HITHER GREEN GOLF COURSE HITHER GREEN LANE, REDDITCH

WINTER BIRD SURVEY

A Report to: Barratt David Wilson Homes Mercia

Report No: RT-MME-153160-07

Date: May 2022



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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

Report Version	Date	Completed by:	Checked and Approved by:
Final	25/05/2022	Laura Grove (Field Ecologist) and Carol Flaxman BSc (Hons) ACIEEM (Principal Ecological Consultant)	Tim Hextell MCIEEM (Principal Technical Ecological Consultant)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

Barratt David Wilson Homes Mercia commissioned Middlemarch Environmental Ltd to undertake Winter Bird Surveys of a site at Hither Green Golf Course in Redditch, Worcestershire. The survey was completed to determine the existing value of the site for wintering bird species. This assessment is required to inform a planning application associated with the proposed construction of residential dwellings with associated hard and soft landscaping.

This report assesses the suitability of the site for wintering birds and presents the findings of Winter Bird Surveys undertaken by an experienced field ornithologist undertaken in November and December 2021, January, February and March 2022.

A total of 36 bird species were recorded using the habitats on site, and key survey findings are summarised in Table A.

Total number of Species recorded	36 species			
Species of Principal Importance	6 (bullfinch, dunnock, herring gull, song thrush, starling and			
England	yellowhammer)			
RSPB Red Listed Species	8 (fieldfare, herring gull, house sparrow, mistle thrush, redwing, song			
	thrush, starling and yellowhammer)			
RSPB Amber Listed Species	4 (black-headed gull, bullfinch, dunnock, and stock dove)			
Local BAP Species	1 (song thrush)			

Table A: Summary of Winter Bird Survey Findings - Hither Green Golf Course, Redditch

Overall, it is considered that the survey area is of low value to wintering bird species, with a fair variety of bird species recorded, the majority of which are considered to be common, widespread generalist species. A range of birds of conservation were noted. The majority of species were recorded in low numbers with many species noted associated with hedgerow and scrub habitats.

The development of Hither Green Golf Course, Redditch site will lead to some permanent loss of habitat together with changes in land use in other areas which will negatively impact those species associated with these habitat types. However, the proposals do include creation of some areas of wildlife/biodiversity habitat. It is considered that although there will be temporary disturbance to habitats whilst development takes place, in the long term, and providing created habitats/retained features are appropriately managed, there should not be any overly detrimental impacts on the majority of bird species recorded during the winter surveys.

It is recommended that a range of measures are implemented as part of the proposed development in order to continue to provide habitats and features suitable to support a range of wintering bird species. Therefore, to minimise potential adverse impacts on wintering/passage bird species, the following recommendations are made:

- R1 The boundary features on site should be retained and appropriately managed in order to ensure that the site continues to support a wide range of wintering bird species. The retained habitats should be protected and undisturbed during the construction phase.
- R2 Biodiversity enhancement measures, including planting of native species and creation of new ponds, should be incorporated into landscaping proposals, as detailed in Preliminary Ecological Appraisal (RT-MME-152753-03-Rev A). Once the landscape proposals are finalised a Landscape and Environment Management Plan should be prepared detailing how the retained and created habitats will be managed in the long-term.
- R3 Should works not have commenced on site by October 2023, it is recommended that an updated Winter Bird Survey be undertaken in order to assess any changes in the status of winter birds on site.

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

Barratt David Wilson Homes Mercia commissioned Middlemarch Environmental Ltd to undertake a Winter Bird Survey at Hither Green Golf Course in Redditch, Worcestershire. This assessment is required to inform a planning application associated with the proposed construction of residential dwellings with associated hard and soft landscaping.

Middlemarch Environmental Ltd has previously carried out the following surveys for Barratt David Wilson Homes Mercia at this site:

- Preliminary Arboricultural Assessment (Report RT-MME-152753-01);
- Arboricultural Impact Assessment (Report RT-MME-152753-02); and,
- Preliminary Ecological Appraisal (Report RT-MME-152753-03 Rev A).

In addition, Middlemarch Environmental Ltd has been commissioned to undertake the following assessments:

- Preliminary Bat Roost Assessment (Report RT-MME-153160-01);
- Badger Survey (Report RT-MME-153160-02);
- Great Crested Newt Habitat Suitability Index Assessment and eDNA Survey (Report RT-MME-153160-03);
- Breeding Birds Survey (Report RT-MME-153160-04);
- Reptile Survey (Report RT-MME-153160-05); and,
- Construction Ecological Management Plan (Report RT-MME-153160-06).

This report provides an assessment of the findings of the wintering bird survey undertaken for the site and is based on five survey visits undertaken in November and December 2021, and January, February, and March 2022.

This report identifies the bird species and numbers that were recorded using the site and provides discussion and evaluation of the ornithological value of the site in terms of identifying important areas/habitats on site for feeding and roosting and Species of Conservation Concern. The report also provides an evaluation of the site in a County and regional context.

1.2 SITE DESCRIPTION

The site under consideration is an irregularly shaped parcel of land that measures approximately 10 ha in size and is located at Hither Green Golf Course in Redditch, Worcestershire. The site is centred at National Grid Reference SP 0437 6937.

At the time of the survey, the eastern half of the site comprised part of a golf course with areas of plantation woodland. The western section of the site mainly consisted of open unmanaged grassland with hedges, scattered trees, and scrub. A large pond was situated towards the northern site boundary and there were four smaller ponds which formed part of the golf course.

The site is bordered to the north by Dagnell End Road and to the east by Hither Green Lane. Residential houses and a continuation of the golf course border the site to the east and fields of grassland, residential dwellings and a public house are present to the north and west. The River Arrow corridor is present to the south of the site with fields of grassland, a cemetery, and residential dwellings beyond. The wider landscape to the north, east and west is dominated by agricultural fields and small residential areas. Redditch town centre dominates the landscape to the south.

2. METHODOLOGIES

2.1 DESK STUDY

As part of the Preliminary Ecological Appraisal (Report RT-MME-152753-03 Rev A) an ecological desk study was undertaken. The consultee for the desk study was Worcestershire Biological Records Centre.

Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations. Relevant bird data are discussed in Chapter 3. In compliance with the terms and conditions relating to its commercial use, the full desk study data are not provided within this report.

2.2 FIELDWORK

The objective of the field survey was to identify important species or habitats that are present on the site and in what numbers, both in terms of number of species and quantities of individual birds present, and the areas that they favour. Particular attention was paid to the presence of birds of Conservation Concern (species that are listed as either red or amber by the Royal Society for the Protection of Birds) and those listed as UK Species of Principal Importance and as priority species on the Local Biodiversity Action Plan.

Counts of passage and wintering birds were carried out on five occasions in November and December 2021, and January, February, and March 2022.

The passage and wintering bird survey comprised a walkover survey by an experienced field ornithologist in line with the method described by Hilden (1986, 1987), highlighted in 'Bird Census Techniques' (Bibby *et al*, 1992). The observer follows a defined route taking in all the major habitats on site, maintaining a slow, steady pace. The observer logs all birds and their activities both visually and by call. Care was taken not to log the same birds twice, although some duplication is inevitable due to the dynamic nature of bird Species. Survey visits generally lasted between three and four hours.

3. RESULTS

3.1 DESK STUDY

The desk study information obtained for a 1 km radius around the survey area from the Worcestershire Biological Records Centre (WBRC) contained three records of house sparrow, two records of reed bunting and a single record of kingfisher relating to a location at Bordesley Abbey from 2015. This site is approximately 440 m to the south of the Hither Green Golf Course survey area. No further records of bird species were provided by WBRC.

3.2 FIELD SURVEY

The surveys were undertaken by Mike Doughty-Lee (Ecological Field Manager and Specialist Ornithological Surveyor) and Laura Grove (Ecological Field Manager). The dates and weather conditions of the winter bird surveys are detailed in Table 3.1.

Date	Parameter							
	Temperature (°C)	Cloud (%)	Wind (Beaufort)	Precipitation				
26-Nov-21	26-Nov-21 7		F2	Showers				
17-Dec-21	8	100	F1	Nil				
27-Jan-22	10	90	F3	Nil				
09-Feb-22	09-Feb-22 9		F2	Showers				
11-Mar-22	9	70	F4	Nil				

Table 3.1: Dates and Weather Conditions of Winter Bird Surveys at Hither Green Golf Course

3.3 SURVEY CONSTRAINTS

No constraints were experienced during each survey.

3.4 SURVEY RESULTS

During the winter bird survey visits completed, a total of 36 species were recorded using the site. Of these 36 species:

- Six species are listed as Priority Species (bullfinch, dunnock, herring gull, song thrush, starling, and vellowhammer).
- One species is listed as a Priority Species in the Worcestershire Biodiversity Action Plan (song thrush).
- Eight species identified on site are Red Listed by The Royal Society for the Protection of Birds (fieldfare, herring gull, house sparrow, mistle thrush, redwing, song thrush, starling, and yellowhammer).
- Four species are Amber Listed by The Royal Society for the Protection of Birds (black-headed gull, bullfinch, dunnock, and stock dove).

The species list and numbers of each bird species recorded at Hither Green Golf Course during the winter bird survey visits are presented in Table 3.2 which also highlights the conservation status of the species, i.e., whether they are locally or nationally important.

		Date					
Common Name	Scientific Name	26-11- 21	17-12- 21	27-01- 22	09-02- 22	11-03- 22	Status
Blackbird	Turdus merula	15	11	5	8	2	-
Black-headed gull	Chroicocephalus ridibundus	1	1	-	-	1	RSPB Amber
Blue tit	Cyanistes caeruleus	10	12	13	13	9	-
Bullfinch	Pyrrhula pyrrhula	1	3	2	2	1	UK SPI, RSPB Amber
Carrion crow	Corvus corone	2	1	4	1	-	-

Table 3.2: Winter Bird Survey Data, Hither Green Golf Course (continues)

		Date					
Common Name	Scientific Name	26-11- 21	17-12- 21	27-01- 22	09-02- 22	11-03- 22	Status
Canada goose	Branta canadensis	-	20	10	-	1	-
Chaffinch	haffinch Fringilla coelebs		1	-	3	3	-
Chiffchaff	Phylloscopus		-	-	-	1	-
Coal tit	Periparus ater	-	-	-	1		-
Common buzzard	Buteo buteo	-	-	1	-	1	-
Dunnock	Prunella modularis	5	3	-	6	3	UK SPI, RSPB Amber
Fieldfare	Turdus pilaris	1	1	-	50	40	RSPB Red
Goldcrest	Regulus regulus	2	3	1	2	1	-
Goldfinch	Carduelis carduelis	1	2	-	-	2	-
Great spotted woodpecker	Dendrocopos major	2	-	-	1	1	-
Great tit	Parus major	6	7	6	8	5	-
Green woodpecker	Picus viridis	1	1	-	-	-	-
Greenfinch	Chloris chloris	1	-	1	5	-	-
Herring gull	Larus argentatus	1	1	2	-	-	UK SPI, RSPB Red
House sparrow	Passer domesticus	1	-	-	-	-	RSPB Red
Jackdaw	Corvus monedula	-	1	7	3	10	-
Jay	Garrulus glandarius	3	2	-	-	-	-
Long-tailed tit	Aegithalos caudatus	-	-	9	7	4	-
Magpie	Pica pica	-	9	2	8	3	-
Mistle thrush	Turdus viscivorus	-	2	-	1	-	RSPB Red
Moorhen	Gallinula chloropus	-	1	-	2	2	-
Nuthatch	Sitta europaea	2	1	-	2	-	-
Pied wagtail	Motacilla alba	-	1	-	-	-	-
Redwing	Turdus iliacus	-	21	-	50	1	RSPB Red
Robin			8	3	7	8	-
Song thrush	Turdus philomelos	2	-	-	5	1	UK SPI, Local BAP, RSPB Red
Starling	Sturnus vulgaris	-	3	-	-	5	UK SPI, RSPB Red
Stock dove Columba oenas		-	7	-	1	-	RSPB Amber
Wood pigeon	Wood pigeon Columba palumbus		4	1	5	7	-
Wren Troglodytes troglodytes		2	4	3	4	9	-
Yellowhammer Emberiza citrinella		-	-	-	-	1	UK SPI, RSPB Red

Key:

RSPB Red Species: included on RSPB Red List of Conservation Concern (see below)

RSPB Amber Species: included on RSPB Amber List of Conservation Concern (see below)

UK SPI: UK Species of Principal Importance

Local BAP: Worcestershire Biodiversity Action Plan Priority Species

Notes for RSPB Red-listing Criteria

Species that meet any of the following criteria are red listed (Continues):

IÚCN: Global Conservation Status. Species listed by Birdlife International as being Globally Threatened using IUCN criteria.

HD: Historic Decline. A severe decline in the UK between 1800-1995, without substantial recent recovery.

BDp: Breeding Population Decline. Severe decline in the UK breeding population size, of more than 50% over the last 25years (BDp¹) or the entire period used for assessments since the first BoCC review, starting in 1969 ("longer term") (BDp²).

WDp: Non-breeding Population Decline. Severe decline in the UK non-breeding population size, of more than 50%, over 25 years (WDp¹) or the longer term (WDp²).

Table 3.2 (continued): Winter Bird Survey Data, Hither Green Golf Course (continues)

Key (Continued):

Notes for RSPB Red-listing Criteria

Species that meet any of the following criteria are red listed (Continued):

BDr: Breeding Range Decline. Severe decline in the UK range, of more than 50%, as measured by number of 10 km squares occupied by breeding birds, over 25 years (BDr¹) or the longer term (BDr²).

Notes for RSPB Amber List Criteria

Species that meet any of the following criteria, but none of the red listed criteria, are amber listed:

SPEC: European Conservation Status. Categorised as a Species of European Conservation Concern (SPEC 1, 2 or 3).

Hdrec: Historic Decline – Recovery. Red listed for Historical Decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years).

BDMp: Breeding population Decline. As for red list criteria BDp¹ and BDp² but with moderate decline (by more than 25% but less than 50%).

WDMp: Non-breeding population Decline. As for red list criteria WDp¹ and WDp², but with moderate decline (by more than 25% but less than 50%).

BDMr: Breeding Range Decline. As for red list criteria BDr¹ and BDr² but with moderate decline (by more than 25% but less than 50%).

BR and **WR** rarity. UK breeding population of less than 300 pairs (BR), or non-breeding population of less than 900 individuals (WR).

BL and WL Localisation. At least 50% of the UK breeding (BL) or non-breeding (WL) population found in 10 or fewer sites.

BI and **WI** International Importance. At least 20% of the European breeding (BI) or non-breeding (WI) population found in the UK.

Table 3.2 (Continued): Winter Bird Survey Data, Hither Green Golf Course

4. DISCUSSION

4.1 SUMMARY OF DESKTOP STUDY FINDINGS

Relatively limited desk study information was obtained for the Hither Green golf course study area from the local biological records centre within only kingfisher, reed bunting and house sparrow noted.

Records provided contained a single record of kingfisher located at least 350 m south-east. Kingfisher may potentially utilise the River Arrow located adjacent to the site and may also utilise the small onsite ponds for feeding over the winter period. The River Arrow also offers a potentially rich winter-feeding area and commuting corridor for other species.

Reed bunting is a bird of marshland and reedbeds, though increasingly utilising farmland habitats such as hedgerows and cereal crops and will also use garden habitats in the winter months. The favourable wetland habitats are absent from the survey area, however, residential gardens are adjacent to the site.

Habitat for house sparrow tends to vary from urban habitats to farmland and the habitats within and adjacent to the site provide opportunities for this species.

4.2 FIELD SURVEY FINDINGS

During the winter bird surveys, a total of 36 species of bird were recorded on the site and are generally considered to be common and widespread generalist species capable of occupying a wide range of habitats.

The five winter bird visits undertaken during 2021-2022 indicate the site to be of low interest for wintering birds with few noticeable concentrations of feeding or roosting species. No particularly important or valuable areas for wintering birds were identified within the survey area, although the western field (not used by the golf course) and perimeter areas of dense scrub, and hedgerow tended to possess the greatest bird interest both in terms of numbers and diversity of species. An area in the north-east corner of the site, dominated by scrub and the greenkeepers shed, also yielded good numbers and a range of species.

Typical woodland species recorded during the survey include great spotted woodpecker, green woodpecker, nuthatch, winter thrushes and wood pigeon. Blue tit and blackbird were the most frequently encountered species in wooded areas on site and hedgerows, with low/moderate numbers of both species recorded. The majority of woodland species recorded on site are of limited conservation concern with the exception of song thrush. Song thrush have experienced a decline in numbers in recent years as a result of habitat loss, and as such is a species of conservation concern in both a national and local context. These detections were made on the eastern boundary of the site, in the plantation woodland that backs on to ornamental gardens, and the southern corner within dense scrub.

A single yellowhammer was also recorded in March 2022 within the western grassland field. Yellowhammer is still a fairly widespread species in the West Midlands region where suitable farmland habitat occurs but is highly influenced by the presence of a good supply of seeds (such as that provided by overwintering stubbles or seed-rich field margins, both of which are declining) and suitable hedgerows/scrub for roosting purposes. This species was recorded on a single survey date and the survey area lacked suitable arable farmland foraging habitat to attract this species in larger numbers.

A further species closely associated with farmland habitats and recorded on site during the winter surveys was stock dove. This amber listed species is generally associated with farmland and parkland habitats and can occur in large congregations when suitable feeding conditions allow. It is not uncommon within the West Midlands region. They may forage in parkland with a mosaic of habitats similar to that which is present at Hither Green Golf Course, however they show a preference for arable land with stubble in the winter months. This is a species that was recorded in low numbers, and the surrounding farmland habitats are considered to offer more suitable winter habitat.

A passerine species which favours scrub habitat and mature hedgerows but which can also occur in a variety of additional habitats including mature gardens and suburban fringe habitats is bullfinch. This species of principal importance and amber listed species of conservation concern was recorded on all five survey visits (peak count three in December 2021). This is not an uncommon species in the West Midlands region and the habitats within, and adjacent to, the survey area are considered to be suitable to support this species i.e. a good hedgerow network with linear scrub and adjacent areas of broad-leaved woodland. Numbers of birds

encountered at most sites are never particularly high and most field encounters are of one or two birds with birds generally being sedentary and staying together in pairs. This species is never likely to be numerous within the survey area. It can be rather shy and elusive and generally avoids areas of high human usage.

Dunnock is a ubiquitous but often overlooked species, which occupies a wide variety of habitat types, including those in urban and suburban areas. Peak count during the survey visits was six in February. Maintaining a good hedgerow and scrub network is important for this species, and it is considered that the proposed development is likely to offer suitable habitat given the proposals for greenspace and the fact that they will take readily to gardens as long as hedgerows and shrubs are planted.

One to two mistle thrushes were recorded on two of the survey visits. This is still a reasonably common and resident breeding species in the region. Birds are generally found within open woodland, parkland and suburban areas, particularly where there is a mixture of berry-bearing trees and short open grassland, which provide a rich foraging resource. The survey area and its immediate environs are considered to provide reasonably suitable habitat for this red listed species of conservation concern.

Very small numbers of starlings were recorded on two of the survey visits. This is a species that tends to favour areas of short-grazed pasture for foraging during the winter period, although it is often recorded in urban and suburban areas where it will exploit a range of feeding opportunities. The survey area is considered to provide some suitable habitat for this species with the wider area also considered to provide extensive areas of suitable starling habitat, a bird that is also, like many species, undergoing significant declines in the West Midlands region.

The most numerous passerine species recorded was during the survey visits was blue tit, with a peak count of 13 birds made during the January and February 2022 survey visits. This species occurred around the whole perimeter of the site boundary. A peak count of 8 great tit was recorded in the same habitat during the February 2022 survey visit. Other passerines found to be using the same habitat included robin, wren, long-tailed tit, chaffinch and greenfinch.

With regard to other passerine species, the site was found to support moderate numbers of winter thrushes, with a peak count of 50 fieldfares and redwing made in February 2022. No migratory thrush species were recorded on site during November 2021 or January 2022, however the increased number of blackbirds recorded on site during the November 2021 visit (peak count of 15 birds) is likely to be a consequence of an influx of continental birds. Fieldfare and redwing are both red listed species of conservation concern (although this designation is related to it scarcity as a breeding species in the UK, where a handful of birds breed primarily in northern Scotland). Both species are common autumn and winter migrants to the UK and occur in a wide variety of habitat types, although are often found on areas of open grassland where they are able to forage for soil invertebrates. They will also exploit berry crops in suitable hedgerows. The hedgerows and scrub, scattered across the site, and within the adjacent vicinity, provide potential foraging areas and valuable roosting locations. Both species are rather erratic in their appearances and in some years may not be recorded in any numbers within a given area. Both species are likely to continue to occur on site throughout the winter post-development. However, birds are highly influenced in their occurrences by a variety of factors including weather and habitat types. The survey area is considered to offer suitable feeding areas e.g. berry-laden hedges and grassland, whilst the hedgerows and woodland also provide potential roosting locations. Birds will frequently utilize residential areas, particularly in hard weather and where suitable berry-bearing bushes occur and will also utilize garden feeding stations.

Moorhen were recorded on three of the survey visits on the larger pond to the north of the site. Occasionally overflying the site were both black-headed gulls and herring gulls recorded in small numbers. Though birds of conservation concern, numbers recorded were very small and it is considered that habitats surrounding the survey area offer better quality habitat for feeding purposes. In terms of winter roosting, these gull species require large, open waterbodies which does not occur on, or adjacent to, the survey area.

In terms of raptors, one species was recorded during the survey visits, common buzzard. Recorded in January and March, this is a possible indication that the site forms part of a territory that is likely to be inhabited year-round. Buzzards are common and widespread and are not unexpected given the size of the study area and habitat present. The wider area provides equally suitable winter habitat for common buzzard.

4.3 POTENTIAL IMPACTS ON WINTERING / PASSAGE BIRDS FROM PROPOSED DEVELOPMENT

It is understood that the site is the subject of a planning application associated with the construction of residential dwellings and associated hard and soft landscaping. Potential impacts on breeding birds during the construction and operational phases of the development are considered below.

Construction Phase Impacts

The construction phase of the proposed development will result in the clearance of the hedgerow in the centre of the site as well as the four smaller ponds of standing water; the larger pond in the north of the site will be retained. The loss of ponds is likely to impact waterbirds such as Canada goose and moorhen, however, other suitable aquatic habitats are present in the wider area. It is also anticipated that much of the grassland as well as some areas of dense scrub and local pockets of plantation woodland will be removed. It is understood under current proposals that the majority of the plantation woodland along the eastern site boundary and semi-natural woodland in the south of the site are to be retained, however if these plans alter then appropriate mitigation and compensation measures will need to be implemented. The loss of scrub and woodland will remove habitat for species associated with these habitat types and lead to loss of foraging and roosting areas for many common passerines.

The current survey has identified that the vast majority of wintering birds on site are associated with the hedgerow network, made up of the field boundary features, dense scrub and the central hedgerow. The retention and protection of the majority of these features is likely to ensure that potential foraging areas for some species will remain as well as potential roosting areas for species such as thrushes and finches.

Overall, the proposals are likely to lead to a removal of habitat and therefore disturbance of the majority of species. However, alternative suitable habitats are present in the local area including the wider retained golf course and farmland with boundary hedgerows allowing these species recorded on site to disperse into the surrounding areas.

Operational Phase Impacts

It is understood that once the proposed construction activities are complete and the houses are inhabited, there is likely to be more disturbance to bird species, particularly from homeowners walking dogs and the likely ownership of cats. As a result of this, there is unlikely to be a significant change in the status of species which are more tolerant to people, such as blackbird, robin and tit species, potentially at the expense of more woodland and scrub specialist species, such as, bullfinch, jay, nuthatch, green and great spotted woodpeckers.

During the operational phase of the development, it is considered that appropriate habitat management will be important to ensure that habitats continue to be of the greatest possible value to wintering birds, with landscaping aiming to provide a range of habitats to appeal to a broad range of bird species. Of particular importance is the maintenance of a woodland/scrub/coarse grass ecotone, as many of the species recorded on site will utilize 'edge' habitats. The pond in the north of the site will also be retained and the creation of replacement ponds and associated aquatic habitats should be considered during the design of the final landscape proposals. Post-development management of the retained and created habitats on site will ensure that habitats remain suitable for wintering birds in the long-term, as recommended in Chapter 6.

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5. CONCLUSIONS

During the winter bird survey visits, a total of 36 species were recorded using the site. Of these 36 species:

- Six species are listed as Priority Species (bullfinch, dunnock, herring gull, song thrush, starling, and yellowhammer).
- One species is listed as a Priority Species in the Worcestershire Biodiversity Action Plan (song thrush).
- Eight species identified on site are Red Listed by The Royal Society for the Protection of Birds (fieldfare, herring gull, house sparrow, mistle thrush, redwing, song thrush, starling, and yellowhammer).
- Four species are Amber Listed by The Royal Society for the Protection of Birds (black-headed gull, bullfinch, dunnock, and stock dove).

In general, numbers of individual birds recorded on each visit were deemed to be low and birds were thinly dispersed across site, with few notable concentrations (the exception being of 50 redwing and fieldfare recorded during the February 2022 survey). The dense scrub and hedgerow are considered to be of some importance for roosting passerine species and provide a wildlife corridor.

The data acquired during the survey visits indicates that the site experiences little fluctuation in levels of use by birds during throughout the winter period. Some small changes are to be expected as birds move around to take advantage of various foraging resources throughout the winter, however the diversity of species and numbers of individual birds remained broadly constant during all of the survey visits.

In conclusion, although the wintering bird survey visits recorded a number of species of importance i.e. species listed on the National Local Biodiversity Action Plans and Red/Amber Listed Species, it is considered that the site is of low value for wintering birds, the majority of which are considered to be common, widespread and generalist species.

Development of the Hither Green golf course, Redditch site will lead to some permanent loss of habitat together with changes in land use in other areas. However, the proposals do include creation of some areas of wildlife/biodiversity habitat. It is considered that although there will be temporary disturbance to habitats whilst development takes place, in the long term, and providing created habitats/retained features are appropriately managed, there should not be any overly detrimental impacts on the majority of bird species recorded during the winter surveys. A series of recommendations are provided in Chapter 6.

6. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

In order to minimise potential adverse impacts on wintering bird species, the following recommendations are made:

- R1 The boundary features on site should be retained and appropriately managed in order to ensure that the site continues to support a wide range of wintering bird species. The retained habitats should be protected and undisturbed during the construction phase.
- R2 Biodiversity enhancement measures, including planting of native species and creation of new ponds, should be incorporated into landscaping proposals, as detailed in Preliminary Ecological Appraisal (RT-MME-152753-03-Rev A). Once the landscape proposals are finalised a Landscape and Environment Management Plan should be prepared detailing how the retained and created habitats will be managed in the long-term.
- R3 Should works not have commenced on site by October 2023, it is recommended that an updated Winter Bird Survey be undertaken in order to assess any changes in the status of winter birds on site.

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