3.1 The Wildlife and Countryside Act 1981 (as amended) (WCA) is the principal legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law, and it is an offence, with certain exceptions, to recklessly or intentionally:
- Kill, injure or take any wild bird.
 - Take, damage, or destroy the nest of any wild bird while in use or being built; or
 - Take or destroy the egg of any wild bird.
- 3.2 Additional protection is afforded to species listed on Schedule 1 of the WCA, whereby intentional disturbance whilst building or occupying a nest or disturbance of dependent young is also considered an offence.
- 3.3 Certain species have also been identified as Species of Principal Importance (SPI) under Section 41 of the NERC Act 2006 (NERC S.41). The S.41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.
- 3.4 The Site falls within the Barnsley Biodiversity Action Plan (LBAP) which identifies several targets for UK priority species that occur within this area, however all bird species included are also covered under NERC S.41 or national level conservation classifications discussed below.

Status

- 3.5 In addition to statutory protection, some bird species are classified according to their conservation status, such as their inclusion on the Red and Amber lists of Birds of Conservation Concern (BoCC) in the UK:
- 3.6 Red list (high conservation concern) species meet at least one of the following criteria:
- They are globally threatened according to IUCN criteria.
 - Their population has declined rapidly (50% or more) in recent years.
 - They that have declined historically and not shown a substantial recent recovery.
- 3.7 Amber list (medium conservation concern) species are those that meet at least one of the following criteria:
- They have an unfavourable conservation status in Europe.
 - Their population or range has declined moderately (between 25% and 49%) in recent years.
 - Their population has declined historically but made a substantial recent recovery.
 - They are rare breeders.
 - They have internationally important or localised populations.
- 3.8 Green list (low conservation concern) species fulfil none of the above criteria.

4.0 METHODOLOGY

Desktop Study

- 4.1 To compile baseline ornithological information, the following statutory and non-statutory organisations were consulted for data regarding designated sites for which birds are a qualifying feature, and protected/notable bird records:
- Natural England via the Multi Agency Geographic Information for the Countryside (MAGIC) website; and
 - Barnsley Biological Records Centre (BBRC)
- 4.2 The geographical extent of the search area for biodiversity information was related to the significance of sites and species and potential zones of influence which might arise from development within the Site, as follows:
- 15km around the Site boundary for sites of International Importance (e.g. Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites);
 - 2km around the Site boundary for statutory sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSIs)) and
 - 1km around the Site for non-statutory designated sites of County Importance (e.g. Sites of Importance for Nature Conservation (SINCs)/Local Wildlife Sites (LWSs) and protected or otherwise notable species records within the last 20 years.

Field Surveys

Wintering Bird Surveys

- 4.3 The wintering bird populations at the Site were assessed by an initial scoping survey in February 2022 to assess the number of species, and individuals thereof, utilising the habitats present with the results of this survey used to determine the need for further survey effort. A route was mapped prior to the surveys being undertaken, paying particular attention to any linear features, such as hedgerows and watercourses, and other features such as ponds and scrub. Bird surveys were not undertaken in unfavourable conditions, such as heavy rain or persistent strong wind (conditions which can negatively affect the results). Table 1 provides details of the survey dates and weather conditions.
- 4.4 To provide a reasonable level of accuracy for determining the population status of the wintering birds at the Site, four surveys were undertaken between dawn and early afternoon between November 2022 and February 2023.
- 4.5 The methodology employed for both the scoping survey and wintering bird surveys was broadly based on territory mapping¹ used for the British Trust for Ornithology (BTO) Common Bird Census (CBC). Standard BTO species codes and symbols for bird activities were used to identify birds and denote activity, sex, and age where appropriate.

Table 1: Survey Dates and Conditions

Survey	Date	Cloud Cover (%)	Rain	Wind (Beaufort)	Visibility

¹ Bibby, C.J., N.D. Burgess & D.A. Hill, 2000: Bird Census Techniques: 2nd Edition. London: Academic Press

2022 Scoping Wintering Bird Survey					
1	25.02.22	15	None	4 – Moderate Breeze	Excellent
2022 Wintering Bird Survey					
2	30.11.22	100	None	1 – Light Air	Very Good
3	22.12.22	100	None	0 – Calm	Good
4	12.01.23	100	Two brief showers <5 minutes in duration otherwise None.	4 – Moderate Breeze	Excellent
5	23.02.23	40	None	2 – Light Breeze	Excellent

Willow Tit Species-specific Surveys

- 4.6 As willow tits were identified as being present within 1km of the Site, and the habitats along the Carr Dike corridor as having potential, albeit limited, to support willow tit, a species-specific survey was undertaken in accordance with national survey methods produced to inform the Back from the Brink HLF project³.
- 4.7 The survey was undertaken concurrently with the February visit of the Wintering Bird Surveys discussed above utilising the same survey route. The playback method was used in all areas of habitat identified as potentially suitable for willow tits with playback points set at 200m intervals along the route. At each survey point the standard two-minute recorded willow tit call was played at sufficient volume to be audible from 100m away with a subsequent two-minute period of silence to identify any willow tits responding to the recording.

Species & Assemblage Assessment

- 4.8 The Chartered Institute of Ecology and Environmental Management (CIEEM) guidance on ecological impact assessment assesses nature conservation importance within a geographical context⁴. To attain each level of importance, an ornithological resource or one of the features (species population or assemblage of species) should meet the criteria set out in Table 2. In some cases, professional judgment may be required to increase or decrease the allocation of importance, based upon local knowledge.
- 4.9 The Site has also been assessed against the selection criteria for Local Wildlife Site (LWS) for Barnsley⁵ on criteria set out for breeding birds. LWSs are recognised by central government as an important tool in promoting sustainable development and protecting biodiversity.
- 4.10 The recent county annual bird report, *Yorkshire Bird Report 2018/19*⁶, was consulted to inform the assessment. The abundance of species referred to by these reports is classified by the following criteria:
- Vagrant – Fewer than ten records ever;

3 https://naturebftb.co.uk/wp-content/uploads/2021/09/25221_BftB_Willow_Tit_Handbook_V6.pdf

4 http://www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf

5 TEP (2011) Barnsley Natural Heritage Sites Species Assessment Criteria 2481.002. Barnsley Metropolitan Borough Council

6 Yorkshire Naturalists Union Birds Section (2022) Yorkshire Bird Report 2018/19.

- Rare – Between 0 and 10 individuals each year in the past 10 years;
- Scarce – Between 11 and 100 individuals each year in the past 10 years;
- Uncommon – 101-1,000 individuals each year in the past 10 years;
- Fairly Common – More than 1,000 records per year;
- Common – More than 10,000 records per year;
- Abundant – More than 50,000 records per year.

Table 2: Evaluation Criteria

Nature Conservation Value	Examples of Selection Criteria
International	A species which is part of the cited interest of an SPA and which regularly occurs in internationally or nationally important numbers. A species present in internationally important numbers (>1% of international population).
National	A species which is part of the cited interest of a SSSI and which regularly occurs in nationally or regionally important numbers. A nationally important assemblage of breeding or over-wintering species. A species present in nationally important numbers (>1% UK population). Rare breeding species (<300 breeding pairs in the UK).
Regional	Species listed as being of principal importance under NERC S.41 which are not covered above, and which regularly occurs in regionally important numbers. Species present in regionally important numbers (>1% of regional population). Sustainable populations of species that are rare or scarce within a region. Species on the BoCC Red List & which regularly occur in regionally important numbers.
County	Species listed as being of principal importance under NERC S.41 which are not covered above and which regularly occurs in county important numbers Species present in county important numbers (>1% of county population). Sustainable populations of species that are rare or scarce within a county, or are listed as being of principal importance under S41 of the NERC Act. A site designated for its county important assemblage of birds (e.g. a SINC Site). Species on the BoCC Red List & which regularly occur in county important numbers.
Local	Other species of conservation interest (e.g. all other species on the BoCC Red and Amber List or species listed as being of principal importance under NERC S.41 which are not covered above) regularly occurring in locally sustainable populations. Sustainable populations of species which are rare or scarce within the locality.
Site	Species that are common and widespread

5.0 RESULTS & EVALUATION

Desk Study

Designated Sites

- 5.1 The Site is not covered by any statutory designation and no international nature conservation designations were recorded within 15km.
- 5.2 Dearne Valley Wetlands Site of Special Scientific Interest (SSSI) is approximately 100m south-west of the Site and is designated for:
- Breeding gadwall *Mareca strepera*, shoveler *Spatula clypeata*, garganey *Spatula querquedula*, pochard *Aythya farina*, bittern *Botaurus stellaris*, black-headed gull *Chroicocephalus ridibundus* and willow tit *Poecile montanus klienschmidtii*
 - Non-breeding gadwall and shoveler; and
 - Diverse assemblage of breeding birds of lowland damp grassland, scrub, open water, and fen.

Non-statutory Designated Sites

- 5.3 A single non-statutory site is present within 1km of the Site. Old Moor and Wath Ings Local Wildlife Site (LWS), approximately 960m south-west of the Site, and is also designated as a Unit of the Dearne Valley Wetlands SSSI (Unit 17). This LWS site is designated due to its importance as a breeding and/or wintering site for a number of Schedule 1 bird species namely avocet *Recurvirostra avosetta*, bittern *Botaurus stellaris*, Mediterranean gull *Ichthyaetus melanocephalus*, kingfisher *Alcedo atthis*, barn owl *Tyto alba*, and little ringed plover *Charadrius dubius*, as well as a number of nationally important NERC Section 41 species recorded from the site: skylark *Alauda arvensis*, reed bunting *Emberiza schoeniclus*, grasshopper warbler *Locustella naevia*, tree sparrow *Passer montanus*, grey partridge *Perdix perdix*, willow tit *Poecile montanus*, dunnock *Prunella modularis*, bullfinch *Pyrrhula pyrrhula*, song thrush *Turdus philomelos*, and lapwing *Vanellus vanellus*.

Protected/Notable Species

- 5.4 The desktop study returned records of 88 species from within 1km of the Site boundary of which six species were recorded from within the Site: grey partridge, yellow wagtail *Motacilla flava*, linnet *Linaria cannabina*, yellowhammer *Emberiza citrinella*, green sandpiper *Tringa ochropus*, and song thrush *Turdus philomelos*.
- 5.5 Of the 88 species returned, 52 are considered to be notable with 19 BoCC Red-listed species, 30 BoCC Amber-listed species, and three BoCC Green-listed species afforded protection under WCA Schedule 1. These are detailed in Table 3.
- 5.6 Marsh harrier *Circus aeruginosus* was reported to have successfully bred on the RSPB land to the south-west of the Site in 2020 and was reported hunting along several sections of Carr Dike in close proximity to the Site and at the Site in 2020. Marsh harrier were not recorded at the Site during breeding bird surveys in 2022 and in general do not overwinter in the UK, migrating to Africa and returning to the UK around April.

Table 3: Bird Species Records from Desktop Study

Name		Status		Within Site Boundary
		WCA Sch.1	NERC S.41	
BoCC Red List				
Pochard	<i>Aythya rufina</i>			
Goldeneye	<i>Bucephala clangula</i>	+		
Grey partridge	<i>Perdix perdix</i>		+	Yes
Swift	<i>Apus apus</i>			
Lapwing	<i>Vanellus vanellus</i>		+	
Herring gull	<i>Larus argentatus</i>		+	
Marsh tit	<i>Poecile palustris</i>		+	
Willow tit	<i>Poecile montanus</i>		+	
Skylark	<i>Alauda arvensis</i>		+	
House martin	<i>Delichon urbicum</i>			
Starling	<i>Sturnus vulgaris</i>		+	
Mistle thrush	<i>Turdus viscivorus</i>			
Fieldfare	<i>Turdus pilaris</i>	+		
Tree sparrow	<i>Passer montanus</i>		+	
House sparrow	<i>Passer domesticus</i>		+	
Yellow wagtail	<i>Motacilla flava</i>		+	Yes
Greenfinch	<i>Chloris chloris</i>			
Linnet	<i>Linaria cannabina</i>		+	Yes
Yellowhammer	<i>Emberiza citrinella</i>		+	Yes
BoCC Amber List				
Greylag goose	<i>Anser anser</i>	+		
Pink-footed goose	<i>Anser brachyrhynchus</i>			
Shelduck	<i>Tadorna tadorna</i>			
Shoveler	<i>Spatula clypeata</i>			
Gadwall	<i>Mareca strepera</i>			
Wigeon	<i>Mareca penelope</i>			
Mallard	<i>Anas platyrhynchos</i>			
Teal	<i>Anas crecca</i>			
Stock dove	<i>Columba oenas</i>			
Woodpigeon	<i>Columba palumbus</i>			
Moorhen	<i>Gallinula chloropus</i>			
Oystercatcher	<i>Haematopus ostralegus</i>			
Snipe	<i>Gallinago gallinago</i>			
Green sandpiper	<i>Tringa ochropus</i>	+		Yes
Black-headed gull	<i>Chroicocephalus ridibundus</i>			
Common gull	<i>Larus canus</i>			

Name		Status		Within Site Boundary
		WCA Sch.1	NERC S.41	
Lesser Black-backed Gull	<i>Larus fuscus</i>			
Sparrowhawk	<i>Accipiter nisus</i>			
Marsh harrier	<i>Circus aeruginosus</i>	+		
Kestrel	<i>Falco tinnunculus</i>			
Rook	<i>Corvus frugilegus</i>			
Willow warbler	<i>Phylloscopus trochilus</i>			
Whitethroat	<i>Curruca communis</i>			
Wren	<i>Troglodytes troglodytes</i>			
Song thrush	<i>Turdus philomelos</i>		+	Yes
Dunnock	<i>Prunella modularis</i>		+	
Grey wagtail	<i>Motacilla cinerea</i>			
Meadow pipit	<i>Anthus pratensis</i>			
Bullfinch	<i>Pyrrhula pyrrhula</i>			
Reed bunting	<i>Emberiza schoeniclus</i>			
BoCC Green List				
Mute swan	<i>Cygnus olor</i>			
Tufted duck	<i>Aythya fuligula</i>			
Goosander	<i>Mergus merganser</i>			
Collared dove	<i>Streptopelia decaocto</i>			
Coot	<i>Fulica atra</i>			
Little grebe	<i>Tachybaptus subruficollis</i>			
Great crested grebe	<i>Podiceps cristatus</i>			
Golden plover	<i>Pluvialis apricaria</i>			
Cormorant	<i>Phalacrocorax carbo</i>			
Grey heron	<i>Ardea cinerea</i>			
Little egret	<i>Egretta garzetta</i>			
Buzzard	<i>Buteo buteo</i>			
Barn owl	<i>Tyto alba</i>	+		
Long-eared owl	<i>Asio otus</i>			
Kingfisher	<i>Alcedo atthis</i>	+		
Green woodpecker	<i>Picus viridis</i>			
Jay	<i>Garrulus glandarius</i>			
Magpie	<i>Pica pica</i>			
Jackdaw	<i>Coloeus monedula</i>			
Carrion crow	<i>Corvus corone</i>			
Blue tit	<i>Cyanistes caeruleus</i>			
Great tit	<i>Parus major</i>			

Name		Status		Within Site Boundary
		WCA Sch.1	NERC S.41	
Sand martin	<i>Riparia riparia</i>			
Swallow	<i>Hirundo rustica</i>			
Long-tailed tit	<i>Aegithalos caudatus</i>			
Cetti's warbler	<i>Cettia cetti</i>	+		
Chiffchaff	<i>Phylloscopus collybita</i>			
Blackcap	<i>Sylvia atricapilla</i>			
Goldcrest	<i>Regulus regulus</i>			
Blackbird	<i>Turdus merula</i>			
Robin	<i>Erithacus rubecula</i>			
Stonechat	<i>Saxicola rubicola</i>			
Pied wagtail	<i>Motacilla alba</i>			
Chaffinch	<i>Fringilla coelebs</i>			
Goldfinch	<i>Carduelis carduelis</i>			
BoCC Unlisted				
Canada goose	<i>Branta canadensis</i>			
Pheasant	<i>Phasianus colchicus</i>			
Red-legged partridge	<i>Alectoris rufa</i>			
Little owl	<i>Athene noctua</i>			

Field Surveys

2022 Scoping Wintering Bird Survey

- 5.7 During the single scoping Wintering Bird Survey undertaken in February 2022, a total of 27 species were recorded from within the survey area (Appendix A). Of these, 15 species meet the criteria of at least one of the following pieces of legislation/classifications discussed above: Schedule 1 of the WCA; Section 41 of the NERC Act 2006; and BoCC Red or Amber lists. These species are referred to as 'notable' species.
- 5.8 Table 4 summarises the notable wintering bird species, whilst Figure 1 illustrates their distribution across the Site.

Table 4: Notable Wintering Bird Species Recorded during the 2022 Scoping Wintering Bird Surveys and Their Recent Status in Yorkshire

Species	Legal/ Conservation Status	Count	Recent Status in Yorkshire
Greylag Goose <i>Anser anser</i>	Amber List WCA Sch.1 (Part II)	1 flyover	Fairly Common resident.
Mallard <i>Anas platyrhynchos</i>	Amber List	3	Fairly Common resident, Common in winter.
Stock Dove <i>Columba oenas</i>	Amber List	1 flyover	Fairly Common resident.
Woodpigeon <i>Columba palumbus</i>	Amber List	254	Abundant resident.

Species	Legal/ Conservation Status	Count	Recent Status in Yorkshire
Black-headed Gull <i>Chroicocephalus ridibundus</i>	Amber List	10 flyovers	Common resident, Abundant in winter.
Common Gull <i>Larus canus</i>	Amber List	12	Common to Abundant winter visitor, numbers vary annually.
Herring Gull <i>Larus argentatus</i>	Red List NERC S.41	2 flyovers	Common resident.
Skylark <i>Alauda arvensis</i>	Red List NERC S.41	13	Common resident.
Wren <i>Troglodytes troglodytes</i>	Amber List	3	Abundant resident.
Song Thrush <i>Turdus philomelos</i>	Amber List NERC S.41	2	Common resident.
Redwing <i>Turdus iliacus</i>	Amber List WCA Sch.1	3	Common winter migrant.
Dunnock <i>Prunella modularis</i>	Amber List NERC S.41	2	Common resident.
Meadow Pipit <i>Anthus pratensis</i>	Amber List	29	Common resident.
Linnet <i>Linaria cannabina</i>	Red List NERC S.41	25	Common resident.
Yellowhammer <i>Emberiza citrinella</i>	Red List NERC S.41	9 + 1 flyover	Fairly Common resident.

2022-23 Full Wintering Bird Survey

- 5.9 A total of 43 species were recorded during the 2022-23 Wintering Bird Surveys (for full list see Appendix B). Of these, 25 species meet at least one of the criteria of at least one of the following pieces of legislation/classifications discussed above: Schedule 1 of the WCA; Section 41 of the NERC Act 2006; and BoCC Red or Amber lists and are considered notable species.
- 5.10 Table 5 summarises the notable species recorded across the four survey occasions, whilst Figure 2 illustrates their respective distributions within the Site.

Table 5: Notable Wintering Bird Species Recorded during the 2022-23 Full Wintering Bird Surveys and Their Recent Status in Yorkshire

Species	Legal/ Conservation Status	Peak Count / Number of Survey Occasions Recorded	Recent Status in Yorkshire
Mallard <i>Anas platyrhynchos</i>	Amber List	2 / 2	Fairly Common resident, Common in winter.
Stock Dove <i>Columba oenas</i>	Amber List	50 + 17 flyovers / 2	Fairly Common resident.
Woodpigeon <i>Columba palumbus</i>	Amber List	368 + 8 flyovers / 4	Abundant resident.
Moorhen <i>Gallinula chloropus</i>	Amber List	1 / 2	Common to Abundant resident, numbers fluctuate substantially.

Species	Legal/ Conservation Status	Peak Count / Number of Survey Occasions Recorded	Recent Status in Yorkshire
Lapwing <i>Vanellus vanellus</i>	Red List NERC S.41	1 flyover / 1	Uncommon resident, Common in winter.
Snipe <i>Gallinago gallinago</i>	Amber List	13 / 2	Scarce resident, Fairly Common in winter.
Black-headed Gull <i>Chroicocephalus ridibundus</i>	Amber List	75 + 2 flyovers / 3	Common resident, Abundant in winter.
Herring Gull <i>Larus argentatus</i>	Red List NERC S.41	3 flyovers / 4	Common resident.
Lesser Black- backed Gull <i>Larus fuscus</i>	Amber List	2 flyovers / 2	Uncommon resident, Fairly Common in winter.
Sparrowhawk <i>Accipiter nisus</i>	Amber List	1 flyover / 1	Fairly Common resident.
Kestrel <i>Falco tinnunculus</i>	Amber List	1 flyover / 1	Fairly Common resident.
Rook <i>Corvus frugilegus</i>	Amber List	62 + 7 flyovers / 3	Abundant resident.
Skylark <i>Alauda arvensis</i>	Red List NERC S.41	99 + 2 flyovers / 4	Common resident.
Wren <i>Troglodytes troglodytes</i>	Amber List	11 / 3	Abundant resident.
Starling <i>Sturnus vulgaris</i>	Red List NERC S.41	80 + 7 flyovers / 3	Abundant but decreasing resident.
Song Thrush <i>Turdus philomelos</i>	Amber List NERC S.41	3 / 3	Common resident.
Mistle Thrush <i>Turdus viscivorus</i>	Red List	4 / 1	Fairly Common resident.
Redwing <i>Turdus iliacus</i>	Amber List WCA Sch.1	77 / 3	Common winter migrant.
Fieldfare <i>Turdus pilaris</i>	Red List WCA Sch.1	76 / 4	Common winter migrant.
House Sparrow <i>Passer domesticus</i>	Red List NERC S.41	3 / 1	Abundant but decreasing resident.
Dunnock <i>Prunella modularis</i>	Amber List NERC S.41	7 / 3	Common resident.
Meadow Pipit <i>Anthus pratensis</i>	Amber List	34 + 1 flyover / 3	Common resident.
Greenfinch <i>Chloris chloris</i>	Red List	1 / 1	Common resident.
Linnet <i>Linaria cannabina</i>	Red List NERC S.41	526 + 13 flyovers / 4	Common resident.
Yellowhammer <i>Emberiza citrinella</i>	Red List NERC S.41	66 / 4	Fairly Common resident.

Willow Tit Species-specific Surveys

- 5.11 The potentially suitable habitats within the Site were considered of low suitability for willow tit as the species composition included several undesirable species as per the national survey method guidelines such as sycamore *Acer pseudoplatanus* and oak *Quercus sp.* with a very limited understorey and little standing deadwood or otherwise rotting material in which nest cavities could be excavated.
- 5.12 No observations or audible contacts of willow tits were made during the species-specific survey undertaken in February 2023 nor were any incidental records forthcoming from the other extensive surveys conducted at the Site throughout 2022 and 2023.

Bird Survey Results Description

- 5.13 The majority of species recorded are typical of the habitats present across the Site, being heavily influenced by the current agricultural management. Internal sections of the large arable fields were utilised as foraging areas by several notable and/or declining species commonly associated with farmland landscapes including; stock dove *Columba oenas*, woodpigeon *Columba palumbus*, snipe *Gallinago gallinago*, gulls, rook *Corvus frugilegus*, skylark *Alauda arvensis*, and meadow pipit *Anthus pratensis*. Areas of fields that were inundated or had been left to fallow supported fluctuating numbers of foraging snipe *Gallinago gallinago*.
- 5.14 The margins of the arable fields supported a small number of species but some, including the notable farmland specialist species linnet *Linaria cannabina* and yellowhammer *Emberiza citrinella*, in moderately high numbers. These areas also provided additional foraging resources and potential roosting sites for skylarks and meadow pipits as well as common and widespread granivorous species.
- 5.15 The hedgerows, patches of scrub, and mature trees across the Site hosted a number of common and widespread species including common tit, thrush, and finch species alongside small numbers of corvids, and goldcrest *Regulus regulus*. In addition, these habitats supported a variety of notable species; stock dove, woodpigeon, wren *Troglodytes troglodytes*, song thrush *Turdus philomelos*, mistle thrush *Turdus viscivorus*, redwing *Turdus iliacus*, fieldfare *Turdus pilaris*, dunnock *Prunella modularis*, greenfinch *Chloris chloris*, linnet, and yellowhammer.
- 5.16 Carr Dike supported a very limited number of wintering birds restricted to up to three mallards *Anas platyrhynchos* and a single moorhen *Gallinula chloropus*. In addition, a number of wetland bird species were tracked commuting along the corridor which included greylag goose *Anser anser*, and lapwing *Vanellus vanellus*, both of which are notable species.
- 5.17 Several species were recorded overflying the Site only which included the aforementioned greylag goose and lapwing, plus herring gulls *Larus argentatus* and lesser black-backed gulls *Larus fuscus*, sparrowhawk *Accipiter nisus*, and kestrel *Falco tinnunculus*. Whilst the Site provides habitats with foraging/feeding opportunities for all of these species no such activity was noted across the four visits.

Evaluation

Bird Assemblage

Local Wildlife Site Assessment

- 5.18 The Site was assessed against published criteria for LWS selection in the wider Barnsley area.

- 5.19 The criteria relevant to wintering birds are:
- a) The Site regularly supports a wintering population of any bird species included on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) that is considered of significance in the Borough as detailed in Table 3 of the guidance document.
 - b) The Site regularly supports a significant proportion of the Borough's wintering population of two or more bird species listed on Section 41 of the NERC Act 2006 and/or the Barnsley Local Biodiversity Action Plan (LBAP) as detailed in Table 4 of the guidance document.
 - c) The Site supports an assemblage of sufficient diversity to be important in the Borough:
 - a. 20 or more regularly wintering species of which a minimum of three feature on Schedule 1 of the WCA, Section 41 of the NERC Act, and/or the Barnsley LBAP.
 - b. 30 or more regularly wintering species of which a minimum of six feature on Schedule 1 of the WCA, Section 41 of the NERC Act, and/or the Barnsley LBAP.
- 5.20 Under criterion a of the above, two WCA Sch.1 species that are included in the list for consideration were recorded amongst the wintering bird assemblage – redwing and fieldfare. Numbers of both species fluctuated significantly throughout the season, considered to be likely indicative of roving flocks of foraging birds passing through the area instead of regular use of the Site by a core population of birds. It is therefore considered that the Site does not meet the LWS designation on this basis.
- 5.21 Under criterion b of the above, four of the species recorded are included in Table 4 of the guidance document: dunnock, house sparrow, linnet, and yellowhammer. Whilst the number of linnets recorded at the Site is of significance in terms of peak count, the regularly occurring numbers of this species throughout the winter were significantly lower (though still considered significant at the Borough level). Neither dunnock or house sparrow occurred in sufficient numbers or, in the case of the latter, with sufficient regularity to qualify as regular support of a significant population of these species. As only a single species, linnet, is considered to regularly occur in numbers deemed a significant proportion of the Borough's wintering population the Site is not considered to be eligible for LWS designation under this criterion.
- 5.22 Under criterion c of the above the 43 species recorded during the full Wintering Bird Survey is sufficient for the Site to be assessed under both sub-criteria. As regular use in this context is defined as “[...] recorded in at least 3 years (not necessarily consecutive) within the past ten years, at least one recorded occurrence of which should be within the past five years.”. Given the limited temporal scope of the survey work undertaken to inform this report, it is considered that there is insufficient data for the Site to be assessed under criterion c and therefore cannot be considered for LWS designation on this basis.

Wintering Bird Assemblage

- 5.23 Arable field parcels and their associated margins provide good foraging opportunities for many of the notable farmland bird species recorded on the Site including moderately large numbers of skylark, linnet, and yellowhammer, in addition to stock dove, woodpigeon, snipe, black-headed gull, common gull, rook, starling, and meadow pipit. Given the moderately large numbers of some of the farmland specialist species utilising the Site in addition to records of species uncommon within the county, the Site was still considered to be of **Local** nature conservation importance for its farmland bird assemblage.

- 5.24 The hedgerows, scrub, and trees within the Site provided good shelter and foraging opportunities for a variety of common and widespread generalist species. The assemblage recorded is typical of such habitat in the region and whilst the assemblage did include several notable species most occurred in low numbers and are not considered to be of conservation priority in Yorkshire as they are deemed Fairly Common to Abundant in the county. These included stock dove, woodpigeon, wren, starling, song thrush, mistle thrush, redwing, fieldfare, house sparrow, dunnock, and greenfinch. There is extensive arable land with hedgerow boundaries to the north of the Site and an extensive network of hedgerows, scrub, and woodland around the RSPB Old Moor and RSPB Bolton Ings nature reserves to the south, further extending east-west along the River Dearne corridor. Both the species composition, and their relative abundances within this assemblage, are typical of those expected for the Borough with the notable species present restricted to relatively common and widespread generalist foragers, the nature conservation importance of the wintering bird assemblage associated with the hedgerows, scrub, and trees is therefore considered to be of **Site** level.
- 5.25 The watercourses and wetland areas supported a restricted range of wetland bird species in winter including mallard and moorhen. The total species diversity was low and all wetland bird species present were low numbers or were considered to be associated with offsite habitat, therefore the Site is considered of **Site** nature conservation importance only for this assemblage.

Individual Species

- 5.26 Table 6 provides a summary of the 20 bird species recorded within the Site that are of at least **Local** importance.
- 5.27 The presence of a large number of skylarks during the November 2022 survey occasion is notable as overwintering flocks of this size are typically only reported from a small number of sites across Yorkshire each winter. However, these large counts were not sustained throughout the season suggesting the initial peak count likely involved transient individuals using the Site as a stopover. Consequently, despite the notable count, the species is considered to occur in numbers of **Local** importance as an overwintering species.
- 5.28 The Site also supported a very large number of linnet during the January survey occasion (526 individuals) but only around 10% of this number throughout the remainder of the winter. It is therefore likely that the Site forms part of a wider network of foraging sites across the wider local landscape and is not a Borough or County-important resource for this species in its own right, and is therefore considered of only **Local** importance for this species also.
- 5.29 Further species of at least **Local** importance (see Table 6 below) are considered as such based on their BoCC listing making them species of conservation interest but that do not occur in Borough/County important numbers on the Site.
- 5.30 Notable species recorded as suspected migrants or flyovers are discounted as they are not seen to utilise any of the habitats on-site and are arguably, therefore, unaffected by any changes to the land use.
- 5.31 The other bird species recorded utilising the habitats within the Site were either recorded in smaller numbers and/or considered common and widespread species nationally and/or locally. These species are recognised as being of only **Site** importance and not included in Table 6.

Table 6: Birds of Local Nature Conservation Importance or Higher

Name		Status		Nature Conservation Value
		WCA Sch.1	NERC S.41	
BoCC Red List				
Skylark	<i>Alauda arvensis</i>		+	Local
Starling	<i>Sturnus vulgaris</i>		+	Local
Mistle Thrush	<i>Turdus viscivorus</i>			Local
Fieldfare	<i>Turdus pilaris</i>	+		Local
House Sparrow	<i>Passer domesticus</i>		+	Local
Greenfinch	<i>Chloris chloris</i>			Local
Linnet	<i>Linaria cannabina</i>		+	Local
Yellowhammer	<i>Emberiza citrinella</i>		+	Local
BoCC Amber List				
Mallard	<i>Anas platyrhynchos</i>			Local
Stock Dove	<i>Columba oenas</i>			Local
Woodpigeon	<i>Columba palumbus</i>			Local
Moorhen	<i>Gallinula chloropus</i>			Local
Snipe	<i>Gallinago gallinago</i>			Local
Black-headed Gull	<i>Chroicocephalus ridibundus</i>			Local
Rook	<i>Corvus frugilegus</i>			Local
Wren	<i>Troglodytes troglodytes</i>			Local
Song Thrush	<i>Turdus philomelos</i>		+	Local
Redwing	<i>Turdus iliacus</i>	+		Local
Dunnock	<i>Prunella modularis</i>		+	Local
Meadow Pipit	<i>Anthus pratensis</i>			Local

6.0 DISCUSSION & RECOMMENDATIONS

- 6.1 The following section provides an assessment of the potential impacts upon notable birds breeding and/or wintering on the Site likely to result from the proposed development. Where appropriate, recommendations are provided for mitigation and enhancement that take account of the likely ecological effects. Throughout the evaluation, any recommendations for mitigation have been informed by the most up-to-date illustrative masterplan layout (umc architects drawing. **Environmental Statement Figure 4.1**).

Impact Assessment for Birds

- 6.2 The potential impact of the loss or change of habitat upon breeding bird species arising from the effects of development is based upon an understanding of each species' ecological requirements, the type of development, number of birds recorded within the survey area, their nature conservation criteria based on legislation and current guidance, their county status according to the county bird report and professional judgement.
- 6.3 The following potential impacts to the recorded bird populations and assemblage may result from the proposals:
- Direct loss/change of habitat, including habitat fragmentation; and/or
 - Disturbance during construction and/or operation.

Habitat Loss

- 6.4 The individual species recorded on-site that are arguably the most vulnerable to impacts from the habitat loss or changes associated with this proposed development include the 20 species considered to be of at least **Local** importance. These are notable species that are either specially protected, appear on the BoCC Red or Amber lists, and/or are listed as a NERC priority species and were recorded in at least locally important numbers.
- 6.5 Development of the arable and grassland habitat present at the Site will likely lead to a total loss of skylark as a wintering species on-site since this species requires expansive open areas of stubble with long lines of sight which would not be present post-development. Given the overall numbers present this total loss is anticipated to represent a **Minor Adverse** impact on these species at the **Local** level. The proposed rough grassland areas to be used as flood compensation areas may provide some compensatory habitat suitable for use by skylark.
- 6.6 The loss of arable habitat will also reduce the overall availability of foraging resources for other species that frequent open habitats for foraging such as stock dove, woodpigeon, snipe, black-headed gull, rook, and meadow pipit, plus other common and widespread species such as corvids and gamebirds. Given the low numbers of these species breeding at the Site, their abundance in the county, and the availability of similar habitat immediately adjacent to the Site boundary or in close proximity, the development is anticipated to have a **Minor Adverse** impact on these species at the **Local** level. In all cases it is considered that this can be offset by the habitat creation included in the scheme.
- 6.7 The associated arable margins will also be lost under the proposed scheme which will remove much of the available foraging resource for linnet and yellowhammer at the Site. It is therefore anticipated that the scheme will result in **Minor Adverse** impacts on these two species at the **Local**

level. However, the habitat creation included in the scheme will include areas of similar, and potentially more extensive, grassland/wildflower habitat that could be use by these species.

- 6.8 The main area of scrub and hedgerow associated with the Carr Dike watercourse corridor is to be retained with losses to these habitats largely confined to sections of hedgerow in the north of the Site. As such it is anticipated that the proposals will overall have a **Negligible to Minor Adverse** impact on the species utilising these habitats at the **Local** level namely wren, starling, song thrush, mistle thrush, redwing, fieldfare, house sparrow, dunnock, and greenfinch. The habitat creation proposals include a substantial increase in scrub and woodland habitat as well as hedgerow planting that will compensate for the loss of these habitats.
- 6.9 The watercourse is to be retained as part of the scheme and, as such the development is anticipated to have **No Effect** on the populations and status of mallard and moorhen at the Site.

Mitigation for Habitat Loss

- 6.10 The Carr Dike corridor and associated riparian vegetation will be retained and include additional tree and scrub planting. Additionally, much of the vegetation on the Site boundaries is to be retained under the proposed scheme.
- 6.11 Habitat creation under the proposed scheme includes scrub and woodland planting, the creation of six attenuation basins and five smaller cascading basins, and two flood compensation areas. The development will be screened from the north, west and south using embankments planted with grassland and scrub. .
- 6.12 The western flood compensation area is to be used to provide mitigation for biodiversity and targeted towards creating habitat suitable for marsh harrier *Circus aeruginosus* with landscaping requirements designed to include features to maintain habitat connectivity to the arable landscape to the north. Further details for the proposals for this area are discussed in the Marsh Harrier Technical Note (FPCR, 2023) which should be read in conjunction with this report. The hedgerows and rough grassland included within this strategy will also provide on-site habitat mitigation for the areas of similar habitats lost as part of the scheme and provide some suitable habitat for skylark.
- 6.13 Management of the woodland and scrub edges to create varied habitat with a range of woody shrub species will have a further **Minor Beneficial** impact on the species that readily utilise dense scrub for roosting and/or foraging during winter including; stock dove, woodpigeon, wren, starling, song thrush, mistle thrush, redwing, fieldfare, house sparrow, dunnock, and greenfinch.
- 6.14 Planting within green infrastructure is recommended to prioritise the provision of native, fruit and seed-bearing species of local origin to provide an foraging resource for a range of bird species especially; song thrush, mistle thrush, redwing, and fieldfare which are heavily reliant on winter berry crops.
- 6.15 Several areas of grassland are to be created as part of the scheme. Areas of grassland subject to more intensive management are suitable for foraging rook and as such will offset some of the detrimental impacts caused to this species by the loss of arable land and in doing so have a **Minor Beneficial** impact on this species.
- 6.16 Less intensively managed areas (such as the flood compensation areas) are recommended to use a species diverse seed mix of species tolerant to periods of inundation (such as Emorsgate Meadow Mixture for Wetlands EM8 or similar), to create alternative foraging provisions for

grassland birds through the provision of new resources and safe habitat. This will have a **Minor Beneficial** impact for starling, dunnock, house sparrow, greenfinch, linnet, and yellowhammer.

- 6.17 The attenuation basins, if planted with some emergent and marginal vegetation, will increase the availability of wetland habitats within the Site post-development and provide a **Minor Beneficial** impact for the mallard, moorhen, and black-headed gull.

Disturbance Impacts

- 6.18 All nesting birds and their nests are protected under the Wildlife and Countryside Act, 1981 (as amended). Construction operations have the potential to disturb birds using the development area of the Site for roosting, foraging, and breeding. Operations likely to disturb breeding birds include; noise and displacement during Site clearance, displacement from vegetation/habitat clearance, initial ground works, and some construction activities. During the breeding season disturbance may lead to nest desertion or the avoidance of the area and reduce the suitability of retained nesting areas, such as the retained habitats including hedgerows or woodland edge. Whilst there is some potential for breeding success to be reduced, this is expected to have a temporary **Minor Adverse** impact on the local conservation status of most of the bird species using the survey area for breeding.

Mitigation for Disturbance

- 6.19 To avoid disturbance to breeding birds, ground and vegetation clearance works are recommended to be undertaken prior to the bird-breeding season (generally accepted to be March to August, inclusive). If this is not possible, the area will be checked prior to removal of vegetation or ground works by an experienced ecologist with specific advice provided prior to clearance. If active nests are found, vegetation will be left untouched, and a protection zone demarcated within which no works will take place until all birds have fledged and the nest is abandoned. Upon abandonment an experienced ecologist would supervise the clearance of the area.. .

Enhancements

- 6.20 Wildlife-friendly enhancements are recommended to further improve the ponds/basins and could include planting with native emergent and marginal vegetation, including common reed *Phragmites australis* to establish reed bed habitat. If included this would provide further habitat, plus nesting opportunities for many species including reed bunting *Emberiza schoeniclus* and sedge warbler *Acrocephalus schoenobaenus* not currently present onsite but that will readily colonise newly available habitat. These recommendations would lead to a **Minor Beneficial to Moderate Beneficial** impact on the assemblage of birds.
- 6.21 Newly-created, grassland areas could include seed mixes specifically designed to provide foraging resources for birds and be cut after mid-July to allow plants to set seed. The use of fertilisers and pesticides should be avoided. Recommended enhancements to achieve the above are:
- Areas of native species tussock-forming grassland;
 - Areas of native species-rich wildflower grassland;
 - Areas of tree and hedgerow planting – using native species and good landscape planting, to create substantive habitat corridors within and around the Site.

- 6.22 As part of planting for retained and created hedgerows, shrub and scrub planting, consideration should be given to native and fruit/nut-bearing species, including, but not limited to field maple *Acer campestre*, hawthorn *Crataegus monogyna*, dogwood *Cornus sanguinea*, hazel *Corylus avellana*, honeysuckle *Lonicera periclymenum*, blackthorn *Prunus spinosa*, dog-rose *Rosa canina*, elder *Sambucus nigra* and holly *Ilex aquifolium*.
- 6.23 Provision could be made to provide suitable nesting habitat within retained and created scrub/woodland areas for willow tit. Willow tit require specialist nesting habitat, deadwood can be attached to existing trees, decaying logs of birch or willow 10 - 20cm diameter. Logs can be attached using wire and staples for sturdiness and should measure 1.0 - 1.5 metres in height, placed just off the ground. Alternatively a small number of suitable retained trees of at least 10-20cm diameter could be “ring barked” to create standing deadwood.

APPENDIX A: BARSLEY ROAD, GOLDTHORPE – 2022 SCOPING WINTERING BIRD SURVEY RESULTS

Species: British Common Name	Species: Latin name	Survey 1 25.02.22	Conservation Status & Protection
Greylag Goose	<i>Anser anser</i>	1 flyover	Amber List WCA Sch.1 (Part II)
Mallard	<i>Anas platyrhynchos</i>	3	Amber List
Pheasant	<i>Phasianus colchicus</i>	2	Not Listed
Red-legged Partridge	<i>Alectoris rufa</i>	28	Not Listed
Stock Dove	<i>Columba oenas</i>	1 flyover	Amber List
Woodpigeon	<i>Columba palumbus</i>	254	Amber List
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	10 flyovers	Amber List
Common Gull	<i>Larus canus</i>	12	Amber List
Herring Gull	<i>Larus argentatus</i>	2 flyovers	Red List NERC S.41
Buzzard	<i>Buteo buteo</i>	2 flyovers	Green List
Magpie	<i>Pica pica</i>	2	Green List
Carrion Crow	<i>Corvus corone</i>	1 flyover	Green List
Blue Tit	<i>Cyanistes caeruleus</i>	3	Green List
Skylark	<i>Alauda arvensis</i>	13	Red List NERC S.41
Long-tailed Tit	<i>Aegithalos caudatus</i>	5	Green List
Wren	<i>Troglodytes troglodytes</i>	3	Amber List
Song Thrush	<i>Turdus philomelos</i>	2	Amber List NERC S.41
Redwing	<i>Turdus iliacus</i>	3	Amber List WCA Sch.1
Blackbird	<i>Turdus merula</i>	5	Green List
Robin	<i>Erithacus rubecula</i>	5	Green List
Dunnock	<i>Prunella modularis</i>	2	Amber List NERC S.41
Pied Wagtail	<i>Motacilla alba</i>	21	Green List

Species: British Common Name	Species: Latin name	Survey 1 25.02.22	Conservation Status & Protection
Meadow Pipit	<i>Anthus pratensis</i>	29	Amber List
Chaffinch	<i>Fringilla coelebs</i>	2	Green List
Linnet	<i>Linaria cannabina</i>	25	Red List NERC S.41
Goldfinch	<i>Carduelis carduelis</i>	5	Green List
Yellowhammer	<i>Emberiza citrinella</i>	9 + 1 flyover	Red List NERC S.41
Total No. Species	27	27	

APPENDIX B: BARNSELEY ROAD, GOLDTHORPE – 2022-23 WINTERING BIRD SURVEY RESULTS

Species: British Common Name	Species: Latin name	Survey 1 30.11.22	Survey 2 22.12.22	Survey 3 12.01.23	Survey 4 23.02.23	Conservation Status & Protection
Mallard	<i>Anas platyrhynchos</i>	2		2 flyovers		Amber List
Pheasant	<i>Phasianus colchicus</i>	1				Not Listed
Red-legged Partridge	<i>Alectoris rufa</i>	6		10	8	Not Listed
Feral Pigeon	<i>Columba livia f. domestica</i>	10 flyovers				Not Listed
Stock Dove	<i>Columba oenas</i>	47 + 2 flyovers		50 + 17 flyovers		Amber List
Woodpigeon	<i>Columba palumbus</i>	39 + 1 flyover	135	154 + 1 flyover	368 + 8 flyovers	Amber List
Moorhen	<i>Gallinula chloropus</i>	1			1	Amber List
Lapwing	<i>Vanellus vanellus</i>	1 flyover				Red List NERC S.41
Snipe	<i>Gallinago gallinago</i>	13		1		Amber List
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	10 flyovers	12 + 2 flyovers	75 + 2 flyovers		Amber List
Herring Gull	<i>Larus argentatus</i>	3 flyovers	2 flyovers	1 flyover	1 flyover	Red List NERC S.41
Lesser Black-backed Gull	<i>Larus fuscus</i>	1 flyover		2 flyovers		Amber List
Grey Heron	<i>Ardea cinerea</i>	1 flyover				Green List
Sparrowhawk	<i>Accipiter nisus</i>		1 flyover			Amber List
Buzzard	<i>Buteo buteo</i>	2				Green List
Kestrel	<i>Falco tinnunculus</i>		1 flyover			Amber List
Jay	<i>Garrulus glandarius</i>	2		2	1	Green List
Magpie	<i>Pica pica</i>	8	9	18 + 1 flyover	24	Green List
Jackdaw	<i>Coloeus monedula</i>	55 + 4 flyovers	20	15	1 flyover	Green List
Rook	<i>Corvus frugilegus</i>	60	20	62 + 7 flyovers		Amber List
Carrion Crow	<i>Corvus corone</i>	33	5	16 + 2 flyovers	8 + 7 flyovers	Green List
Blue Tit	<i>Cyanistes caeruleus</i>	3	1	2	4	Green List

Species: British Common Name	Species: Latin name	Survey 1 30.11.22	Survey 2 22.12.22	Survey 3 12.01.23	Survey 4 23.02.23	Conservation Status & Protection
Great Tit	<i>Parus major</i>	1	1		8	Green List
Skylark	<i>Alauda arvensis</i>	99 + 2 flyovers	33	39	16	Red List NERC S.41
Long-tailed Tit	<i>Aegithalos caudatus</i>	9		1		Green List
Goldcrest	<i>Regulus regulus</i>	3				Green List
Wren	<i>Troglodytes troglodytes</i>	11		3	10	Amber List
Starling	<i>Sturnus vulgaris</i>	15 + 6 flyovers		80 + 7 flyovers	1	Red List NERC S.41
Song Thrush	<i>Turdus philomelos</i>	2		3	1	Amber List NERC S.41
Mistle Thrush	<i>Turdus viscivorus</i>			4		Red List
Redwing	<i>Turdus iliacus</i>	77		20	33	Amber List WCA Sch.1
Blackbird	<i>Turdus merula</i>	28	6	13	16	Green List
Fieldfare	<i>Turdus pilaris</i>	2	1	76	21	Red List WCA Sch.1
Robin	<i>Erithacus rubecula</i>	14	2	7	18	Green List
House Sparrow	<i>Passer domesticus</i>			3		Red List NERC S.41
Dunnock	<i>Prunella modularis</i>	3		2	7	Amber List NERC S.41
Pied Wagtail	<i>Motacilla alba</i>	3 + 1 flyover		25		Green List
Meadow Pipit	<i>Anthus pratensis</i>	16 + 12 flyovers		34 + 1 flyover	9	Amber List
Chaffinch	<i>Fringilla coelebs</i>	27 + 2 flyovers	1	5	2 flyovers	Green List
Greenfinch	<i>Chloris chloris</i>				1	Red List
Linnet	<i>Linaria cannabina</i>	68 + 63 flyovers	50	526 + 13 flyovers	12	Red List NERC S.41
Goldfinch	<i>Carduelis carduelis</i>	18 + 23 flyovers		20 + 4 flyovers	8 + 2 flyovers	Green List
Yellowhammer	<i>Emberiza citrinella</i>	39	17	66	4	Red List NERC S.41
Total No. Species	43	38	18	32	25	



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Key

Site Boundary

BoCC Red List Species

- LI Linnet
- S Skylark
- Y Yellowhammer

BoCC Amber List Species

- BH Black-headed Gull
- D Dunnock
- GJ Greylag Goose
- MA Mallard
- MP Meadow Pipit
- RE Redwing
- ST Song Thrush
- WP Woodpigeon
- WR Wren
- Fly over only

Additional Protections:

- NERC Species of Principal Importance
- Schedule 1 Species
- LBAP Species (underlined)



Key

- | | |
|--|---|
| Site Boundary | Additional Protections: |
| BoCC Red List Species | NERC Species of Principal Importance |
| FF Fieldfare | Schedule 1 Species |
| HG Herring Gull | <u> </u> LBAP Species (underlined) |
| HS House Sparrow | |
| L Lapwing | |
| LI Linnet | |
| M Mistle Thrush | |
| S Skylark | |
| SG Starling | |
| Y Yellowhammer | |
| GR Greenfinch | |
| BoCC Amber List Species | |
| BH Black-headed Gull | |
| CM Common Gull | |
| D Dunnock | |
| K Kestrel | |
| LB Lesser Black-backed Gull | |
| MA Mallard | |
| MP Meadow Pipit | |
| SN Snipe | |
| SD Stock Dove | |
| MH Moorhen | |
| RE Redwing | |
| RO Rook | |
| ST Song Thrush | |
| SH Sparrowhawk | |
| WP Woodpigeon | |
| WR Wren | |
| → Fly over only | |