

Appendix 11.3 Bird Survey Results

Introduction

This report has been prepared by Tyler Grange Group Ltd on behalf of Northern Gateway Development Vehicle LLP (NGDV). It sets out the findings of breeding and non-breeding bird surveys undertaken at 'Northern Gateway'.

The EIA¹ assesses the Project for Assessment, which measures approximately 570 ha. Within the Assessment Boundary, sits the Proposed Scheme (Application Boundary approximately 210 ha), for which an outline planning application is sought. Breeding and non-breeding bird surveys were undertaken within the Survey Area (**Figure 11.3**); which was largely defined by permitted access. Access was granted within the entirety of the Proposed Scheme, with the addition of fields immediately south of the southern Application Boundary, also being permitted for access. All remaining areas outside of the Survey Area, but within the Assessment Boundary were not surveyed in detail, and assumptions were made of the habitat type, condition and protected species suitability through aerial imagery and views from Public Rights of Way (PRoW).

The scope of the bird surveys are detailed below, but primarily lead by the proximity of the Assessment Boundary to the South Pennine Moors SPA; and while records of all species were made during both the breeding and non-breeding surveys, particular attention was paid to assessing the Survey Area for the presence/ absence of the breeding and assemblage SPA designated species.

Legislation and Conservation Status

All birds are protected under the provisions of the Wildlife and Countryside Act (WCA) 1981 (as amended). Some receive additional protection under Schedule 1 of the Act.

Several bird species are listed as a Priority Species in the UK Post-2010 Biodiversity Framework which provides a statutory list of priority species in England, Scotland, Wales and Northern Ireland, as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England), Section 7 of the Environment (Wales) Act 2016, Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011. Decision-makers such as Local Planning Authorities must have regard to Priority species in all their activities, including when making decisions on planning applications.

The Birds of Conservation Concern (BoCC)² compiled by Royal Society for the Protection of Birds (RSPB) / British Trust for Ornithology (BTO), commonly referred to as the UK Red List for birds, provides detail on the conservation status of all regular breeding and wintering bird species in the United Kingdom (U.K), Channel Islands and the Isle of Man. Bird species have been assigned to one of three groups (Red, Amber or Green) based on their conservation status, with each group defined as follows:

- RED List species are those that are globally threatened according to the International Union for Conservation of Nature (IUCN) criteria; those whose population or range has declined rapidly ($\geq 50\%$) in recent years; and those that have declined historically and not shown a substantial recent recovery;

¹ NORM3018 Northern Gateway JPA 1.1 Environmental Impact Assessment

² Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021) The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* **114**: 723-747

- AMBER List species are those with an unfavourable conservation status in Europe, those whose population or range has declined moderately (25%-49%) in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations; and
- GREEN List species are the remaining species and being on this list indicates that they are of low conservation priority, although population sizes should be monitored.

The Survey Area is located within the Zone of Influence for South Pennine Moors Special Protection Area (SPA). The South Pennine Moors SPA is designated for its nationally significant important breeding populations of bird species and summer assemblage of breeding birds. To inform an impact assessment of future development within the Survey Area on qualifying bird features, breeding bird surveys and non-breeding bird surveys have been carried out in 2023 - 2024. The following birds (**Table A11.3.1**) are noted as primary reasons for the selection of these designated sites, due to their internationally important numbers during summer.

Table A11.3.1: South Pennine Moors SPA (summer assemblage of breeding birds)

South Pennine Moors SPA (breeding birds)	South Pennine Moors SPA (summer assemblage of breeding birds)	
Merlin <i>Falco columbariu</i>	Peregrine <i>Falco peregrinus</i>	Redshank <i>Tringa tetanus</i>
Golden Plover <i>Pluvialis apricaria</i>	Short-eared owl <i>Asio flammeus</i>	Common sandpiper <i>Actitis hypoleucos</i>
	Merlin	Whinchat <i>Saxicola rubetra</i>
	Golden Plover	Wheatear <i>Oenanthe Oenanthe</i>
	Lapwing <i>Vanellus vanellus</i>	Ring ouzel <i>Turdus torquatus</i>
	Dunlin <i>Calidris alpina</i>	Twite <i>Carduelis flavirostris</i>
	Snipe <i>Gallinago gallinago</i>	Curlew <i>Numenius arquata</i>

Previous Surveys and Desk Study Records

A search of local biological records was undertaken by Greater Manchester Local Record Centre (GMLRC) in April 2024 for a search radius of 2km from the Survey Area boundary.

25 Section 41 (Species of Principle Importance) bird species records were received from close proximity of Survey Area, additionally four Schedule 1 bird species records were returned, including the following species which have the potential to be breeding on or near the Survey Area, given the habitats present:

- Barn owl *Tyto alba*
- Bullfinch *Pyrrhula pyrrhula*
- Curlew
- Dunnock *Prunella modularis*
- Grasshopper warbler *Locustella naevia*
- Grey partridge *Perdix perdix*

- Herring Gull *Larus argentatus*
- House sparrow *Passer domesticus*
- Lapwing
- Linnet *Carduelis cannabina*
- Little Ringed Plover *Charadrius dubius*
- Marsh tit *Poecile palustris*
- Reed Bunting *Emberiza schoeniclus*
- Skylark *Alauda arvensis*
- Song Thrush *Turdus philomelos*
- Starling *Sturnus vulgaris*
- Tree pipit *Anthus trivialis*
- Tree sparrow *Passer montanus*
- Yellow wagtail *Motacilla flava*

Survey Methodology

Breeding Bird Survey

Four breeding bird surveys were undertaken between April and July for each of the transect routes. Due to the size of the survey, the surveys consisted of seven transect routes. Surveys were undertaken by experienced ecologists and comprised transect surveys across the Survey Area, as shown on **Figures 11.13-11.14**.

Survey visits were undertaken by a suitably qualified ecologists experienced in undertaking bird surveys. The method used was based on a territory mapping methodology in accordance with published guidance^{3 4}.

The survey visits were conducted during the period between one hour after sunrise and approximately 10:00 for dawn surveys, as this is considered to be the optimal time to record bird breeding activity. The dusk survey visit was conducted during the period between ‘the last few hours of the day, and extending beyond sunset for at least one hour’⁵. The identity and activity of all birds, either seen or heard inside the Survey Area or within 50m of its boundary, were recorded on maps of a suitable scale.

³ Bibby, C.J., Burgess, N.D., Hill, D.A. and Mustoe, S.H. (2000) *Bird census techniques*. Academic Press, London.

⁴ Gilbert, G., Gibbons, D.W., & Evans, J. (1998) *Bird Monitoring Methods: A Manual of Techniques for UK Key Species*. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.

⁵ <https://birdsurveyguidelines.org/methods/survey-method/>

Although the same survey route was used during all visits, the starting point and survey direction were alternated during each survey so that all areas were covered at varied times after sunrise to ensure even coverage during the peak period of bird activity.

Bird species were noted using the standard British Trust for Ornithology (BTO) codes. Behaviour considered likely to indicate breeding included: singing, display flights, mating and courtship displays, nesting, carrying of nesting material and birds showing fidelity to a particular patch of ground or vegetation. An aggregation of two or more sightings of a species was taken to be an indication that breeding was likely. Also, if specific behaviours (such as the gathering of nest material, copulations, adults carrying food or recently fledged young) were observed, this was also taken to indicate breeding.

'Probable' breeding status was attributed to those species that were regularly recorded within the Survey Area in proximity to suitable nesting habitat but with insufficient data to confirm breeding. 'Possible' breeding status was attributed to those species that were recorded within the Survey Area but with a general lack of suitable nesting habitat present within the Survey Area.

Over-flying bird species were noted but where no suitable nesting habitat for these species was noted within the Survey Area, territory mapping was not undertaken.

The results of each visit were then transcribed onto a summary map in order to identify species showing fidelity to areas of habitat over several survey visits.

The conservation status of the birds observed was ascertained through consultation of national, regional and local bird reports.

Dates, times and weather conditions are presented below in **Table A11.3.2**

Table A11.3.2: Date, Time and Weather Conditions during the 4 Survey visits

Transect Route	Visit	Date	Time Start	Time End	Weather Start	Weather End
T1, T2, T3, T4, T5, T6 & T7	1	10/04/2024	06:30	09:00	Temperature: 4°C, Cloud Cover: 2/8, Wind: 1/12, Precipitation: 0.	Temperature: 6°C, Cloud Cover: 7/8, Wind: 2/12, Precipitation: 0.
T1, T3, T4 & T5	2	07/05/2024	05:50	09:00	Temperature: 13°C, Cloud Cover: 7/8, Wind: 2/12, Precipitation: 0.	Temperature: 13°C, Cloud Cover: 5/8, Wind: 3/12, Precipitation: 0.
T2 & T6	2	08/05/2024	06:10	09:00	Temperature: 11°C, Cloud Cover: 8/8, Wind: 1/12, Precipitation: 0.	Temperature: 13°C, Cloud Cover: 1/8, Wind: 1/12, Precipitation: 0.
T7	2	09/07/2024	06:10	09:00	Temperature: 10°C, Cloud Cover: 5/8, Wind: 1/12, Precipitation: 0.	Temperature: 13°C, Cloud Cover: 4/8, Wind: 1/12, Precipitation: 0.
T1, T2, T3, T4, T6 & T7	3	21/05/2024	05:35	08:15	Temperature: 11°C, Cloud Cover: 6/8, Wind: 2/12, Precipitation: 0.	Temperature: 13°C, Cloud Cover: 6/8, Wind:

						1/12, Precipitation: 0.
T5	3	06/06/2024	06:00	08:30	Temperature: 10°C, Cloud Cover: 7/8, Wind: 1/12, Precipitation: 0.	Temperature: 10°C, Cloud Cover: 6/8, Wind: 2/12, Precipitation: 0.
T5	4	01/07/2024	20:15	22:15	Temperature: 14°C, Cloud Cover: 7/8, Wind: 3/12, Precipitation: 0.	Temperature: 12°C, Cloud Cover: 8/8, Wind: 3/12, Precipitation: 0.
T3, T4, T6 & T7	4	02/07/2024	20:00	22:35	Temperature: 14°C, Cloud Cover: 6/8, Wind: 3/12, Precipitation: 0.	Temperature: 12°C, Cloud Cover: 8/8, Wind: 2/12, Precipitation: 0.
T1 & T2	4	03/07/2024	20:00	22:35	Temperature: 15°C, Cloud Cover: 3/8, Wind: 2/12, Precipitation: 0	Temperature: 13°C, Cloud Cover: 6/8, Wind: 3/12, Precipitation: 0

Limitations

Some areas of the Survey Area did not have access during the breeding bird surveys, however, surveyors recorded any bird species displaying breeding behaviours from adjacent accessible areas.

For visit 3 on transect route 5, the survey was undertaken at two weeks after the other transect route surveys, however this is still within the optimum breeding bird season it is not considered a limitation to the surveys.

During visit 2, transect 6 had livestock present in the southern field, however the field could be surveyed from a distance so the results for the transect is not limited.

There were no weather limitations during the breeding bird surveys, all surveys were conducted without precipitation and minimal wind speed.

Non-breeding Bird Survey

Non-breeding bird surveys have been carried out between October 2023 – March 2024.

The survey methodology followed guidance produced by the Bird Survey & Assessment Steering Group for non-breeding bird surveys⁶. The objective of the surveys was to identify the scale and distribution of non-breeding bird populations within the Survey Area and the locations that they favour and to identify the presence or likely absence of the qualifying bird species of the South Pennine Moors SPA.

⁶ Bird Survey & Assessment Steering Group. (2023). Bird Survey Guidelines for assessing ecological impacts, v.1.1.0. Available at: <https://birdsurveyguidelines.org> [Accessed June 2024]

The Survey Area comprised the development area plus 100 m in all directions around the Survey Area boundary where access/views permitted.

Six surveys were completed for each of the transect routes throughout the core winter and autumn/spring migration period between October and March by experienced ecologists working for Tyler Grange. Due to the size of the survey, the Survey Area consisted of seven transect routes, as shown on **Figure 11.13**.

Although the same survey route was used during all visits, the starting point and survey direction were alternated during each survey so that all areas were covered at varied times to ensure even coverage during the peak period of bird activity.

The conservation status of the birds observed was ascertained through consultation of national, regional and local bird reports.

Dates, times and weather conditions are presented below in **Table A11.3.3**

Table A11.3.3: Date, Time and Weather Conditions during the 6 Survey Visits

Transect Route	Visit	Date	Time Start	Time End	Weather Start	Weather End
T1, T2, T3, T4, T5, T6 & T7.	1	31/10/2023	08:30	10:30	Temperature: 9°C, Cloud Cover: 8/8, Wind: 3/12, Precipitation: 0.	Temperature: 11°C, Cloud Cover: 8/8, Wind: 2/12, Precipitation: 1.
T1, T2, T3, T4, T5, T6 & T7.	2	29/11/2023	07:45	10:45	Temperature: -2°C, Cloud Cover: 0/8, Wind: 1/12, Precipitation: 0.	Temperature: -1°C, Cloud Cover: 0/8, Wind: 1/12, Precipitation: 0.
T1, T2, T3, T4, T5, T6 & T7.	3	20/12/2023	07:50	10:20	Temperature: 8°C, Cloud Cover: 8/8, Wind: 3/12, Precipitation: 0.	Temperature: 9°C, Cloud Cover: 8/8, Wind: 3/12, Precipitation: 1/2.
T1 & T2	4	26/01/2024	08:00	10:20	Temperature: 5°C, Cloud Cover: 2/8, Wind: 3/12, Precipitation: 0.	Temperature: 6°C, Cloud Cover: 2/8, Wind: 3/12, Precipitation: 0.
T3, T4, T5, T6 & T7.	4	29/01/2024	07:45	10:30	Temperature: 9°C, Cloud Cover: 8/8, Wind: 1/12, Precipitation: 1.	Temperature: 9°C, Cloud Cover: 8/8, Wind: 2/12, Precipitation: 0.
T1, T2, T3, T4, T5, T6 & T7.	5	26/02/2024	06:45	09:30	Temperature: 4°C, Cloud Cover: 1/8, Wind: 1/12, Precipitation: 0.	Temperature: 4°C, Cloud Cover: 1/8, Wind: 1/12, Precipitation: 0.
T1, T2, T3, T4, T5, T6 & T7.	6	20/03/2024	06:45	09:15	Temperature: 10°C, Cloud Cover: 8/8, Wind: 1/12, Precipitation: 1.	Temperature: 10°C, Cloud Cover: 8/8, Wind: 1/12, Precipitation: 1.

Limitations

Some areas of the Survey Area did not have access during the non-breeding bird surveys, however, surveyors recorded any bird species present from adjacent accessible areas.

During visit 4 on the 29th January 2024 and visit 6 on the 20th March 2024, there was light rain for the duration of the survey, birds were still active during the survey and therefore can be assumed it was not a limitation.

Results

Breeding Bird Survey Results

Based on the survey results obtained, there were no recordings of Annex 1 qualifying breeding bird species of South Pennine Moors SPA. One SPA summer assemblage breeding bird species was recorded as probable breeders across the Survey Area. Lapwing were recorded, specifically to the north and north-eastern fields of the Survey Area. There were 7 territories recorded during the surveys located within transect routes 1 & 2. Additional recordings of this species were noted on transect route 7 during visit 1 and transect route 4 during visit 4, however they were not recorded during the other surveys on this routes and a territory area could not be established.

One Schedule 1 species have been recorded as confirmed/probable breeders within the Survey Area, as described in **Table 3** below. Barn owls were recorded during survey visits on transect routes 1, 2, 3, 4 & 5, with a juvenile being recorded during visit 4 on transect route 4 at **Building B32**. Multiple recordings of this species during the surveys recorded hunting behaviours along hedgerows/treelines and the open grasslands, and showed affinity to farm buildings present within the Survey Area.

Two bird species of Conservation Concern (Red list) have been recorded as confirmed breeders within the Survey Area, with one confirmed territory for skylark noted from an adult carrying food being observed during visit 2 on transect route 2. Other recordings of this species which showed probable breeding territories were located on transect routes 1, 5, 6 & 7, with at least 8 territories recorded. There was one confirmed territory for tree sparrow noted from an adult carrying food being observed during visit 2 on transect route 5. This species was also noted to show breeding behaviour on transect routes 2 & 4, however they did not show affinity to a specific territory and a territory area could not be concluded.

Seven bird species of Conservation Concern (Red list and SoPI species) have been recorded as probable breeders within the Survey Area, linnet, grasshopper warbler and house sparrow which are all Red List BoCC species were recorded as probable breeders within the Survey Area. Territory numbers were not able to be concluded due to the species not showing an affinity to specific areas or being present on the majority of survey visits. Additionally, song thrush (Amber List BoCC/SoPI species) was recorded as being a probable breeder within the Survey Area, with at least 12 territories being recorded across all 7 transect routes. Mistle thrush *Turdus viscivorus* (Red List BoCC) was recorded as being a possible breeder within the Survey Area providing suitable breeding habitats.

The distribution of confirmed/probable known breeding territories is shown on **Figure 11.14**.

Other red and amber list species which have been noted within the Survey Area however did not display any breeding behaviour include; fieldfare *Turdus pilaris*, grey wagtail *Motacilla cinerea*, herring gull, house martin *Delichon urbicum*, mallard *Anas platyrhynchos*, teal *Anas crecca*, meadow pipit *Anthus pratensis*, moorhen *Gallinula chloropus*, starling, swift *Apus apus*, wheatear *Oenanthe oenanthe*, yellowhammer *Emberiza citrinella* and yellow wagtail.

It was not considered necessary to provide a territory map of 'non-priority' list species due to their conservation status but **Table A11.3.4** lists the species recorded, their breeding status and affinity to a particular habitat/other observations.

Table A11.3.4: Priority Bird Species within the Survey Area and breeding status

Species	BTO Cons. Status	SoPI	Breeding Status	Number of Territories	Habitat/ Notes
Barn owl	Schedule 1	No	Confirmed breeder	1 confirmed, 1 probable	One juvenile recorded during visit 4 on transect route 4 located at Building B32 . One probable breeder showed affinity to Building B22 on transect route 4. Barn owl recordings on all transect routes throughout the breeding bird surveys. Birds showed affinity to the farm buildings present in the Survey Area.
Skylark	Red	Yes	Confirmed breeder	1 confirmed, 8 probable	One confirmed territory recorded, with one adult recorded carrying food during visit 2 on transect route 2. Birds observed/recorded showed affinity to the open grassland fields. Multiple additional registrations recorded with birds singing, however specific territories were not recorded.
Tree sparrow	Red	Yes	Confirmed breeder	1 confirmed territory	One adult recorded carrying food during visit 2 on transect route 5. Birds showed affinity to the line of trees, hedgerows and woodland.
Lapwing	Red/Schedule 1	Yes	Probable breeder	7	Multiple territories recorded during transects to the north and northeastern fields of the Survey Area. Birds showed displaying behaviours frequently during the survey visits. Birds showed affinity to open grassland.
Song Thrush	Amber	Yes	Probable breeder	12 territories	Twelve probable breeding territories, birds showed affinity to the woodland and treelines in the field boundaries. Multiple additional registrations recorded at different locations within the Survey Area on the majority of surveys, however only 12 territory areas recorded.
Linnet	Red	Yes	Probable breeder	N/A	Multiple recordings of this species showing breeding behaviours across the Survey Area, however, birds did not show affinity to a specific territory.
Dunnock	Amber	Yes	Probable breeder	N/A	Birds observed/recorded showed affinity to field boundary hedgerows.
Grasshopper warbler	Red	Yes	Probable breeder	N/A	Birds recorded within the southern field of transect route 1 during visit 2 & 3, birds recorded singing,

					however, birds did not show affinity to a specific territory.
Greenfinch <i>Chloris chloris</i>	Red	No	Probable breeder	N/A	Birds observed/recorded showed affinity to field boundary hedgerows and treelines.
Bullfinch	Amber	Yes	Probable breeder	N/A	Multiple registrations of birds displaying breeding behaviour, no specific territories recorded.
House sparrow	Red	No	Probable breeder	N/A	Birds showed affinity to hedgerows located near the farm buildings within the Survey Area.
Mistle thrush	Red	No	Possible breeder	N/A	Birds recorded on transect route 2 and transect route 5. No specific territories recorded, however the Survey Area provides suitable nesting habitat for this species.

Table 4: Non-priority Bird Species within the Survey Area

Species	Breeding Status	Habitat/ Notes
Whitethroat <i>Sylvia communis</i>	Confirmed breeder	Adult recorded carrying food on transect route 3.
Blackbird <i>Turdus merula</i>	Probable breeder	Multiple registrations recorded on every survey, behaviours included singing.
Blackcap <i>Sylvia atricapilla</i>	Probable breeder	Birds showed affinity to woodland, treelines and hedgerows.
Blue tit <i>Cyanistes caeruleus</i>	Probable breeder	Multiple registrations recorded on all transect routes during the surveys, birds showed affinity to the hedgerows/trees.
Chaffinch <i>Fringilla coelebs</i>	Probable breeder	Birds showed affinity to field boundary hedgerows/trees, breeding behaviour included singing.
Chiffchaff <i>Phylloscopus collybita</i>	Probable breeder	Birds showed affinity to field boundary hedgerows/trees.
Goldfinch <i>Carduelis carduelis</i>	Probable breeder	Birds showed affinity to field boundary hedgerows/trees.
Great Tit <i>Parus major</i>	Probable breeder	Birds showed affinity to field boundary hedgerows/trees.
Long tailed tit <i>Aegithalos caudatus</i>	Probable breeder	Birds showed affinity to field boundary hedgerows/trees.
Oystercatcher <i>Haematopus ostralegus</i>	Possible breeder	Birds recorded during visit 1 of transect route 1, no breeding behaviours were observed, however the open grassland fields provide suitable nesting areas for this species.
Robin <i>Erithacus rubecula</i>	Probable breeder	Birds showed affinity to field boundary hedgerows/trees.
Sedge warbler <i>Acrocephalus schoenobaenus</i>	Probable breeder	Birds recorded on transect routes 6 & 7, behaviours included singing however no specific territory was recorded.
Willow warbler <i>Phylloscopus trochilus</i>	Probable breeder	Birds recorded during all transect routes, showed affinity to woodland and grassland habitat.
Wood pigeon <i>Columba palumbus</i>	Probable breeder	Multiple registrations recorded at different locations within the Survey Area associated with boundary vegetation.

Wren <i>Troglodytes troglodytes</i>	Probable breeder	Multiple registrations recorded on all transect routes during the surveys, birds showed affinity to the hedgerows/trees/woodland.
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Summary

The Survey Area has been found to support at least 12 priority bird species (barn owl, skylark, tree sparrow, lapwing, song thrush, linnet, dunnock, grasshopper warbler, greenfinch, bullfinch, house sparrow and mistle thrush), with multiple territories throughout the Survey Area, with key habitats being the farm buildings, open grassland fields, agricultural fields, woodland and the field boundary hedgerows/treelines.

Non-Breeding Bird Survey Results

During the six surveys, two qualifying species for which the SPA is designated was recorded within the Survey Area. These species were lapwing (peak count 77) and snipe (peak count 29), with lapwing being recorded on all survey visits on transect routes 1, 2, 5 & 7 and snipe being recorded on all transect visits on transect routes 1, 2, 3, 5 & 7. However these species are designated under Article 4.2 summer assemblages of breeding birds not for their passage or wintering populations. An additional 21 species of Red List BoCC and SoPI were recorded during the non-breeding bird surveys within the Survey Area, as detailed in **Table A11.3.5** below.

Table A11.3.5: Priority Bird Species recorded within the Survey Area

Species	Survey Visit	Peak Numbers	Conservation Status	SoPI ⁷
Barn owl	1, 2, 3*, 4, 5* & 6	6	Schedule 1	No
Bullfinch	1, 2*, 3, 4, 5 & 6	13	Amber	Yes
Dunnock	1, 2, 3, 4, 5 & 6*	22	Amber	Yes
Fieldfare	1*, 2, 3, 4, 5 & 6	245	Red	No
Greenfinch	1, 2*, 3, 4, 5 & 6	20	Red	No
Green sandpiper <i>Tringa ochropus</i>	3	1	Amber/Schedule 1	No
Grey partridge	1	2	Red	Yes
Herring gull	1, 2, 3*, 4*, 5 & 6*	2	Red	Yes
House sparrow	2, 3, 4, 5* & 6	44	Red	No
Lapwing	1, 2, 3*, 4, 5 & 6	77	Red/SPA	Yes
Linnet	2*, 4, 5 & 6	17	Red	Yes

⁷ Species of Principle Importance

Mediterranean gull <i>Larus melanocephalus</i>	5	2	Amber/Schedule 1	No
Mistle thrush	1, 2*, 3, 5 & 6	6	Red	No
Pintail <i>Anas acuta</i>	3	2	Amber/Schedule 1	No
Redwing <i>Turdus iliacus</i>	1*, 2, 3, 4, 5 & 6	770	Amber/Schedule 1	No
Reed bunting	1, 2*, 3, 4, 5 & 6	20	Amber	Yes
Skylark	1, 3, 4, 5* & 6	17	Amber	Yes
Snipe	1, 2, 3*, 4, 5 & 6	29	Amber/SPA	No
Song thrush	1, 2, 3*, 4, 5 & 6	15	Amber	Yes
Starling	1, 3, 4*, 5 & 6	308	Red	Yes
Tree sparrow	1, 2*, 3, 4, 5* & 6	20	Red	Yes
Woodcock <i>Scolopax rusticola</i>	2, 3*, 4 & 5	6	Red	No
Yellowhammer	2 & 5*	6	Red	Yes

Barn owl (peak count 6), fieldfare (peak count 245) and redwing (peak count 770) which are all Schedule 1 species were present across the whole Survey Area during the non-breeding bird surveys, being recorded on all 7 transect routes and all survey visits. However, these were recorded in relatively low numbers compared to the UK wintering population size of redwing (680,000⁸) and fieldfare (720,000⁹).

Green sandpiper (peak count 1 on transect route 7), mediterranean gull (peak count 2 on transect route 3) and pintail (peak count 2 on transect route 6) which are all Schedule 1 species were recorded on one visit of the six surveys, however these species were recorded in relatively low numbers.

Priority species bullfinch, dunnock, greenfinch, herring gull, reed bunting, song thrush and tree sparrow, were recorded on all six of the survey visits. House sparrow, mistle thrush, skylark and starling were recorded on five of the six survey visits. Linnet and woodcock were recorded during four of the six survey visits. All of these species were recorded in relatively low numbers compared to population size.

Yellowhammer and grey partridge both of which are Red List BoCC/SoPI species were recorded in low numbers, neither of these species were recorded on more than two of the six survey visits across the entire Survey Area.

In addition to the red list, schedule 1 and SPA designated species noted, there were various amber and green list recorded including; Blackbird, blackcap, black-headed gull *Chroicocephalus ridibundus*, blue

⁸ <https://www.bto.org/understanding-birds/birdfacts/redwing>

⁹ <https://www.bto.org/understanding-birds/birdfacts/fieldfare>

tit, buzzard *Buteo buteo*, Canada goose *Branta canadensis*, carrion crow *Corvus corone*, chaffinch, chiffchaff, coal ti *Periparus atert*, collared dove *Streptopelia decaocto*, common gull *Larus canus*, feral pigeon *Columba livia* (domest.), goldcrest *Regulus regulus*, goldfinch, great crested grebe *Podiceps cristatus*, great tit, grey heron *Ardea cinerea*, grey wagtail, jackdaw *Corvus monedula*, jay *Garrulus glandarius*, kestrel *Falco tinnunculus*, lesser black-backed gull *Larus fuscus*, long-tailed tit, magpie *Pica pica*, mallard, meadow pipit, moorhen, mute swan *Cygnus olor*, oystercatcher, pied wagtail *Motacilla alba*, raven *Corvus corax*, robin, rook *Corvus frugilegus*, siskin *Carduelis spinus*, sparrowhawk *Accipiter nisus*, stock dove *Columba oenas*, stonechat *Saxicola torquatus*, teal, treecreeper *Certhia familiaris*, tufted duck *Aythya fuligula*, woodpigeon and wren.

Incidental Barn Owl Records

There were several incidental records of barn owl across the Survey Area during the bat surveys. One observation of barn owl was recorded during a survey on building B21 on the 3rd June 2024. Additionally, two observations were made in relation to building B2 during the 16th June and 25th June 2024.

Although barn owl were observed throughout various surveys, across the Survey Area, confirmed evidence of barn owl breeding was only observed within B32, where there is an artificial barn owl box within.

Breeding and Non-breeding Bird Surveys 2022

Survey methodology for breeding and non-breeding birds was largely similar to that of 2024, although there was more access to land with the Project for Assessment (fields south of Whittle Brook, down to Egypt Farm).

Results of the breeding bird surveys were similar, with all 12 Priority bird species being recorded. There was one addition; x3 wheatear were recorded during the April breeding bird survey within the southern fields, close to Simon Lane (approximate Grid Reference: SD 83233 06988). Due to the timing of the observation, it was considered that these birds were on-passage to their breeding ground at the South Pennine Moors.

Results of the 2022 non-breeding bird surveys were also similar to that of 2024. The same species were recorded, with the omission of green sandpiper and Mediterranean gull.

It is therefore considered that species assemblage has been consistent over the 2022-2024 survey period, as there were no substantial changes in habitat type and/ or condition.