



UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

Former Kempston Hardwick Brickworks
and adjoining land, Bedford

Environmental Statement Volume 3

Appendix 6.9 - Breeding Bird Survey Report

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1 INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1. This Breeding Bird Survey Report has been prepared in support of the planning proposal for the Proposed Development as described in **Chapter 2: Description of the Proposed Development (Volume 1)** of the Environmental Statement. The boundary for the Proposed Development is shown in **Figure 1: Breeding Bird Site Location Plan** in **Annex 4: Figures** and will hereafter be referred to as 'the Site'.
- 1.1.2. The Site is subdivided into the Lake Zone, the Core Zone, the West Gateway Zone and the East Gateway Zone (as shown in **Figure 1: Breeding Bird Site Location Plan** in **Annex 4: Figures**).

1.2 SCOPE OF REPORT

- 1.2.1. The requirement for breeding bird surveys followed the completion of the Preliminary Ecological Appraisal (**Appendix 6.1: Preliminary Ecological Appraisal Report (Volume 3)**) which identified numerous desk records of birds, and suitable habitats within the Site of potential importance for breeding birds. The purpose of the breeding bird survey is:
- To provide baseline information on the breeding bird community at the Site, with particular reference to whether legally protected and/or notable species are present or likely to be present;
 - To provide recommendations to enable compliance with relevant nature conservation legislation and planning policy; and
 - To identify the need for avoidance, mitigation, compensation or enhancement measures and/or further ecological surveys.
- 1.2.2. The scientific names of the bird species referred to in this report are provided in **Annex 1**, and the UK legislation and other conservation status pertaining to birds are provided in **Annex 2**.

1.3 SITE CONTEXT

- 1.3.1. The Site, equating to an area of 268ha, is located in an area broadly defined on all four sides by existing road and rail infrastructure. The A421 passes from northeast to southwest along the western side of the Site, with local access provided by Woburn Road running in parallel on the A421's eastern edge. Ampthill Road runs from north to south to the eastern edge of the Site. Broadmead Road connects from Woburn Road, running west to east along the southern edge of the Site.
- 1.3.2. The northwest of the Site is bounded by a railway line (linking Bedford to Oxford) to the west of which is the Marsh Leys Industrial Estate. Manor Road, a minor road which links the A421 to Kempston Hardwick Station and village, crosses west-east through the central part of the Site before joining the B531 road in the east. Manor Road cuts the Site in two, with the Lake Zone to the north and Core Zone to the south. Part of the East Gateway Zone straddles Manor Road. The B531 forms much of the northeast boundary of Site. Immediately to the north of the Site are two lakes, to the north of which is the A421.
- 1.3.3. To the south of Manor Road, the Site is bounded to the east by three lakes fringed by woodland and dense scrub. Immediately to the south of the Site are Broadmead and Randall Farms to the south of which is the village of Stewartby. The Bedford-Oxford railway line cuts south-north through the Site

dividing the Core Zone and West Gateway Zone. Bedford Road (now replaced by the A421 which runs adjacent and to the west) forms the western boundary of the West Gateway Zone.

- 1.3.4. The Lake Zone (at the time of the survey) contained three freshwater lakes, water-filled ditches and extensive areas of dense scrub, together with a large (10ha) area of degraded concrete, hard-standing. The northern-most two lakes were separated by a narrow (30-40m wide) band of wetland vegetation, which likely form a single lake, (covering approximately 16.2ha) during periods of high water-levels in winter. These lakes were fringed by dense reedbed around much of their perimeters, with the smaller lake to the south (covering approximately 4.3ha) fringed by dense scrub. The Lake Zone also contained an extensive area of rough, uncultivated grassland in the west, bounded along its western perimeter by dense scrub, hedgerows and a reed-lined ditch. Immediately to the east of the Lake Zone is a large lake (covering approximately 50.8ha), also fringed by reeds in places.
- 1.3.5. At the time of writing this report, the field of uncultivated grassland within the Lake Zone (covering approximately 37.5ha) was under the Middle Tier of the Countryside Stewardship (agri-environment) Scheme¹.
- 1.3.6. The East Gateway Zone straddles Manor Road with adjacent residential housing, hedgerows, gardens and scrub. The eastern part of the East Gateway Zone comprises deciduous woodland and scrub that is dissected, north-south by the B531 road.
- 1.3.7. The Core Zone comprised primarily of five fields of arable farmland, bounded by gappy hedges and a belt of deciduous woodland and dense scrub along its eastern boundary. Manor Road and the houses and gardens of Kempston village form the northern boundary of the Core Zone. Adjacent to the east of the Core Zone was a string of poorly defined lakes, interspersed by scrub trees and wetland vegetation.
- 1.3.8. The West Gateway Zone primarily comprised of a single field of arable farmland, bounded by dense hedgerows and trees, but also an area of woodland and scrub in the northeast.

¹ Department for Environment, Food and Rural Affairs and Natural England (n.d.) *Multi-Agency Geographic Information for the Countryside* (MAGIC) Map. Available at: <https://magic.defra.gov.uk/> (Accessed: 25 April 2025).

2 METHODS

2.1 SURVEY AREA

- 2.1.1. The Survey Area comprised all land within the Site and within 100m of its boundary. The 100m buffer was included in the Survey Area to detect territories that were recorded outside the Site boundary but very likely to extend to within the Site boundary.

2.2 BREEDING BIRD SURVEY

- 2.2.1. A generic breeding bird survey was carried out within the Survey Area from May to June 2024 (inclusive). The survey methods used, broadly followed those provided in the Bird Survey & Assessment Steering Group (2024)² which are an adapted version of those that were used for the British Trust for Ornithology, Common Bird Census (CBC). Details of the methods used for the CBC survey and data analysis are provided by Marchant (1983)³. The Steering Group guidelines are intended for use by ornithologists and ecological consultants who engage in bird surveys for the purpose of assessing ecological impacts including Ecological Impact Assessments (EclA) and Environmental Impact Assessments (EIA).
- 2.2.2. The Steering Group guidelines² recommend that for most sites, a total of six (evenly spaced) visits are undertaken from late March to early July. Six visits are considered sufficiently robust to identify the majority of bird species (typical of lowland habitats) in the breeding season and establish a good understanding of the numbers and distribution of species present.
- 2.2.3. Due to the Project programme, the first breeding bird survey visit did not take place until 7 May 2024 (missing the early part of the breeding season), and a total of four of the recommended six survey visits were completed, of which some parts the Site received three visits due to access permission issues. The 3-4 surveys were nevertheless completed to allow for the mitigation design to progress in 2024/25 and reduce the risk of encountering any unforeseen species or assemblages of high conservation value in 2025.
- 2.2.4. Transects (no further than 50m apart) were walked across all open terrestrial habitats, while all field boundaries and the edges of woodland and scrub edges were also walked. The locations of all birds seen and heard were recording onto field recording maps using standard British Trust for Ornithology (BTO) notation for territory mapping (Marchant, 1983). The species, number of individuals, sex if possible, behaviour and location of each observation was recorded. Behaviours recorded included: calling, alarm calling, singing, carrying food, carrying nest material, disputing, begging and flying over.
- 2.2.5. In accordance with good practice guidance⁴, the starting point and direction of the routes walked were varied on each survey visit to minimise bias, as birds may be active at different times of day in different areas. Surveys were undertaken in early morning until midday (at the latest), and in

² Bird Survey & Assessment Steering Group (2024) *Bird Survey Guidelines for assessing ecological impacts*. Available at: <https://birdsurveyguidelines.org> [Accessed: 25 April 2025].

³ Marchant, J.H. (1983) *Common Birds Census Instructions*. Hertfordshire, England: British Trust for Ornithology. [Accessed: 25 April 2025].

⁴ Bibby, C.J., Burgess, N.D., Hill, D.A. and Mustoe, S.H. (2000) *Bird Census Techniques*. 2nd edn. London, England: Academic Press.

appropriate weather conditions (not during periods of strong wind and/or heavy rain). The Site and Survey Area are shown on **Figure 1: Breeding Bird Site Location Plan** in **Annex 4: Figures**.

DATES OF SURVEY AND PERSONNEL

- 2.2.6. The surveys were completed by competent surveyors, experienced in undertaking breeding bird surveys using territory mapping methods. The dates, times and weather conditions are provided in **Table 1** in **Annex 3**.

2.3 TERRITORY MAPPING (DATA ANALYSIS)

- 2.3.1. Using the results of the breeding bird survey visits, the territories of all bird species recorded were mapped.
- 2.3.2. The conservation status of each species recorded has been assessed using the following criteria, with Notable Species (in the terms of this report) defined as species appearing on one or more of the following lists:
- Listed on Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended)⁵;
 - Listed on Section 41 (Priority Species) of the *Natural Environment and Rural Communities (NERC) Act, 2006*⁶; and
 - Included in Birds of Conservation Concern (BoCC) 5, Red and Amber Lists⁷.
- 2.3.3. The territory mapping method is based on the observation that many species during the breeding season are territorial. This is found particularly amongst passerines, where territories are often marked by conspicuous song, display, and periodic disputes with neighbouring individuals. The expected outcome of the breeding bird survey is that mapped registrations for a species fall into clusters, approximately coinciding with territories. Where a species has closely packed territories (e.g. wren), the mapping of simultaneously singing birds becomes essential. Territory boundaries are taken to be between such birds.
- 2.3.4. Behavioural observations made during the surveys that were indicative of breeding comprised of territorial/alarm calls, song, aggressive encounter, occupied nest or nest box, carrying nest material, faecal sacs or food.
- 2.3.5. The data analyses procedures used were broadly based on those detailed by Marchant (1983)³ and Bibby *et al.* (2000)⁴ taking account of the reduced number of visits completed (8-10 visits were undertaken for the CBC). From the species master maps, the number of territories for each species was calculated. Due to only 3-4 survey visits being completed (rather than the recommended six) and due to the late start to the survey in May, a registration of a species on a single survey date was taken as a breeding territory (rather than two or more dates). It should be noted however, that this approach may have led to an over-estimate of the number of territories for some species.

⁵ *Wildlife and Countryside Act 1981*. (as amended from time to time)

⁶ *Natural Environment and Rural Communities Act 2006*. (as amended from time to time)

⁷ Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. 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, pp. 723-747. Available at: <https://britishbirds.co.uk/content/status-our-bird-populations> [Accessed: 25 April 2025].

2.4 SURVEY LIMITATIONS

- 2.4.1. Full access was obtained to all areas within the Site boundary for visits 2 and 4, but with no access possible to the Lake Zone and eastern part of the East Gateway Zone on visit 3, and limited access to the western part of the West Gateway Zone on visit 1. Access to the 100m buffer area (outwith the Site) was generally restricted to publicly accessible areas within the 100m buffer. Access was however considered sufficient to record the majority of breeding bird territories that would have been detectable (active) during the late breeding season period covering May and June.
- 2.4.2. Whilst every effort has been made to detect all species present, some bird species are more difficult to detect due to their ecology (crepuscular species) or behaviour (secretive nature) and therefore may have gone undetected during the survey. As a constraint applicable to all bird surveys, this is not considered to place significant constraints upon interpretation of the breeding bird survey results obtained.
- 2.4.3. Due to the late commission of the survey (in early May), the survey will not have included the early breeding season period from late March to late April. It is therefore likely that some of the bird species which start nesting early in the year (typically, species that are resident throughout the year in the area) will have been under-represented in the results presented in this report. It is also feasible that some species that were breeding on-Site early in the year, will not have been recorded at all, and the total numbers of territories/pairs within the Site for other species under-estimated.
- 2.4.4. It is acknowledged that the surveys for the 2024 breeding bird survey started late (in early May) and that the early part of the breeding season was not surveyed. However, no additional species were recorded holding territory within the Site during an additional breeding bird survey visit undertaken in March 2025. There are no areas of mature deciduous woodland on-site that might support early nesting, resident species, typical of this habitat (such as nuthatch or lesser spotted woodpecker). As such, it is therefore considered that the results from the 2024 survey remain valid and provide a robust/near complete picture of the breeding bird community on-site.

3 RESULTS

3.1.1. A total of 76 bird species were recorded during the breeding bird survey in 2024 of which 55 were considered to be breeding/holding territory, including:

- Two species listed on Schedule 1 of the *Wildlife & Countryside Act 1981*⁵ (as amended): Little Ringed Plover and Cetti's warbler;
- A total of 13 Species Listed on Section 41 (Priority Species) of the *NERC Act, 2006*⁶: Grey Partridge, Turtle Dove, Cuckoo, Skylark, Grasshopper Warbler, Song Thrush, House Sparrow, Dunnock, Yellow Wagtail, Bullfinch, Linnet, Yellowhammer and Reed Bunting;
- A total of 12 species on the Birds of Conservation Concern (BoCC) Red List⁷: Pochard, Grey Partridge, Turtle Dove, Cuckoo, Skylark, Grasshopper Warbler, Nightingale, House Sparrow, Yellow Wagtail, Greenfinch, Linnet and Yellowhammer; and
- A total of 13 species on the Birds of Conservation Concern (BoCC) Amber List⁷: Mallard, Moorhen, Stock Dove, Woodpigeon, Willow Warbler, Sedge Warbler, Whitethroat, Wren, Song Thrush, Dunnock, Meadow Pipit, Bullfinch and Reed Bunting.

3.1.2. **Figure 2: Breeding Bird Territory Location Parts a-g in Annex 4: Figures** shows the approximate central locations of the territories (rather than a nest site) for the Notable Species (as defined in Section 2.3) as well as for those species that occur in numbers that could potentially be important in terms of the county totals (Mute Swan, Tufted Duck, Great Crested Grebe, Coot, Reed Warbler, Garden Warbler and Lesser Whitethroat). **Table 3-1** below details which species are shown on each part of the **Figure 2** series (**Figure 2a** to **Figure 2g** of **Annex 4: Figures**).

Table 3-1 – Species distribution on Figure 2 series

Figure 2 series	Notable Species included
Figure 2ai-aii	Coot, Great crested grebe, Mallard, Moorhen, Mute swan, Pochard, Tufted duck
Figure 2bi-bii	Cuckoo, Grey partridge, Little ringed plover, Stock dove, Turtle dove, Woodpigeon
Figure 2ci-cii	Cetti's warbler, Skylark, Willow warbler
Figure 2di-dii	Grasshopper warbler, Sedge warbler, Reed warbler
Figure 2ei-eii	Garden warbler, Whitethroat, Wren
Figure 2fi-fii	Dunnock, House sparrow, Nightingale, Song thrush
Figure 2gi-gii	Bullfinch, Greenfinch, Linnet, Meadow pipit, Reed bunting, Yellow wagtail, Yellowhammer

3.1.3. The number of breeding territories for each species within the Survey Area is presented in **Table 3-2** together with their conservation status. The number of territories recorded in each Zone (+100m buffer) is also provided, noting that some individual territories will be recorded in more than one zone where the 100m buffer areas overlap. The table also lists those species which were recorded during the survey but for which no evidence of breeding was obtained (denoted by a 'P' for Present/recorded but no breeding evidence).

Table 3-2 - Number of breeding pairs/territories recorded within the Survey Area and Zones

BTO code	Species name	Legal/Conservation Status			Lake Zone	East Gateway Zone	Core Zone	West Gateway Zone	Total within Survey Area
		WCA	NERC	BoCC					
Species for which evidence of breeding was obtained during the survey									
CG	Canada Goose			Green	1	0	1	0	2
MS	Mute Swan			Green	3	0	0	0	3
MA	Mallard			Amber	1	0	0	0	1
PO	Pochard			Red	1	0	0	0	1
TU	Tufted Duck			Green	1	0	0	0	1
P	Grey Partridge		Yes	Red	0	0	1	0	1
PH	Pheasant			Green	5	0	1	2	8
GG	Great Crested Grebe			Green	5	0	0	0	5
BZ	Buzzard			Green	0	1	0	1	2
MH	Moorhen			Amber	1	0	0	0	1
CO	Coot			Green	7	0	1	0	8
LP	Little Ringed Plover		Yes	Green	1	0	0	0	1

BTO code	Species name	Legal/Conservation Status			Lake Zone	East Gateway Zone	Core Zone	West Gateway Zone	Total within Survey Area
		WCA	NERC	BoCC					
SD	Stock Dove			Amber	0	0	1	0	1
WP	Woodpigeon			Amber	9	7	15	3	26
TD	Turtle Dove			Red	0	0	1	0	1
CD	Collared Dove		Yes	Green	0	0	2	0	2
CK	Cuckoo			Red	2	0	1	0	3
GS	Great Spotted Woodpecker		Yes	Green	0	1	1	0	2
G	Green Woodpecker			Green	1	0	0	0	1
J	Jay			Green	1	0	1	0	2
MG	Magpie			Green	4	3	7	4	18
JD	Jackdaw			Green	0	0	1	0	1
C	Carrion Crow			Green	1	2	2	1	5
BT	Blue Tit			Green	8	3	12	5	27
GT	Great Tit			Green	5	2	4	1	12
S	Skylark		Yes	Red	13	1	16	3	31

BTO code	Species name	Legal/Conservation Status			Lake Zone	East Gateway Zone	Core Zone	West Gateway Zone	Total within Survey Area
		WCA	NERC	BoCC					
CW	Cetti's Warbler	Yes		Green	9	1	1	0	11
LT	Long-tailed Tit			Green	5	1	3	2	10
WW	Willow Warbler			Amber	7	1	2	0	9
CC	Chiffchaff			Green	11	4	14	6	30
SW	Sedge Warbler			Amber	10	0	1	0	11
RW	Reed Warbler			Green	9	2	2	1	14
GH	Grasshopper Warbler		Yes	Red	1	0	0	0	1
BC	Blackcap			Green	21	14	20	4	47
GW	Garden Warbler			Green	5	1	1	1	8
LW	Lesser Whitethroat			Green	3	2	3	1	9
WH	Whitethroat			Amber	18	0	10	9	32
WR	Wren			Amber	23	11	22	8	54
TC	Treecreeper			Green	0	0	1	0	1
B	Blackbird			Green	14	4	15	4	31
ST	Song Thrush		Yes	Amber	6	3	5	1	13

BTO code	Species name	Legal/Conservation Status			Lake Zone	East Gateway Zone	Core Zone	West Gateway Zone	Total within Survey Area
		WCA	NERC	BoCC					
R	Robin			Green	18	10	20	6	49
N	Nightingale			Red	2	1	1	0	2
HS	House Sparrow		Yes	Red	1	2	2	0	2
D	Dunnock		Yes	Amber	17	6	17	4	34
YW	Yellow Wagtail		Yes	Red	1	0	1	1	2
PW	Pied Wagtail			Green	2	1	0	0	2
MP	Meadow Pipit			Amber	1	0	0	0	1
CH	Chaffinch			Green	4	2	3	1	7
BF	Bullfinch		Yes	Amber	1	0	1	0	2
GR	Greenfinch			Red	5	4	5	0	9
LI	Linnet		Yes	Red	9	1	7	5	17
GO	Goldfinch			Green	9	3	6	2	19
Y	Yellowhammer		Yes	Red	1	0	4	4	8
RB	Reed Bunting		Yes	Amber	3	0	1	0	4
Other species recorded during the survey for which no evidence of breeding was obtained									

BTO code	Species name	Legal/Conservation Status			Lake Zone	East Gateway Zone	Core Zone	West Gateway Zone	Total within Survey Area
		WCA	NERC	BoCC					
GJ	Greylag Goose			Amber	P		P		P
T	Teal			Amber	P				P
H	Grey Heron			Green	P				P
ET	Little Egret			Green	P		P		P
CA	Cormorant			Green	P		P		P
SH	Sparrowhawk			Amber	P				P
KT	Red Kite	Yes		Green	P		P		P
OC	Oystercatcher			Amber	P		P		P
L	Lapwing		Yes	Red					P
BH	Black-headed Gull			Amber	P		P		P
HG	Herring Gull		Yes	Red					P
LB	Lesser Black-backed Gull			Amber	P		P		P
CN	Common Tern			Amber	P				P
SI	Swift			Red	P				P
KF	Kingfisher	Yes		Amber			P		P

BTO code	Species name	Legal/Conservation Status			Lake Zone	East Gateway Zone	Core Zone	West Gateway Zone	Total within Survey Area
		WCA	NERC	BoCC					
K	Kestrel			Amber					P
HY	Hobby	Yes		Green	P				P
RN	Raven			Green	P				P
SL	Swallow			Green	P				P
SG	Starling		Yes	Red	P		P		P
GL	Grey Wagtail			Amber	P				P

- 3.1.4. A further 21 species were recorded within the Survey Area for which no evidence of breeding was obtained (see **Table 3-1**). Non-breeding waterbirds were recorded foraging and resting on the lakes and their edges, including Little Egret, Grey Heron, Cormorant (peak count of five birds on the lakes within the Core Zone on 6 June), Greylag Goose (peak count of nine birds) and Teal (four birds on the lakes within the Lake Zone on 19 June). A Common Tern was hunting over the Lake Zone on 19 June and a Kingfisher seen in the same area on the same date. The Kingfisher was likely derived from a local breeding pair, though no suitable nesting sites have been located within the Site. Common Tern, Grey Heron and Greylag Goose are likely to breed in the local area and Little Egret now nests at Blunham and Southill Lakes in the south of Bedfordshire⁸.
- 3.1.5. Kestrel, Hobby, Sparrowhawk and Red Kite were all recorded hunting over the Site, as well as Swallow and Swift, foraging over the lakes on-Site, all of which were likely to relate to local breeding birds. A family group of five Raven flew low over the Site and a Grey Wagtail was seen in the Lake Zone on 19 June. A flock of 12 Lapwing flew low over the Lake Zone on 19 June and there were six feeding in a fallow (uncultivated) field in the Core Zone on 29 June. Oystercatcher were recorded on three dates, including three flying, low over the Lake Zone on 23 May, two in a field in the Core Zone on 24 May and four flying over the Core Zone on 6 June; all of these records are likely to relate to locally breeding birds. Non-breeding Starling, Black-headed Gull, Herring Gull and Lesser Black-backed Gull were also recorded on-Site.
- 3.1.6. Of the non-breeding bird species recorded, there was very limited suitable nesting habitat (woodland and clumps of tall trees) for Sparrowhawk, Red Kite and Hobby, though nesting within close proximity of the Site cannot be entirely discounted. Lapwing and Oystercatcher could potentially nest in the open fields within the Lake and Core Zones; and Greylag Goose on the lakes.

⁸ Brind, R. (2022) *Bedfordshire Bird Report 2020, Volume 75*. England: Bedfordshire Natural History Society.

4 KEY SPECIES SUMMARY

- 4.1.1. A total of 28 Notable Species of conservation value (as defined in Section 2.3) were recorded breeding/holding territory within the Survey Area in 2024. In addition, the populations of Mute Swan, Tufted Duck, Great Crested Grebe, Coot, Reed Warbler, Garden Warbler and Lesser Whitethroat (all currently BoCC5, Green listed) were recorded in numbers that may exceed 1% of their respective county (Bedfordshire) population and therefore also be considered of conservation value.
- 4.1.2. There is no fundamental biological reason to take 1% of a population as the threshold level for establishing the level of importance of a site. Nevertheless, this percentage is widely considered to be of value in developing measures that give an appropriate level of protection to populations. The criterion was adopted by parties involved in the Ramsar Convention 1971 and thereafter, the 1% level of national species totals has been taken as the basis of assessment in various countries, including Britain⁹.
- 4.1.3. Details of the type of use of the Survey Area by these species and the likely importance of the populations on-Site are provided below.

4.2 SCHEDULE 1 SPECIES

- 4.2.1. Two species listed on Schedule 1 of the *Wildlife & Countryside Act 1981*⁵ (as amended) were recorded breeding within the Survey Area (Little Ringed Plover and Cetti's warbler). Red Kite, Hobby and Kingfisher were also recorded during the surveys and though no evidence of breeding was obtained, nesting within close proximity¹⁰ of the Site cannot entirely be discounted. Barn Owl was not recorded during the survey visits, though suitable nest sites in buildings and old trees may be present within or close to the Site, and the habitat within the Site, provides excellent opportunities for hunting birds.

LITTLE RINGED PLOVER

- 4.2.2. The breeding population of Little Ringed plover was estimated at 1,175–1,311 pairs in Great Britain in 2007¹¹. Gravel or sand pits were the most important habitats for breeding Little Ringed Plover, supporting 25.9% and 17.8% of pairs respectively, followed by reservoirs and pools (18.1%); shingle islands and banks along rivers (17.8%) and industrial/urban habitats (15.8%)¹¹. Little Ringed Plover is described as an uncommon, localised breeder and regular passage migrant in Bedfordshire, with breeding reported from seven sites in the county in 2020⁸. The species first bred in the county in 1951, with the county population increasing to 18-20 pairs by 1979¹².

⁹ Stroud, D.A., Mudge, G., and Pienkowski, M.W. (1990) *Protecting internationally important bird sites*. Available at: <https://data.jncc.gov.uk/data/4f8c80b1-a73a-4afe-a0b5-784c6be7de4b/Protecting-internationally-important-bird-sites-web.pdf> [Accessed: 25 April 2025].

¹⁰ Nesting within a distance of the Site in which disturbance could potentially occur, due to construction and operations on-Site.

¹¹ Conway, G.J., Austin, G.E., Handschuh, M., Drewitt, A.L. and Burton, N.H.K. (2019) 'Breeding populations of Little Ringed Plover (*Charadrius dubius*) and Ringed Plover (*Charadrius hiaticula*) in the United Kingdom in 2007', *Bird Study*, 66(1), pp. 22-31. Available at: <https://www.tandfonline.com/doi/full/10.1080/00063657.2018.1563045> [Accessed: 25 April 2025].

¹² Trodd, P. and Kramer, D. (1991) *The Birds of Bedfordshire*. Welwyn Garden City: Castlemead Publications.

- 4.2.3. A Little Ringed Plover was alarm calling from the area of hardstanding (associated with the Site's former use as a brickworks) in the south of the Lake Zone on 23 May though not recorded on subsequent visits in June. The car park area provides suitable nesting habitat for this species, being a relatively undisturbed location. It is therefore feasible that the species attempted to nest in the car park but later deserted the area. A single territory/breeding pair would exceed 1% of the county (Bedfordshire) population.

CETTI'S WARBLER

- 4.2.4. Cetti's Warbler is described as a localised resident and rare breeder in Bedfordshire, with confirmed or probable breeding reported at 17 sites in 2020, involving at least 31 pairs⁸. The 11 territories recorded within the Site in 2024 (primarily associated with scrub on the fringes of the waterbodies within the Lake Zone) will likely form a substantial proportion of the county total (>10%).

4.3 SECTION 41 NERC SPECIES

- 4.3.1. A total of 13 Species Listed on Section 41 (Priority Species) of the *NERC Act, 2006*⁶ were recorded breeding/holding territory within the Survey Area in 2024: Grey Partridge, Turtle Dove, Cuckoo, Skylark, Grasshopper Warbler, Song Thrush, House Sparrow, Dunnock, Yellow Wagtail, Bullfinch, Linnet, Yellowhammer and Reed Bunting.

GREY PARTRIDGE

- 4.3.2. Grey Partridge is a Priority Species (on s41 of NERC⁶) and is BoCC Red listed due to a severe decline in the UK breeding population (>50% over the past 25 years⁷). Grey Partridge is described as a declining resident in Bedfordshire⁸. No population estimate for Grey Partridge is available for Bedfordshire. However, population estimates are available for the adjoining counties of Buckinghamshire (300 pairs¹³) and Cambridgeshire (500-2,000 pairs¹⁴). The species was recorded in suitable breeding habitat within the Core Zone on 9 May and therefore deemed to be breeding. Even allowing for a continued decline in numbers in Bedfordshire, a single pair is unlikely to represent more than 1% of the county total.

TURTLE DOVE

- 4.3.3. Turtle Dove is a Priority Species (listed on s41 of NERC⁶) and is BoCC Red listed, due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). The species is described as a fast-declining summer resident in Bedfordshire, with a total of 29 territories recorded in the county during the national census for the species in 2022¹⁵ (RBBP, 2024). In view of this, the single territory recorded within the Survey Area in 2024 (in scrub and hedgerow) is likely to represent more than 1% of the Bedfordshire (county) total.

CUCKOO

- 4.3.4. Cuckoo is a Priority Species (listed on s41 of NERC⁶) and is BoCC Red listed, due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). Cuckoo is described as a declining, summer resident in Bedfordshire⁸. No population estimate for Cuckoo is available for

¹³ Ferguson, D. (2012) *The Birds of Buckinghamshire*. 2nd edn. UK: Buckinghamshire Bird Club.

¹⁴ Bacon, L., Cooper, A. and Venables, H. (2013) *Cambridgeshire Bird Atlas 2007-2011*. Cambridge, England: Cambridgeshire Bird Club.

¹⁵ RBBP (2024). Rare Breeding Birds in the UK in 2022, *British Birds*. November 2024, Vol. 117. 585-660.

Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (50-100 pairs¹⁴) and Buckinghamshire (50 pairs¹³). Male Cuckoos can be heard from a considerable distance and move quickly around their large breeding territories and therefore it is feasible that the three territories recorded within the Survey in 2024 are an over-estimated of the true population. However, even a single breeding territory is now likely to represent close to; or exceed 1% of the Bedfordshire (county) total.

SKYLARK

- 4.3.5. Skylark is a Priority Species (listed on s41 of NERC⁶) and is BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). Skylark is described as a widespread resident and common passage migrant and winter visitor in Bedfordshire⁸. No population estimate for Skylark is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (10,000-20,000 pairs¹⁴) and Buckinghamshire (10,000 pairs¹³). The 31 Skylark territories recorded within the Survey Area in 2024 (associated with the arable and uncultivated fields within the Lake, West Gateway and Core Zones) are therefore unlikely to exceed 1% of the Bedfordshire population.

GRASSHOPPER WARBLER

- 4.3.6. Grasshopper Warbler is a Priority Species (listed on s41 of NERC⁶) and is BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). The species is described as a regular but local and declining summer visitor in Bedfordshire, with a total of 21 territory holding birds reported in the county in 2020⁸. This secretive species is typically reported in the county from mid-April to July. No population estimate for Grasshopper Warbler is available for Bedfordshire. However, population estimates are available for the adjoining counties of Hertfordshire (10-30 territories¹⁶) and Buckinghamshire (50 pairs¹³). The single Grasshopper Warbler territory recorded within the Survey Area in 2024 (in reedbed in the Lake Zone) is therefore likely to exceed 1% of the Bedfordshire population.

SONG THRUSH

- 4.3.7. Song Thrush is a Priority Species (listed on s41 of NERC⁶) and is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). Song Thrush is described as a common resident and winter visitor in Bedfordshire, present throughout the year⁸. No population estimate for Song Thrush is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (10,000-15,000 pairs¹⁴) and Buckinghamshire (20,000 pairs¹³). The 13 Song Thrush territories recorded within the Survey Area in 2024 (associated with woodland and gardens) are therefore unlikely to exceed 1% of the Bedfordshire population.

HOUSE SPARROW

- 4.3.8. House sparrow is a Priority Species (listed on s41 of NERC⁶) and is BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). The species is described as a once abundant resident that is now in decline and very local in Bedfordshire, present throughout the year⁸. No population estimate for House Sparrow is available

¹⁶ Smith, K.W., Dee, C.W., Fearnside, J.D. and Illet, M. (2015) *Birds of Hertfordshire*. UK: Hertfordshire Natural History Society.

for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (20,000-50,000 pairs¹⁴) and Buckinghamshire (14,000 pairs¹³). The two territories recorded in the Survey Area (in houses along Manor Road) are therefore likely to represent a very small (<1%) proportion of the Bedfordshire population.

DUNNOCK

- 4.3.9. Dunnock is a Priority Species (listed on s41 of NERC⁶) and BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). The species is described as a very common resident in Bedfordshire, present throughout the year⁸. No population estimate for Dunnock is available for Bedfordshire though a population estimate is available for the adjoining county of Cambridgeshire (25,000-50,000 pairs¹⁴). The 34 Dunnock territories recorded within the Survey Area in 2024 (associated with scrub and hedgerows throughout the Site) are therefore unlikely to exceed 1% of the Bedfordshire population.

YELLOW WAGTAIL

- 4.3.10. Yellow Wagtail is a Priority Species (listed on s41 of NERC⁶) and is BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). Yellow Wagtail is described as a localised breeder and regular passage migrant in Bedfordshire⁸, typically present from early April to September. No population estimate for Yellow Wagtail is available for Bedfordshire. However, population estimates are available for the adjoining counties of Hertfordshire (100-300 territories¹⁶) and Buckinghamshire (200 pairs¹³). The Yellow Wagtail territories recorded within the Site in 2024 were located in an uncultivated field within the Lake Zone and an arable field bordering the West Gateway and Core Zones, respectively. Given that the extent of suitable habitat in Bedfordshire is more likely to be closer to that of Buckinghamshire rather than Cambridgeshire, with its extensive areas of fenland, the two pairs/territories of Yellow Wagtail are likely to represent more than 1% of the total in Bedfordshire.

BULLFINCH

- 4.3.11. Bullfinch is a Priority Species (listed on s41 of NERC⁶) and BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). The species is described as a widespread but thinly distributed species in Bedfordshire, present throughout the year⁸. No population estimate for Bullfinch is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (1,000-3,000 pairs¹⁴) and Buckinghamshire (4,000 pairs¹³). Given the continued decline of bullfinch in these counties, and likely in Bedfordshire too, the county total is likely to be well below these figures. However, the two territories recorded in the Survey Area (in scrub and hedgerows in the Lake and Core Zones respectively) are still likely to represent a small proportion (<1%) of the Bedfordshire population.

LINNET

- 4.3.12. Linnet is a Priority Species (listed on s41 of NERC⁶) and BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). The species is described as a locally common resident and summer visitor in Bedfordshire⁸ that is present throughout the year. No population estimate for Linnet is available for Bedfordshire though population estimates are available for the adjoining counties of Hertfordshire (2,000-5,000 territories¹⁶), Cambridgeshire (5,000-10,000 pairs¹⁴) and Buckinghamshire (2,000 pairs¹³). Given that the Linnet population in Bedfordshire is likely to be closer to that of Buckinghamshire and

Hertfordshire (than Cambridgeshire, with its more extensive areas of open farmland, scrub and hedgerows), the 17 territories recorded in the Survey Area (associated with the scrub and hedgerows) potentially represents more than 1% of the Bedfordshire population.

YELLOWHAMMER

- 4.3.13. Yellowhammer is a Priority Species (listed on s41 of NERC⁶) and BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). Yellowhammer is described as a widespread resident that has suffered from recent declines in Bedfordshire⁸, that is present throughout the year. No population estimate for Yellowhammer is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (5,000-10,000 pairs¹⁴) and Buckinghamshire (9,000 pairs¹³). The eight territories recorded in the Survey Area (associated with scrub and hedgerows) are therefore likely to represent a very small proportion (<1%) of the Bedfordshire population.

REED BUNTING

- 4.3.14. Reed Bunting is a Priority Species (listed on s41 of NERC⁶) and BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). The species is described as a fairly common resident that is showing signs of recovery after earlier declines in Bedfordshire⁸ and is present throughout the year. No population estimate for Reed Bunting is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (3,000-10,000 pairs¹⁴) and Buckinghamshire (1,300 pairs¹³). The four territories recorded in the Survey Area (primarily in waterside reeds and scrub in the Lake Zone) are therefore likely to represent a very small proportion (<1%) of the Bedfordshire population.

4.4 BIRDS OF CONSERVATION CONCERN - RED LISTED SPECIES

- 4.4.1. A total of 12 species on the Birds of Conservation Concern (BoCC) Red List (Pochard, Grey Partridge, Turtle Dove, Cuckoo, Skylark, Grasshopper Warbler, Nightingale, House Sparrow, Yellow Wagtail, Greenfinch, Linnet and Yellowhammer); of which Pochard, Nightingale and Greenfinch are not Priority Species in NERC⁶.

POCHARD

- 4.4.2. Pochard is BoCC Red listed, primarily due to a severe decline in the UK wintering population (>50% over the past 25 years⁷). The numbers of breeding Pochard in the UK has fluctuating between 600-800 pairs during 2010-2019 (RBBP, 2021¹⁷). Pochard is described as a numerous winter visitor that has bred in Bedfordshire, with one pair confirmed to have bred and birds present at another four sites during the breeding season in 2020⁸. Two pairs were present in the county in 2019 (RBBP, 2021). Between 1946-1987, Pochard bred in the county in 22 (of the 42) years, with the species preferring freshwater lakes surrounded by dense vegetation¹⁸. In most years, only 1-2 pairs were present, though a peak count of 10 pairs bred in the county in 1959, including two pairs at nearby Stewartby Lake¹².

¹⁷ RBBP (2021). Rare Breeding Birds in the UK in 2019, Mark Eaton and the Rare Breeding Birds Panel. British Birds 114, November 2021: 646-704

¹⁸ Harding, B.D. (1979) *Bedfordshire bird atlas: An atlas of breeding birds in the county of Bedford from 1968 to 1977*. UK: Bedfordshire Natural History Society.

- 4.4.3. A pair of Pochard were seen on a lake in the Lake Zone on 7 May, followed by four (fully grown/fledged) birds (a possible family group) in the same area on 19 June; indicating that breeding may have occurred within the Site in 2024. A single breeding pair would likely represent a substantial proportion (>25%) of the county population in any year.

NIGHTINGALE

- 4.4.4. Nightingale is BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). The species is described as a scarce and declining summer visitor in Bedfordshire, with a total of 24 territory-holding (singing) birds reported from 16 sites in the county in 2020⁸. The first birds are usually reported in the county in early to mid-April and sing until early June, after which they are extremely difficult to locate due to their secretive behaviour. The two territories recorded within the Survey area in 2024 (in hedgerows and dense scrub), clearly represent a substantial proportion of the Bedfordshire (county) total.

GREENFINCH

- 4.4.5. Greenfinch is BoCC Red listed due to a severe, long-term decline in the UK breeding population (>50% over the past 25 years⁷). The species is described as a common but declining resident in Bedfordshire⁸. No population estimate for Greenfinch is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (5,000-20,000 pairs¹⁴) and Buckinghamshire (9,000 pairs¹³). The nine territories recorded in the Survey Area (in scrub) are therefore likely to represent a very small proportion (<1%) of the Bedfordshire population.

4.5 BIRDS OF CONSERVATION CONCERN – AMBER LISTED SPECIES

- 4.5.1. A total of 13 species on the Birds of Conservation Concern (BoCC) Amber List: Mallard, Moorhen, Stock Dove, Woodpigeon, Willow Warbler, Sedge Warbler, Whitethroat, Wren, Song Thrush, Dunnock, Meadow Pipit, Bullfinch and Reed Bunting (those in bold are also Priority Species in NERC⁶).

MALLARD

- 4.5.2. Mallard is BoCC Amber listed due to a moderate decline in the wintering population in the UK (25-50% decline over the past 25 years⁷). Mallard is described as a common but declining resident in Bedfordshire⁸. No population estimate for Mallard is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (2,500-6,000 pairs¹⁴) and Buckinghamshire (6,000 pairs¹³). The single pair of Mallard recorded breeding within the Survey Area in 2024 is therefore likely to represent a very small proportion (<1%) of the total in Bedfordshire.

MOORHEN

- 4.5.3. Moorhen is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). The species is described as a common and widespread resident in Bedfordshire⁸. No population estimate for Moorhen is available for Bedfordshire. However, a population estimate is available for the adjoining county of Buckinghamshire (300 pairs¹³). The single pair of Moorhen recorded within the Site in 2024 is therefore likely to represent a very small proportion (<1%) of the Bedfordshire (county) total.

STOCK DOVE

- 4.5.4. Stock dove is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). Stock Dove is described as a widespread resident in Bedfordshire⁸. No population estimate for Stock Dove is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (2,000-4,000 pairs¹⁴) and Buckinghamshire (4,000 pairs¹³). The single pair/territory of stock dove recorded within the Survey Area in 2024 is therefore likely to represent a very small proportion (<1%) of the total in Bedfordshire.

WOODPIGEON

- 4.5.5. Woodpigeon is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). The species is described as a very common resident and winter visitor in Bedfordshire⁸. No population estimate for Woodpigeon is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (100,000-200,000 pairs¹⁴) and Buckinghamshire (100,000 pairs¹³).
- 4.5.6. Woodpigeon can nest in any month of the year (but primarily from March-October), and the male birds sing (call) infrequently throughout the long breeding season. The 26 pairs/territories of Woodpigeon recorded within the Survey Area in 2024 are therefore likely to be an under-estimate of the true population on-Site. However, the population on-Site is still likely to represent a very small proportion (<1%) of the total in Bedfordshire.

WILLOW WARBLER

- 4.5.7. Willow Warbler is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). Willow Warbler is described as a widespread but declining summer visitor in Bedfordshire⁸. No population estimate for Willow Warbler is available for Bedfordshire. However, population estimates are available for the adjoining counties of Hertfordshire (<1,000 territories¹⁶), Cambridgeshire (1,500-3,000 pairs¹⁴) and Buckinghamshire (6,000 pairs¹³). Results from the BTO/JNCC/RSPB Breeding Bird Survey indicate that the Willow Warbler population in England has declined by 22% between 2012-2022 and by 87% in the East of England Region from 1995-2022¹⁹. In view of this and that only 189 Willow Warbler territories were recorded in Cambridgeshire in 2022, the nine territories recorded within the Survey Area in 2024 (associated with scrub) are likely to exceed 1% of the Bedfordshire population.

SEDGE WARBLER

- 4.5.8. Sedge warbler is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). Sedge Warbler is described as a locally common summer visitor in Bedfordshire, primarily present in the county from April to August/September⁸. No population estimate for Sedge Warbler is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (3,000-5,000 pairs¹⁴) and Buckinghamshire (1,600 pairs¹³). The 11 Sedge Warbler territories recorded within the Survey Area

¹⁹ Heywood, J.J.N., Massimino, D., Balmer, D.E., Kelly, L., Marion, S., Noble, D.G., Pearce-Higgins, J.W., White, D.M., Woodcock, P., Wotton, S. and Gillings, S. (2024) *The Breeding Bird Survey 2023. BTO Research Report 765*. Thetford: British Trust for Ornithology. Available at: https://www.bto.org/sites/default/files/bto_jncc_rspb_breeding_bird_survey_report_2023.pdf [Accessed: 28 April 2025].

in 2024 (primarily in the reed-fringed waterbodies within the Lake Zone) are therefore likely to represent less than 1% of the Bedfordshire population.

WHITETHROAT

- 4.5.9. Whitethroat is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). The species is described as a common summer visitor in Bedfordshire, typically present in the county from mid-April to September⁸. No population estimate for Whitethroat is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (9,000-12,000 pairs¹⁴) and Buckinghamshire (13,000 pairs¹³). The 32 Whitethroat territories recorded within the Survey Area in 2024 (associated with scrub and hedgerows) are therefore unlikely to exceed 1% of the Bedfordshire population.

WREN

- 4.5.10. Wren is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). Wren is described as a very common resident in Bedfordshire, present throughout the year⁸. No population estimate for Wren is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (50,000-100,000 pairs¹⁴) and Buckinghamshire (40,000 pairs¹³). The 54 Wren territories recorded within the Survey Area in 2024 (primarily associated with scrub, woodland and hedgerows) are therefore unlikely to exceed 1% of the Bedfordshire population.

MEADOW PIPIT

- 4.5.11. Meadow pipit is BoCC Amber listed due to a moderate, long-term decline in the UK breeding population (25-50% over the past 25 years⁷). Meadow Pipit is described as a common migrant but local breeder in Bedfordshire⁸. No population estimate for Meadow Pipit is available for Bedfordshire. However, population estimates are available for the adjoining counties of Cambridgeshire (400-1,000 pairs¹⁴) and Buckinghamshire (200 pairs¹³). The one pair/territory of Meadow Pipit recorded within the Lake Zone (in the uncultivated field in the north) is therefore likely to represent a relatively small proportion (<1%) of the total in Bedfordshire.

4.6 OTHER SPECIES OF CONSERVATION VALUE

In addition, the populations of Mute Swan, Tufted Duck, Great Crested Grebe, Coot, Reed Warbler, Garden Warbler and Lesser Whitethroat (all currently BoCC5, Green listed) were recorded in numbers that may exceed 1% of their respective county (Bedfordshire) populations, the details of which are discussed as follows:

MUTE SWAN

- 4.6.1. Mute Swan is described as a common resident in Bedfordshire⁸. There is no recent population estimate for Mute Swan in Bedfordshire though population estimates are available for the adjoining counties of Hertfordshire (80-100 pairs¹⁶), and Buckinghamshire (100 pairs¹³). The three pairs recorded within the Survey Area in 2024 will therefore likely represent more than 1% of the Bedfordshire total.

TUFTED DUCK

- 4.6.2. Tufted Duck is described as a numerous winter visitor and regular breeder in Bedfordshire⁸. A total of 21 pairs were reported in the county in 1987¹². There is no recent population estimate for Tufted

Duck in Bedfordshire though population estimates are available for the adjoining counties of Cambridgeshire (200-500 pairs¹⁴) and Buckinghamshire (200 pairs¹³). The single pair recorded within the Survey Area in 2024 will therefore likely represent less than 1% of the Bedfordshire total.

GREAT CRESTED GREBE

- 4.6.3. Great Crested Grebe is described as a relatively common breeder and more numerous winter visitor in Bedfordshire, with breeding reported from 18 sites in the county, involving multiple pairs at many of these locations⁸. There is no recent population estimate for Great Crested Grebe in Bedfordshire, though estimates are available for the adjoining counties of Cambridgeshire (150-300 pairs¹⁴) and Buckinghamshire (300 pairs¹³). The five pairs recorded within the Survey Area in 2024 will therefore likely represent more than 1% of the Bedfordshire total.

COOT

- 4.6.4. Coot is described as a common breeder and very common winter visitor in Bedfordshire⁸, present in the county throughout the year. There are no recent population estimates for Coot in Bedfordshire, though estimates are available for the adjoining counties of Hertfordshire (390-1,300 pairs¹⁶), Cambridgeshire (1,000-2,000 pairs¹⁴) and Buckinghamshire (550 pairs¹³). In addition, results from the BTO/JNCC/RSPB Breeding Bird Survey indicate that the population of Coot in England has declined by 25% between 2012-2022 and by 29% in the East of England Region from 1995-2022¹⁹. The eight pairs recorded within the Survey Area in 2024 therefore have the potential to represent more than 1% of the Bedfordshire total.

REED WARBLER

- 4.6.5. Reed Warbler is described as a locally common summer visitor in Bedfordshire, primarily present in the county from mid-April to August/September⁸. There are no recent population estimates for Reed Warbler in Bedfordshire, though estimates are available for the adjoining counties of Hertfordshire (120-240 pairs¹⁶) and Buckinghamshire (250 pairs¹³). The 14 territories recorded within the Survey Area in 2024 will therefore likely represent more than 1% of the Bedfordshire total.

GARDEN WARBLER

- 4.6.6. Garden Warbler is described as a fairly common summer visitor in Bedfordshire, primarily present in the county from late-April to August/September⁸. There are no recent population estimates for Garden Warbler in Bedfordshire, though estimates are available for the adjoining counties of Hertfordshire (1,200-2,000 pairs¹⁶), Cambridgeshire (500-1,000 pairs¹⁴) and Buckinghamshire (2,000 pairs¹³). In addition, results from the BTO/JNCC/RSPB Breeding Bird Survey indicate that the Garden Warbler population in England has declined by 19% between 2012-2022 and by 31% in the East of England Region from 1995-2022¹⁹. The eight territories recorded within the Survey Area in 2024 therefore have the potential to represent more than 1% of the Bedfordshire total.

LESSER WHITETHROAT

- 4.6.7. Lesser Whitethroat is described as a fairly common summer visitor in Bedfordshire, primarily present in the county from mid-April to September⁸. There are no recent population estimates for Lesser Whitethroat in Bedfordshire, though estimates are available for the adjoining counties of Cambridgeshire (1,000-2,000 pairs¹⁴) and Buckinghamshire (1,500 pairs¹³). The nine territories recorded within the Survey Area in 2024 are therefore likely to represent less than 1% of the Bedfordshire total.

5 CONCLUSION

- 5.1.1. Results from the breeding bird survey undertaken in 2024 indicate that the Site supports a diverse range of bird species that are typical of the habitats present (scrub, hedgerows, farmland, deciduous woodland and reed-fringed gravel pits). The highest densities of territories were located in the areas of scrub, reeds and woodland.
- 5.1.2. It is acknowledged that the surveys for the 2024 breeding bird survey started late (in early May) and that the early part of the breeding season was not surveyed. However, no additional species were recorded holding territory within the Site during an additional breeding bird survey visit undertaken in March 2025. There are no areas of mature deciduous woodland on-site that might support early nesting, resident species, typical of this habitat (such as nuthatch *Sitta Europaea* or lesser spotted woodpecker *Dryobates minor*). As such, it is therefore considered that the results from the 2024 survey remain valid and provide a robust/near complete picture of the breeding bird community on-site
- 5.1.3. One species listed on Schedule 1 of the *Wildlife and Countryside Act 1981*⁵ (as amended) was recorded breeding (Cetti's Warbler) and Little Ringed Plover potentially nested within the Site. The populations of both species within the Site will represent more than 1% of their respective Bedfordshire (county) populations. Potentially suitable habitat is likely to be present within or close to the Site for other Schedule 1 species, including Barn Owl, Red Kite, Hobby and Kingfisher.
- 5.1.4. A total of 28 notable bird species of conservation value (as defined in Section 2.3) were recorded breeding/holding territory within the Survey Area in 2024. Of these, the populations of Nightingale (two pairs/territories), Pochard (one pair) and Turtle Dove (one pair) within the Site will form substantial proportions (>10%) of their respective county populations. In addition, the on-site populations of Grasshopper Warbler (one pair), Cuckoo (three pairs), Yellow Wagtail (two territories) and Linnet (17 pairs/territories) are likely to exceed 1% of their county totals.
- 5.1.5. A further five (non-notable) species were recorded breeding within the Site in numbers that potentially exceed 1% of their respective Bedfordshire totals (for Mute Swan, Great Crested Grebe, Reed Warbler, Coot and Garden Warbler).
- 5.1.6. In view of this, the Site clearly supports important assemblages of breeding birds, primarily associated with the scrub and wetland habitats present.

Annex 1

SPECIES NAME

_____ **wsp**

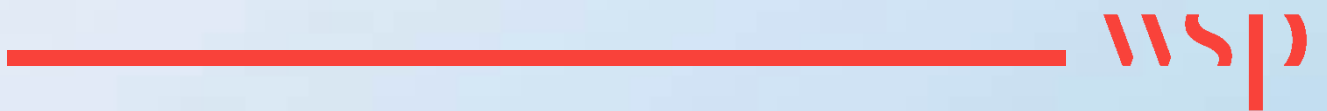
BTO Species Code	Species Name (English Vernacular)	Species Name (Scientific)
B.	Blackbird	<i>Turdus merula</i>
BC	Blackcap	<i>Sylvia atricapilla</i>
BH	Black-headed gull	<i>Chroicocephalus ridibundus</i>
BT	Blue tit	<i>Cyanistes caeruleus</i>
BZ	Buzzard	<i>Buteo buteo</i>
C.	Carrion crow	<i>Corvus corone</i>
CW	Cetti's warbler	<i>Cettia cetti</i>
CH	Chaffinch	<i>Fringilla coelebs</i>
CC	Chiffchaff	<i>Phylloscopus collybita</i>
CD	Collared dove	<i>Streptopelia decaocto</i>
CO	Coot	<i>Fulica atra</i>
CB	Corn bunting	<i>Emberiza calandra</i>
CK	Cuckoo	<i>Cuculus canorus</i>
D.	Dunnock	<i>Prunella modularis</i>
FP	Feral pigeon	<i>Columba livia</i>
GN	Goldeneye	<i>Bucephala clangula</i>
GO	Goldfinch	<i>Carduelis carduelis</i>
GG	Great crested grebe	<i>Podiceps cristatus</i>
GS	Great spotted woodpecker	<i>Dendrocopos major</i>
GT	Great tit	<i>Parus major</i>
G.	Green woodpecker	<i>Picus viridis</i>
GR	Greenfinch	<i>Chloris chloris</i>
H.	Grey heron	<i>Ardea cinerea</i>
HG	Herring gull	<i>Larus argentatus</i>
HY	Hobby	<i>Falco subbuteo</i>
HM	House martin	<i>Delichon urbicum</i>

BTO Species Code	Species Name (English Vernacular)	Species Name (Scientific)
HS	House sparrow	<i>Passer domesticus</i>
JD	Jackdaw	<i>Coloeus monedula</i>
J.	Jay	<i>Garrulus glandarius</i>
K.	Kestrel	<i>Falco tinnunculus</i>
L.	Lapwing	<i>Vanellus vanellus</i>
LW	Lesser whitethroat	<i>Curruca curruca</i>
LI	Linnet	<i>Linaria cannabina</i>
ET	Little egret	<i>Egretta garzetta</i>
LT	Long-tailed tit	<i>Aegithalos caudatus</i>
MG	Magpie	<i>Pica pica</i>
MA	Mallard	<i>Anas platyrhynchos</i>
MP	Meadow pipit	<i>Anthus pratensis</i>
MU	Mediterranean gull	<i>Ichthyaetus melanocephalus</i>
MH	Moorhen	<i>Gallinula chloropus</i>
PE	Peregrine	<i>Falco peregrinus</i>
PH	Pheasant	<i>Phasianus colchicus</i>
PW	Pied wagtail	<i>Motacilla alba</i>
PO	Pochard	<i>Aythya ferina</i>
RL	Red-legged partridge	<i>Alectoris rufa</i>
RW	Reed warbler	<i>Acrocephalus scirpaceus</i>
RI	Ring-necked parakeet	<i>Psittacula krameri</i>
R.	Robin	<i>Erithacus rubecula</i>
RO	Rook	<i>Corvus frugilegus</i>
SM	Sand martin	<i>Riparia riparia</i>
SW	Sedge warbler	<i>Acrocephalus schoenobaenus</i>
SU	Shelduck	<i>Tadorna tadorna</i>

BTO Species Code	Species Name (English Vernacular)	Species Name (Scientific)
SV	Shoveler	<i>Spatula clypeata</i>
S.	Skylark	<i>Alauda arvensis</i>
ST	Song thrush	<i>Turdus philomelos</i>
SH	Sparrowhawk	<i>Accipiter nisus</i>
SG	Starling	<i>Sturnus vulgaris</i>
SD	Stock dove	<i>Columba oenas</i>
SL	Swallow	<i>Hirundo rustica</i>
SI	Swift	<i>Apus apus</i>
TU	Tufted duck	<i>Aythya fuligula</i>
WH	Whitethroat	<i>Curruca communis</i>
WP	Woodpigeon	<i>Columba palumbus</i>
WR	Wren	<i>Troglodytes troglodytes</i>
YW	Yellow wagtail	<i>Motacilla flava</i>

Annex 2

RELEVANT LEGISLATION & POLICY



THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017 (HABITAT REGULATIONS)

- 5.1.7. The Habitat Regulations²⁰ Part 1 Regulation 10 (2) and (3) state that local authorities “*must take such steps in the exercise of their functions as they consider appropriate to contribute to...the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the UK including by means of the upkeep, management and creation of such habitat...*”. The legislation continues to state that economic and recreation requirements must be taken into consideration in considering which measures are appropriate.

WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

- 5.1.8. Under the *Wildlife and Countryside Act 1981*⁵ (as amended) all wild birds are protected from killing and injury, and their nests and eggs protected from taking, damage and destruction whilst in use.
- 5.1.9. Additional protection is extended to species listed under Schedule 1 of the Act⁵, meaning it is also an offence to disturb these species at or near the nest, or whilst they have dependent young during breeding the season.

NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

- 5.1.10. The *NERC Act 2006*⁶ reinforces the duty upon all public authorities, including planning authorities, to have regard for the conservation of biodiversity when discharging their duties. The Act refines the definition of biodiversity conservation, stating that it includes restoring or enhancing a population or habitat. Section 41 of the *NERC Act* requires the Secretary of State to list Habitats and Species of Principal Importance (HPis and SPis) for the conservation of biodiversity in England. The habitats and species listed in accordance with Section 41 largely replicate those listed on the UK Biodiversity Action Plan (BAP) which occur in England (however there are exceptions).

BIRDS OF CONSERVATION CONCERN 5

- 5.1.11. The UK’s leading bird conservation organisations reviewed the most up to date information on the status of birds in the UK and elsewhere in their range to produce the third review of the status of birds which occur regularly in the UK. This is presented as *The status of our bird populations: the fifth Birds of Conservation Concern (BoCC) in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*⁷. The review comprised a ‘red list’ of species of high conservation concern, an ‘amber’ list of species of moderate conservation concern, with other species that do not qualify under red or amber list criteria on the green list.
- 5.1.12. To qualify on the red list species may be listed as globally threatened by IUCN, have suffered a historical decline without substantial recent recovery, or a decline of more than 50% in breeding or non-breeding populations, or a 50% contraction in breeding range over 25 years (or the longer term). Amber list species can be those listed as Species of European Conservation Concern, those which have suffered a historical decline but shown significant recent recovery, have shown a decline of between 25 and 50% in breeding or non-breeding populations, or a contraction in breeding range of between 25 and 50% over 25 years (or the longer term) or be rare or localised breeders in the UK, or be species for which 20% of the breeding or non-breeding population is found in the UK.

²⁰ *The Conservation of Habitats and Species Regulations 2017*. (as amended from time to time)

- 5.1.13. Red or amber listing does not confer additional protection under legislation or planning policy, however it provides a basis for informing evaluation of a site and for targeting conservation effort and is a widely used resource for interpreting bird populations.

Annex 3

SURVEY VISIT DETAILS

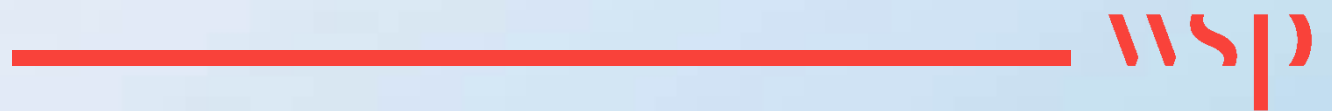


Table 1 - Breeding Bird Survey, Visit Details

Visit No.	Date	Times	Cloud cover (of 8)	Wind direction	Wind strength (Beaufort Scale)	Precipitation	Visibility	Temperature range (Celsius)
1	27-Mar-24	06:40-11:00	6	S	1-3	None	Very good (3km+)	6-10
2	25-Apr-24	07:00-11:30	6	W	2	None	Very good (3km+)	4-11
2	26-Apr-24	06:30-11:30	6-8	E	1-2	None	Very good (3km+)	4-10
3	08-May-24	06:00-11:00	6-8	W	1-2	None	Good (2-3km)	10-13
4	23-May-24	06:00-10:30	8	NW	3-4	None	Very good (3km+)	15-16
5	31-May-24	07:00-11:00	8	NW	3-4	Occasional light drizzle	Good (2-3km)	12
6	17-Jun-24	06:00-10:30	1-4	SW	2-3	None	Very good (3km+)	14-21

Annex 4

FIGURES





N

Site Boundary

Core Zone

East Gateway Zone

Lake Zone

West Gateway Zone

0250500

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 1 - Site Location

Drawing No:

Figure 1

Date:

14/05/2025

Scale:

15,000 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB



N

0

100

200

Metres

Site boundary

Survey area

Coot

Great crested grebe

Mallard

Moorhen

Mute swan

Pochard

Tufted duck

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2ai - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Site boundary

Survey area

Coot

Great crested grebe

Mallard

Mute swan

0100200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2ai - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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- Site boundary
- Survey area
- Cuckoo
- Little ringed plover
- Woodpigeon

0 100 200
Metres



Client:	Universal Destinations & Experiences		
Project:	Universal Destinations & Experiences UK Project		
Title	Figure 2bii - Location of territories of notable species		
Drawing No:	Figure 2	Drawn:	SS
Date:	14/05/2025	Checked:	CM
Scale:	7,500 @ A3	Approved:	SB



Site boundary

Survey area

Cuckoo

Grey partridge

Little ringed plover

Stock dove

Turtle dove

Woodpigeon

0100200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2bii - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM


Approved:

SB

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Site boundary

Survey area


Cetti's warbler

Skylark

Willow warbler

0100200

Metres



Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title:

Figure 2ci - Location of territories
of notable species

Drawing No: Figure 2

Date: 14/05/2025

Scale: 7,500 @ A3

Drawn: SS

Checked: CM

Approved: SB



 Site boundary
 Survey area
 Cetti's warbler
 Skylark
 Willow warbler

0 100 200
Metres



Client:

Universal Destinations & Experiences

Project:

Project:

Universal Destinations & Experiences
UK Project

No.	Title	Date	Page
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
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26
27
28
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30
31
32
33
34
35
36

Figure 2ci - Location of territories of notable species

Drawing No: **Figure 2**
Date: **14/05/2025**
Scale: **7,500 @ A3**

Drawn: SS
Checked: CM
Approved: SB



Site boundary

Survey area

Grasshopper warbler

Reed warbler

Sedge warbler

N

0

100

200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2di - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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 Site boundary
 Survey area
 Reed warbler
 Sedge warbler

0 100 200
Metres



Client:

Universal Destinations & Experiences

Project:

Project:

Universal Destinations & Experiences
UK Project

No.	Title	Author	Date	Place
1	The Great Gatsby	F. Scott Fitzgerald	1925	New York
2	The Catcher in the Rye	J.D. Salinger	1951	New York
3	The Sound and the Fury	William Faulkner	1929	New York
4	The Waste Land	T.S. Eliot	1922	New York
5	The Sun Also Rises	Ernest Hemingway	1926	New York
6	The Grapes of Wrath	John Steinbeck	1939	New York
7	The Old Man and the Sea	Ernest Hemingway	1952	New York
8	The Great American Novel	Various Authors	1950s	New York
9	The American Dream	Various Authors	1950s	New York
10	The American Dream	Various Authors	1950s	New York

Figure 2di - Location of territories of notable species

Drawing No: **Figure 2**
Date: **14/05/2025**
Scale: **7,500 @ A3**

Drawn: SS
Checked: CM
Approved: SB

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Site boundary

Survey area

Garden warbler

Whitethroat

Wren

N

0

100

200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2ei - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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Site boundary

Survey area

Garden warbler

Whitethroat

Wren

N

0

100

200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2ei - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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N

Site boundary

Survey area

Dunnock

House sparrow

Nightingale

Song thrush

0100200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2fii - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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Site boundary

Survey area

Dunnock

House sparrow

Nightingale

Song thrush

0100200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2fii - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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Site boundary

Survey area

Bullfinch

Greenfinch

Linnet

Meadow pipit

Reed bunting

Yellow wagtail

Yellowhammer

N

0

100

200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2gi - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

SB

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Site boundary

Survey area

Bullfinch

Greenfinch

Linnet

Reed bunting

Yellow wagtail

Yellowhammer

N

0

100

200

Metres

wsp

Client:

Universal Destinations & Experiences

Project:

Universal Destinations & Experiences
UK Project

Title

Figure 2gi - Location of territories
of notable species

Drawing No:

Figure 2

Date:

14/05/2025

Scale:

7,500 @ A3

Drawn:

SS

Checked:

CM

Approved:

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