
Kronospan North Axis Road

on behalf of Axis PED

Environmental Statement

Appendix 7.2: Breeding Bird Survey Report



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1 INTRODUCTION

1.1 Project Background

- 1.1.1 This appendix has been prepared to accompany ES Chapter 7.0: Biodiversity and Nature Conservation'
- 1.1.2 It presents detailed methodologies and results of desk and field studies undertaken to establish baseline breeding bird conditions and inform the design and assessment of the Proposed Development.
- 1.1.3 Only common bird species names are referred to within the main text of this Appendix. **Annex 1** provides a summary of all bird species recorded during the surveys. Both common and species names together with a summary of their conservation status as relevant is provided.

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 Records on existing ornithological features were obtained from Cofnod, the local environmental record centre for North Wales within 2km of the Application Site boundary.

2.2 Breeding Bird Survey

- 2.2.1 A breeding bird survey was undertaken in the spring/summer of 2022.
- 2.2.2 The study area comprised the Application Site, including adjoining habitats to the Application Site (for example hedgerows and tree-lines along Application Site boundaries).
- 2.2.3 The methodology employed was based upon an amended version of the British Trust for Ornithology (BTO) Common Bird Census (CBC) technique, as detailed in Gilbert *et al.* (1998¹) and comprised three staggered survey visits between April and May.
- 2.2.4 All survey visits were undertaken between approximately 06.00hrs and completed by 10.45hrs in conditions suitable for survey (avoiding heavy rain and strong winds). Detailed survey effort is presented in **Table 7.2.1**.
- 2.2.5 During survey all bird registrations were recorded on suitably scaled field maps using standard BTO species codes and behaviour notations (such as singing, carrying food, active nest). The approximate locations of bird territories within the Application Site were determined using standard territory mapping techniques to identify and isolate areas within which birds consistently displayed breeding behaviours (following Gilbert *et al.* 1998).
- 2.2.6 Observations of birds just visiting the Application Site (e.g. non-breeding gulls feeding in fields) and birds flying over the Application Site were also made.
- 2.2.7 Survey visits were undertaken by Z. Hinchcliffe (ZH) and P. Baker (PB), both experienced and competent ornithologists.

¹ Gilbert, G., Gibbons, D.W & Evans, J. (1998) *Bird monitoring methods*. A manual of techniques for key UK species. RSPB.

Table 7.2.1: Breeding bird survey effort.

Date	Surveyor	Start time (24hrs)	End time (24hrs)	Sunrise times (24hrs)	Survey conditions
08/04/2022	PB	09:00	10:45	06:31	Light north westerly wind, slightly overcast with good visibility and no rain.
27/04/2022	ZH	06:20	07:40	05:49	Light north easterly wind, clear sky with good visibility and no rain
24/05/2022	ZH	06:25	08:30	05:03	Light north westerly wind, slightly overcast with good visibility and no rain.

Limitations

2.2.8 No limitations to survey were experienced.

3 RESULTS

3.1 Existing Ornithological Records

3.1.1 A total of 341 recent records of birds were provided by Cofnod comprised of 73 species. Of these, eight species are listed on Schedule 1 of the Wildlife and Countryside Act. These include barn owl *Tyto alba*, brambling *Fringilla montifringilla*, crossbill *Loxia curvirostra*, fieldfare *Turdus pilaris*, kingfisher *Alcedo atthis*, osprey *Pandion haliaetus*, red kite and redwing *Turdus iliacus*. No bird records were returned within the Application Site itself.

3.1.2 Twelve Red List species and nine Amber List species were returned in the data search, as well as 14 species listed under Section 7 of the Environment (Wales) Act 2016.

3.2 Breeding Bird Survey

3.2.1 For the purposes of this appendix Notable Species are defined as Birds of Conservation Concern (BoCC Amber and Red List Species (Stanbury *et al.* 2021²) and Annex 1/Schedule 1 raptors and owls.

3.2.2 The breeding bird assemblage recorded within the Application Site is typical of lowland farmland habitats. Five breeding Notable Species were recorded breeding within the Application Site, consisting of four Amber List species (wood pigeon, whitethroat, wren and dunnock), and one Red List species (greenfinch). Of these, one species (dunnock) is listed as rare and most threatened species under Section 7 (S7) of the Environment (Wales) Act (2016).

3.2.3 The number of breeding territories of these species were typically low (≤ 2 territories), with the exception of wren (up to 6 territories).

3.2.4 The Notable Species breeding assemblage was typically associated with field boundary vegetation and woodland within the Application Site.

² Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747. Available online at <https://britishbirds.co.uk/content/status-our-bird-populations>.

- 3.2.5 All breeding species recorded along with an estimated number of territories are detailed within **Table 7.2.2**. Those species in **bold** are considered Notable Species. The indicative locations of the territories of Notable Species are provided in **Figure 7.5**.

Table 7.2.2: Breeding bird survey results.

Common name	Estimated number of territories	Comments
Woodpigeon	1	Associated with woodland blocks within the Stie
Coal Tit	1	Associated with field boundary vegetation near Afon Bradley Farm
Blue Tit	3	Associated with field boundary vegetation
Great Tit	1	Associated with field boundary vegetation
Long-tailed Tit	2	Associated with field boundary vegetation
Chiffchaff	1	Associated with woodland areas
Whitethroat	1	Associated with field boundary vegetation
Wren	6	Associated with field boundary vegetation and woodland areas
Blackbird	3	Associated with field boundary vegetation
Robin	2	Associated with field boundary vegetation
Dunnock	1	Associated with field boundary vegetation
Chaffinch	2	Associated with field boundary vegetation
Greenfinch	2	Associated with field boundary vegetation
Goldfinch	1	Associated with field boundary vegetation

- 3.2.6 During the surveys a small number of species were recorded which were not considered as breeding within the Application Site. These consisted of species flying over the Application Site only (buzzard, mallard and mandarin duck) and those considered only visiting the Application Site to feed (pheasant, rook)³.

³ This was based on a number of factors including the number and gender of birds recorded (e.g. only one record of one female during the survey period), unsuitability of habitats onsite for breeding of some species, and movement of birds from the Application Site to a suspected nest site offsite.

ANNEX 1. BIRD SPECIES SUMMARY

Table A1-1 provides a list of bird species recorded during the breeding bird surveys. Both common and species names are presented along with a summary of each species conservation status using the following abbreviations:

- Annex 1 – species listed on Annex 1 of the EU Birds Directive as threatened;
- S1- species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended – species listed on this Schedule, but are provided more protection from harassment;
- Red/ Amber/ Green (GB) – Birds of Conservation Concern (BoCCs) as listed by leading bird conservation organisations in the UK, including the RSPB and BTO. Red and Amber categories are given (Stanbury *et al.*, 2021);
- Red/ Amber/ Green (Wales) - Red, Amber or Green listed on the Population Status of Birds in Wales list (Johnstone and Bladwell, 2016); and,
- EnvW S7 - species listed as rare and most threatened on the Environment (Wales) Act (2016).

Table A1-1: Summary of bird species.

Common name	Species name	Conservation status
Mallard	<i>Anas platyrhynchos</i>	Amber (GB, Wales)
Pheasant	<i>Phasianus colchicus</i>	Non-native
Woodpigeon	<i>Columba palumbus</i>	Amber (GB)
Collared Dove	<i>Streptopelia decaocto</i>	Green (GB)
Buzzard	<i>Buteo buteo</i>	Green (GB)
Great Spotted Woodpecker	<i>Dendrocopos major</i>	Green (GB)
Green Woodpecker	<i>Picus viridis</i>	Green (GB), Amber (Wales)
Magpie	<i>Pica pica</i>	Green (GB)
Jackdaw	<i>Coloeus monedula</i>	Green (GB)
Rook	<i>Corvus frugilegus</i>	Amber (GB)
Carrion Crow	<i>Corvus corone</i>	Green (GB)
Coal Tit	<i>Parus ater</i>	Green (GB)
Blue Tit	<i>Cyanistes caeruleus</i>	Green (GB)
Great Tit	<i>Parus major</i>	Green (GB)
Swallow	<i>Hirundo rustica</i>	Green (GB)
Long-tailed Tit	<i>Aegithalos caudatus</i>	Green (GB), Amber (Wales)
Willow Warbler	<i>Phylloscopus trochilus</i>	Amber (GB); Red (Wales)
Chiffchaff	<i>Phylloscopus collybita</i>	Green (GB)
Whitethroat	<i>Curruca communis</i>	Amber (GB), Red (Wales)
Wren	<i>Troglodytes troglodytes</i>	Amber (GB)
Starling	<i>Sturnus vulgaris</i>	Red (GB, Wales); Sec7
Song Thrush	<i>Turdus philomelos</i>	Amber (GB, Wales); Sec7
Blackbird	<i>Turdus merula</i>	Green (GB)
Robin	<i>Erithacus rubecula</i>	Green (GB)
House Sparrow	<i>Passer domesticus</i>	Red (GB); Amber (Wales); Sec7

Common name	Species name	Conservation status
Dunnock	<i>Prunella modularis</i>	Amber (GB); Sec7
Pied Wagtail	<i>Motacilla alba yarellii</i>	Amber (GB)
Chaffinch	<i>Fringilla coelebs</i>	Green (GB)
Greenfinch	<i>Chloris chloris</i>	Red (GB); Amber (Wales)
Goldfinch	<i>Carduelis carduelis</i>	Green (GB)

ANNEX 2: BREEDING BIRD SURVEY EFFORT

Date	Surveyor	Start Time (24 hrs)	End time (24 hrs)	Wind Speed	Wind Direction	Rain	Cloud Height	Cloud Cover	Visibility	Frost	Snow	Temperature (°C)
08/04/2022	PB	09:00	10:45	1	NNW	0	5/8	2	2	0	0	7
27/04/2022	ZH	06:20	07:40	1	ENE	0	1/8	2	2	0	0	4
24/05/2022	ZH	06:25	08:30	2	NW	0	3/8	2	2	0	0	8

Wind Speed		W-Direction	Rain		Cloud Cover		Cloud Height	
Calm	0	Use 16 point Compass	None	0	In eighths e.g.	3/8	<150m	0
Light air	1		Drizzle/Mist	1			150-500m	1
Light breeze	2	N	Light showers	2			>500m	2
Mod. breeze	4	NNE	Heavy rain	4				
Fresh breeze	5	NE						
Strong breeze	6	ENE						
Mod. gale	7	E	Visibility		Snow		Frost	
Fresh gale	8	Etc	Poor	0	None	0	None	0
Strong gale	9		< 1km	1	On site	1	Ground	1
Whole gale	10		>1km	2	High ground	2	All day	3
Storm	11							