Ecology

Appendix 7.12 Breeding Bird Survey

Legislation and Conservation Status

A7.1 All birds are protected under the provisions of the Wildlife and Countryside Act (WCA) 1981 (as amended). Some receive additional species protection under Schedule 1 of the Act.

A7.2 Several bird species are listed as Species of Principal Importance (SoPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

A7.3 Reference is made to Birds of Conservation Concern (BOCC) compiled by Royal Society for the Protection of Birds (RSPB)/British Trust for Ornithology (BTO). All breeding and wintering bird species in the UK, Channel Islands and the Isle of Man have been assigned to one of three groups (Red, Amber or Green) based on their conservation status. Each group is defined as follows:

- RED List species are those that are globally threatened according to the International Union for Conservation of Nature (IUCN) criteria; those whose population or range has declined rapidly (≥ 50%) in recent years; and those that have declined historically and not shown a substantial recent recovery;
- AMBER List species are those with an unfavourable conservation status in Europe, those whose population or range has declined moderately (25%-49%) in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations; and
- The remaining species are placed on the GREEN List, indicating that they are of low conservation priority, although population sizes should be monitored.

Previous Records

A7.4 A search of local biological records was undertaken by North Wales Environmental Information Service (COFNOD) returning a large number of bird species in the surrounding area, which are expected given the habitats present. The majority were common urban/suburban species, with records of Schedule 1 species also returned. No evidence of such Schedule 1 species were noted within the Site during the surveys completed, however, some habitat does exist for nesting Hobby *Falco Subbuteo* amongst the mature trees.

A7.5 The Site has been surveyed for the species group several times over the past decade and the findings have remained largely the same in terms of recorded numbers and overall suitability.

Survey Methodology

Breeding Bird Survey

A7.6 A total of four Breeding Bird Surveys were completed within the Site, staring in May 2021 and finishing in June 2021; with two surveys per month undertaken by suitably qualified ecologists experienced in undertaking bird surveys. The method used was based on a territory mapping

methodology in accordance with published guidance (Bibby et al 2000, Gilbert et al 1998). The survey details are presented in **Table A7.12.1** below.

Table A7.12.1: Breeding Bird Survey Details

Visit	Date	Time	Weather	Surveyors
1	12/05/2021	06:15 – 08:00	Wind: Beaufort Scale (BFS) 0, cloud: 10%, precipitation: none, temperature 5-7°C	Joseph Dance Nick Bell
2	28/05/2021	06:00 – 08:45	Wind: BFS 1, cloud: 50%, precipitation: none, temperature 2°C	Richard Castell
3	15/06/2021	05.45 – 08:00	Wind: BFS 0, cloud: 10%, precipitation: none; temperature: 10°C	Joseph Dance
4	21/06/2021	06:00 – 08:30	Wind: BFS 2, cloud 75%, precipitation: none; temperature: 11-14°C	Richard Castell

A7.7 The survey visits were conducted during the period between one hour after sunrise and approximately 09:00, as this is considered to be the best time to record bird breeding activity. The identity and activity of all birds, either seen or heard, were recorded on maps of a suitable scale.

A7.8 Although the same survey route was used during all visits, the starting point and survey direction were alternated during each survey so that all areas were covered at varied times after sunrise to ensure even coverage during the peak period of bird activity.

A7.9 On each survey, bird activity likely to indicate breeding was recorded on a map. Species were noted using the standard British Trust for Ornithology (BTO) codes. Behaviour considered likely to indicate breeding included: singing, display flights, mating and courtship displays, nesting, carrying of nesting material and birds showing fidelity to a particular patch of ground or vegetation. An aggregation of two or more sightings of a species was taken to be an indication that breeding was likely. Also, if specific behaviours (such as the gathering of nest material, copulations, adults carrying food or recently fledged young) were observed, this was also taken to indicate breeding.

A7.10 'Confirmed' breeding status was attributed to those species where active nests and/or chicks were recorded; 'Probable' breeding status was attributed to those species that were regularly recorded within the Site in proximity to suitable nesting habitat but with insufficient data to confirm breeding. 'Possible' breeding status was attributed to those species that were recorded within the Site and with a general lack of suitable nesting habitat present within the Site.

A7.11 Over-flying birds such as corvids, woodpigeons and black-headed gulls were not recorded.

A7.12 The results of each visit were then transcribed onto a summary map in order to identify species showing fidelity to areas of habitat over several Site visits.

A7.13 The conservation status of the birds observed was ascertained through consultation of national, regional and local bird reports.

Survey Limitations

A7.14 An April survey visit was not possible so an extra survey visit between May and June was undertaken (typically only three survey visits are required between April and June for territory mapping purposes). Given the generally low ornithological interest recorded within the Site, and using worst-case assumptions regarding species which may have been missed, this is not expected to have altered the conclusions made in this report.

Survey Results and Summary

A7.15 **Table A7.12.2** below summarises the results of the bird surveys completed within the Site in relation to species encountered, breeding status, likely number of territories and distribution within the Site. The results are also presented on Plan 13539/P03 at **Appendix 7.13.**

Table A7.12.2: Breeding Bird Survey Results

Species	Conservation Status[1]	Site Breeding Status	No. Territories	Summary
Lapwing *Vanellus vanellus*	Red List	Probable breeder	Up to three	This species was confined to the south-eastern arable fields within the Site, with a maximum count of six birds on a single survey visit (first may visit). No active nests were observed, but behaviour indicative of nesting (adults attacking corvids and fake feeding/injury feigning) was noted. The number of birds recorded decreased throughout the surveys, with no birds recorded on the final survey visit. The peak of activity (i.e. mid-May) is consistent with early season (i.e. April) breeding attempts before the adults and their young disperse once mature enough.
Song Thrush *Turdus philomelos*	Amber List	Probable breeder	Up to three	At least two territories of this species, confirmed by singing males or repeated observations, were noted in the central tree and hedgerow line which follows the public footpath in the north of the Site. A further territory was suspected in the woodland in the centre of the playing fields (confirmed by a singing male at the same time as another bird alarm calling), but this was only recorded on the last survey visit. No conclusive evidence of breeding was noted.
House Sparrow *Passer domesticus*	Red List	Non-breeder	None	Although the Site itself offers no potential breeding habitat for this species, this species was regularly recorded foraging and 'loafing' in boundary hedgerows within the Site adjacent to residential estates. The most regular occurrences were noted in the far south-western hedgerow adjacent to Cefn Road, the hedgerow between the Site and the farmstead to the south, and the far north-western hedgerow. Limited activity was noted in the central tree and hedgerow line which follows the public footpath within the Site.
Starling *Sturnus vulgaris*	Red List	Non-breeder	None	Although no evidence of breeding activity was recorded within the Site , it was evident that adult birds used the Site for foraging and collecting food to return to young off-site in the residential estate. On the final survey visit, up to 50 birds (a

[1] Birds of Conservation Concern 5 -RSPB/BTO – December 2021

Species	Conservation Status[1]	Site Breeding Status	No. Territories	Summary
				combination of adults and juveniles) were recorded foraging in the playing fields in the west of the Site. Prior to this, all fields in the west of the Site (principally the playing fields) were noted to support foraging adults who were then observed flying off-site (with food in some instances) to the adjacent residential estates.
Hirundines: Swallow *Hirundo rustica*, Swift *Apus apus* and House Martin *Delichon urbicum*	House martin and swift-Red List	Non-breeders	None	No nesting habitat for these species was recorded within the Site. All of these species were regularly recorded foraging within the Site, however, and it is likely they nest in the adjacent farm complex and residential estate and use the Site for foraging only.
Dunnock *Prunella modularis*	Amber List	Probable breeder	Unknown (Up to 10)	Many birds were recorded singing within the Site in association with internal and boundary hedgerows, with a maximum count of 10 individual singing males recorded on the final June visit. This could indicate the presence of 10 breeding territories within the Site but due to the breeding ecology and behaviour of this species, it cannot be confirmed. At least five territories are considered to be present based on the aggregation of sightings and singing males in similar locations across visits. These were restricted to the central area of the Site in the hedgerow and scrub belt which separates the playing fields from arable land to the south, and between the Site and the farmstead to the south. No conclusive evidence of breeding was recorded within the Site.
Whitethroat *Sylvia communis*	Amber List	Probable breeder	Three	A maximum number of seven males were recorded singing on the first visit in May but this subsequently decreased to aggregations of singing males and sightings in three locations, indicating three territories. It is suspected that the birds singing in May were still establishing territories and subsequently dispersed. The areas where the territories were recorded were along the central tree/hedge line and within scrub between the Site and the farmstead to the south.
Little owl *Athene noctua*	Green List	Confirmed breeder	One	A little owl nest was recorded within a mature oak tree in the centre of the playing fields in the west of the Site.

Species	Conservation Status[1]	Site Breeding Status	No. Territories	Summary
Reed bunting *Emberiza schoeniclus*	Amber List	Non-breeder	None	A single bird was noted to fly through the Site and the Site generally offers no suitable breeding habitat for this species.
Herring gull *Larus argentatus*	Red List	Non-breeder	None	Although the Site offers no suitable habitat for breeding attempts for this species, a number of birds were regularly recorded foraging and resting in the arable and playing fields within the Site, at a maximum count of 34 birds on the first May visit.
Lesser black-backed gull *Larus fuscus*	Amber List	Non-breeder	None	Although the Site offers no suitable habitat for breeding attempts for this species, a number of birds were regularly recorded foraging and resting in the arable and playing fields within the Site, at a maximum count of 15 birds on the second May visit.
Greenfinch *Cardeulis chloris*	Red List	Possible breeder	None	A single bird was heard calling within the Site on one occasion but the Site and adjacent residential estates do provide some suitable habitat for nesting attempts.
General	Green/Amber List	See individual species list	N/A	A number of other common/widespread urban/suburban green list species were recorded within the Site and treated as probable breeders given the presence of suitable habitat or observing confirmed breeding behaviour (i.e. adults with young), or either noted as foragers/passing through. These species were: • Magpie *Pica pica* (possible) • Chiff chaff *Phylloscopus collybita* (probable) • Carrion crow *Corvus corone* (possible) • Wren *Troglodytes troglodytes* (probable) • Wood pigeon *Columba palmubus* (probable) • Blue tit *Cyanistes caeruleus* (probable) • Great tit *Parus major* (probable) • Blackbird *Turdus merula* (confirmed) • Robin *Erithacus rubecula* (probable) • Rook *Cornus frugilegus* (possible) • Blackcap *Sylvia atricapilla* (probable) • Chaffinch *Fringilla coelebs* (probable) • Goldfinch *Cardeulis cardeulis* (probable) • Moorhen *Gallinula chloropus* (possible) • Mallard *Anas platyrhynchos* (possible) • Jackdaw *Corvus monedula* (possible) • Stock dove *Columba oenas* (possible)

A7.16 It is considered that the principal ornithological value of the Site for nesting is within the boundary vegetation comprising hedgerow and scrubby margins, which were noted to

support probable breeding from a number of birds of conservation concern and other 'green list' species. The central woodland copse within the Site was also noted to support a wide range of both amber and green list species. The arable fields also provide value for two or three pairs of breeding lapwing, which is the only red listed species with territories recorded on-site.

A7.17 Whilst the playing fields within the Site offer no suitable habitat for nesting, they are obviously important in maintaining bird populations locally for those species which utilise such grassland for foraging and rearing young, principally starling and thrushes.