

ORNITHOLOGY REPORT NINFIELD GREENER GRID PARK

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1 SUMMARY

This report has been produced for Statkraft UK LTD to support a planning application for a Greener Grid Park development on land adjacent to Ninfield Substation, East Sussex.

A three-visit Breeding Bird Survey was carried out in spring 2020 to quantify the breeding bird assemblage at the Site. A total of 24 bird species were recorded during the survey, including four species of conservation concern. Ten bird species showed evidence of confirmed or probable breeding within the BBS Area, with a further 11 species possibly breeding.

The habitats within the Development footprint consist almost exclusively of grassland with a short sward height, and are of limited value to birds. It is understood that all woodland, hedges and tall vegetation within or adjacent to the Site will be retained; therefore, subject to safeguarding measures to prevent potential harm to nesting birds, any adverse effects on ornithology interests at the Site are considered negligible.

Enhancement measures are proposed to improve nesting and foraging resources for birds and, as such, the development is expected to provide a long-term net gain for birds within the Site and immediate surrounds.



2 INTRODUCTION

Arcus Consultancy Services Limited (Arcus) was commissioned by Statkraft UK LTD to carry out a Breeding Bird Survey (BBS) at land south-west of Ninfield Substation, East Sussex (the Site); centred on National Grid Reference TQ 72239 11724.

This report is submitted as part of a planning application for a Greener Grid Park development at the Site and presents the ornithological baseline conditions and potential ecological impacts from the Development, taking into account relevant planning policy and legislation. The report provides an assessment of potential effects, with recommendations for any mitigation and/or enhancements required.

Given the small size of the Site, the habitats present, and the potential resources available in the context of the wider landscape, the Site is not expected to represent an important area for birds during the non-breeding season (approximately September–March); however, a desk-based assessment of likely non-breeding bird interest is included herein.

Further information on the Development is included in the Planning Design and Access Statement and suite of Planning Drawings submitted with the planning application.

2.1 Planning policy, legislation and guidance

Relevant legislation and policy discussed in the report are summarised in Appendix A.

English (British) vernacular and scientific names of bird species referred to in this report follow the British List maintained by the British Ornithologists' Union (BOU)¹, with a full list provided in Appendix B.

3 METHODS

3.1 Desk Study

A desk study was carried out as part of the Preliminary Ecological Appraisal (PEA)², and has been reviewed to identify any nearby sites or observations of ornithological significance.

Natural England's Multi Agency Geographic Information for the Countryside (MAGIC) website was consulted to obtain information about any local or national statutory designated sites such as Sites of Special Scientific Interest (SSSI) within 2 km of the Site. A search of National Site Network sites, such as Special Areas of Conservation (SAC) or Special Protection Areas (SPA), within 5 km of the Site was also undertaken. Only sites with ornithological designated features are presented here; all designated sites are provided in the PEA report.

Records of birds of conservation concern within 2 km of the Site were requested from Sussex Biodiversity Record Centre (SXBRC). These were filtered to species of conservation concern, recorded since 1st January 2011.

3.2 Field Surveys

A Breeding Bird Survey (BBS) was carried out in May and June 2020 within the BBS Area, which included all land within the red-line boundary and immediate surrounds.

The BBS followed a reduced version of the British Trust for Ornithology's (BTO) method for the Common Birds Census (CBC)³. The surveyor walked a route that passed within 50 m

¹ British Ornithologists' Union (2017) The British List: A Checklist of Birds of Britain (9th edition). *Ibis* 160, 190-240.

² Arcus (2021) Ninfield Greener Grid Park, Preliminary Ecological Appraisal [report]

³ Marchant, J. (1983) *Common Birds Census Instructions*. British Trust for Ornithology, Thetford.



of all points within the BBS Area recording and mapping all species encountered, including behavioural observations where applicable.

Three visits were carried out:

- Visit 1: 1st May 2020;
- Visit 2: 22nd May 2020; and
- Visit 3: 24th June 2020.

All surveys were carried out during the morning with each visit lasting for up to 1.5 hours. The weather during all survey visits was good, with light winds and no precipitation.

3.2.1 Data analysis

Data analysis focussed on identifying breeding territory locations of species of conservation concern, which included any bird species matching one or more of the following criteria:

- Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)¹⁰;
- Species listed on Annex I of the Birds Directive¹³;
- Species of Principal Importance listed on the NERC Act 2006¹²; and
- Red- and Amber-listed birds of conservation concern⁴.

To analyse the data, all registrations of these species were transferred from the field maps to produce 'species summary maps' from which the number and distribution of likely territories for each species could be determined based on location of individual observations and the birds' behaviour. The method was based on that described by Bibby (2000)⁵, with an element of professional judgement, and breeding status was based on criteria used by the BTO⁶ to interpret breeding evidence.

The likely breeding status of birds was categorised using the following criteria:

- Not Breeding: Birds observed flying over, or for birds observed in unsuitable breeding habitat.
- <u>Possible Breeding</u>: A species encountered in apparently suitable breeding habitat, or a bird exhibiting territorial behaviour (e.g. singing) on one occasion.
- <u>Probable Breeding</u>: A pair of birds encountered in apparently suitable breeding habitat, a bird exhibiting territorial behaviour (e.g. singing) in the same location on more than one visit, bird/s giving anxiety calls or showing agitated behaviour.
- <u>Confirmed Breeding</u>: Birds seen carrying food, visiting a nest site, or observations of recently fledged or dependant young observed in the vicinity of a likely nest site.

3.3 Survey Limitations

No survey visit was carried out during April 2020, potentially resulting in under-recording of some species that breed earlier in spring; however, given the habitats present within and surrounding the Site, no notable species of high numbers of birds are considered likely in this period. The mitigation recommended will protect nesting birds from harm during construction, and it is highly unlikely that any species recorded in April would change the proposed measures or overall conclusions of this assessment.

Despite the limitations identified, the survey results are considered to be an accurate reflection of the ornithology interest at the Site (see Section 5).

⁴ Eaton, M.A., Aebischer, N.J., Brown, A., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A., & Gregory, R.D. (2015) *Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man*. British Birds, 108: 708-746

⁵ Bibby, C.J., Burgess, N.D., Hill, D.A. and Mustoe, S.H. (2000) *Bird Census Techniques, 2nd edition*. Academic Press, London

⁶ https://www.bto.org/recording-breeding-evidence



4 RESULTS

4.1 Desk Study

4.1.1 Designated Sites

Several designated sites are present within the 2 km and 5 km search distances used for the Desk Study; however, none are designated for their bird interest. Further details of designated sites are available in the PEA Report².

4.1.2 Existing records

The desk study returned 159 relevant bird records. These comprised 33 species; however, no records were returned for the land within or immediately surrounding the BBS Area. The closest record provided was Yellowhammer recorded approximately 1.1 km away in 2011. Given the limitations of the records returned, including the distance and age of observations, they are not considered to be of practical use to this assessment and are not considered further.

4.2 Field Surveys

A total of 24 species were recorded during the BBS, including ten species either confirmed or probably breeding within the BBS Area. Of these, four were species of conservation concern (as defined in Section 3.2.1) including one that showed evidence of confirmed breeding (CB): mallard; one probably breeding (PrB): mistle thrush; and two possibly breeding (PoB): stock dove and song thrush.

The conservation designations of all species recorded are provided in Appendix B.

Table 4.1: Breeding status of bird species within the Site

Species	Territories / pairs*				_ Details		
Species	NB	РоВ	B PrB CB		Details		
Canada goose	1				Two birds flew west over the BBS Area.		
Mallard				1	A pair was observed with young ducklings on the pond in the south of the BBS Area.		
Pheasant	1				A pair of birds were observed foraging in the BBS Area in an area of habitat unsuitable for breeding.		
Moorhen				1	A pair was observed with dependant young on the pond in the south of the BBS Area.		
Stock dove		1			A single bird was present around farm buildings to the south of the BBS Area on one occasion.		
Woodpigeon	X	3	3		Observed during all survey visits in variable numbers, including pairs in adjacent woodland suitable for breeding.		
Great spotted woodpecker		1			A single bird recorded on one occasion in apparently suitable breeding habitat.		
Jay		1			A single bird recorded on one occasion in apparently suitable breeding habitat.		
Magpie	1	2	1		Recorded on all survey visits in low numbers.		
Jackdaw	Х	2			Flocks numbering up to 19 birds foraging within the BBS Area and observations of individuals in adjacent habitats.		



0	Territories / pairs*					
Species	NB	РоВ	oB PrB CB		- Details	
Carrion crow		2			Small numbers recorded on all survey visits, including individuals in suitable breeding habitat.	
Blue tit		4	1		A pair observed in suitable habitat with several individuals also recorded.	
Great tit		4			Individuals were recorded on all survey visits.	
Swallow	1				Two birds were recorded foraging in the BBS Area but no suitable breeding habitat is present.	
Long-tailed tit		1	1		A pair was recorded in the north of the BBS area, with another individual in the south.	
Blackcap		6			Singing males were recorded from six different locations across the three survey visits.	
Goldcrest		1			A singing male was present in the west of the BBS Area on one occasion.	
Wren		2	4		Singing males were recorded on all survey visits, with four consistently holding-territory.	
Blackbird		2	2		Singing males were recorded on all survey visits from boundary habitats.	
Song thrush		1			A singing male was recorded in the north of the BBS Area on one occasion.	
Mistle thrush			1		A pair were present in suitable breeding habitat, with likely the same birds seen individually nearby on other survey visits.	
Robin		3	2	1	Birds were recorded on all survey visits including singing males and a bird observed carrying food.	
Pied wagtail		1			One-two birds recorded foraging within the Site and may breed around nearby farm buildings.	
Chaffinch		1			A singing male was recorded on one occasion.	

^{*} NB = Not Breeding, PoB = Possible Breeding, PrB = Probable Breeding, PrB = PrB = PrB

5 DISCUSSION AND MITIGATION

5.1 Breeding season bird interest

The species recorded during the BBS are considered an accurate reflection of the bird interests at the Site, based on the geographic location and habitats present.

The bird breeding season can be protracted and influenced by local and national weather events with different species active at different times. It is inevitable that not all birds will be recorded during every visit and as a result some species may be over- or underrecorded. Some early breeding, or cryptic species, such as tawny owl or mistle thrush, could be present or breed in greater numbers in the BBS Area; however, their detection would not influence the conclusion or any mitigation proposed.

The Site is considered to have very limited potential to support Schedule 1 bird species, with the possible exception of barn owl. Two records of barn owl were returned during the desk study, both from approx. 1.3 km southwest of the Site and most recently in July 2010. No suitable nest sites were noted during the field survey and the sward height is too short to provide suitable rodent habitat and therefore provides limited foraging opportunities. As



such, there is no evidence that this species is present within the Site or immediate surrounds.

The habitats within the Development footprint consist almost exclusively of grassland with a short sward height and are of limited value to birds. As such, farmland species such as skylark were not recorded within the Site and are highly unlikely to use the Site for nesting or foraging. Some species were recorded foraging in the ground adjacent to the boundary habitats, including blackbird and mistle thrush, and a small area of potential foraging habitat may be lost for some species. Given the small size of the Development, this will be limited in extent, especially in the context of the wider landscape where similar habitat types are extensive and direct adverse effects are considered negligible.

The boundary habitats include mature trees, woodland edge and hedgerow, and offer good nesting and foraging opportunities for several common and widespread bird species. All woodland, scrub and hedgerow habitats within or adjacent to the Site will be retained so any direct adverse effects on nesting birds through habitat loss are considered negligible. If any vegetation clearance is required, for example, trimming back of tall vegetation to facilitate access, or removal of ruderal or overgrown vegetation, mitigation is proposed to safeguard nesting birds and ensure legal compliance (see section 5.4).

The entrance route used to access the proposed Development is an existing track regularly used by farm traffic, and an increase in use is not expected to adversely impact bird interests within the adjacent habitats. Use will be greatest during the construction phase; however, this will be temporary and unlikely to be significant.

Habitat enhancement measures are proposed which will compensate for the loss of low value habitats currently present, and increase foraging and nesting opportunities within the Site and surrounds (see section 5.5).

5.2 Non-breeding season bird interest

Non-breeding season (here defined as approximately September to March) surveys have not been carried out at the Site.

The Site is relatively small and enclosed by mature woodland, and is considered unlikely to be used by non-passerines of conservation concern, such as lapwing. The pond to the south of the Site may hold small numbers of common, widespread duck species, such as mallard, throughout the year but is considered too small and disconnected from other wetland habitats to support notable numbers of wildfowl.

The habitats and resources present within the Site during the non-breeding season are available extensively in the wider area. It is expected that a small number of birds will be present within the Site and surrounds during the non-breeding season, including predominantly resident species, such as tits and thrushes, and may also include some migrant species of conservation concern, such as redwing or fieldfare. Habitats likely to be of greatest value are those around the Site boundaries which will be retained and improved and, as such, no adverse impacts on non-breeding bird interest are anticipated.

Habitat improvements being implemented as part of the Development, are expected to offer long-term benefits for birds during the non-breeding season.

5.3 Cumulative effects

A similar development has been consented approximately 300 m east of the Site (Ref: RR/2020/1817/P). The habitats present in this area are broadly similar to those within the Site, and although no surveys were carried out to inform the assessment, the Site is expected to support a similar range of widespread hedgerow species.

Both developments will avoid scrub and woodland habitats surrounding the respective sites; however, they will result in a loss of grassland habitats. In both instances these are



considered to be of low value to birds, and enhancements will compensate for their loss in providing improved habitats, increasing foraging and nesting opportunities. Some effects may result from disturbance during construction; however, these will be temporary, limited to common, widespread species and safeguards are recommended to protect nesting birds.

Overall, cumulative effects are considered negligible and not significant.

5.4 Mitigation

Although the majority of the Site is unsuitable for nesting birds, some do breed within habitats around the Site boundaries. As such, it is possible that construction works could negatively impact breeding birds through direct harm and disturbance, including to active nests. Such impacts may also constitute a legal offence under the Wildlife and Countryside Act 1981 (as amended)¹⁰ and avoidance and/or mitigation measures will be required.

Assuming the habitats within the Site are comparable to the conditions at the time of the surveys, no substantive vegetation removal is required to facilitate the Development; however, any small-scale clearance, such as removal of ruderal vegetation, widening access tracks or cutting back overhanging vegetation, will be subject to the following best practice measures.

Mitigation will include, but not be limited to, the following:

- To ensure compliance with the Wildlife and Countryside Act 1981 (as amended)¹⁰, any work involving vegetation clearance during the peak bird nesting season (March to September, or earlier/later if weather conditions are particularly mild) must be avoided. To also minimise the risk of adverse effects to reptiles and amphibians, clearance of scrub or ground-level vegetation is recommended to be completed in either April or September as the risk of nesting bird presence will be reduced and herptiles will be fully active. Clearance activities can be undertaken from May to August however a nesting bird check (detailed below) may be required in advance of works.
- If any clearance works to nesting habitats are required during the nesting season, then pre-construction checks for nesting birds would need to be carried out by a suitably experienced ecologist no more than 48 hours prior to the works commencing.
- If any nesting birds are found to be present, an appropriate buffer zone would be implemented, within which works are excluded, for the duration of the breeding attempt. Any active nests will need to be left *in situ* until a suitably experienced ecologist confirms that birds have stopped using them.
- In the unlikely event that any birds listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)¹⁰, are found to be nesting on Site, an ecologist will need to be contacted for further advice.

5.5 Enhancements

In order to increase the biodiversity value of the Development site, and to adhere to Government guidance set out in the National Planning Policy Framework 2019 (NPPF)¹⁵, a range of enhancement measures will be incorporated into the Development design. These are detailed within the Landscape and Visual Appraisal (LVA)⁷.

These will include improvements to the hedgerow habitats surrounding the Site, through planting of a mix of native tree and scrub species to strengthen existing habitats and increase cover, foraging and nesting resources for birds throughout the year. The planting mix will include evergreen and fruit-bearing species beneficial to birds, such as rowan (*Sorbus aucuparia*), hawthorn (*Crataegus monogyna*), and holly (*Ilex aquifolium*), among others. Improvements to grassland habitats around the Site will offer all-round benefits to

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⁷ Arcus (2021) Landscape and Visual Appraisal – Ninfield Greener Grid Park



biodiversity, including birds, by increasing the variety of habitat-types and resources available. A biodiversity net gain of 16.31% has been calculated and is outlined in the Biodiversity Metrics Assessment submitted with the application.

Where suitable locations are available, nest boxes will be placed in habitats surrounding the Development to offer enhanced nesting opportunities for some species. These will be tree-mounted, and be made of woodcrete, or similar material, to ensure durability. Boxes will include a minimum of six for hole-nesting species (32 mm)⁸ and two open-fronted boxes⁹. Indicative locations have been added to the Landscape Mitigation Plan.

6 CONCLUSION

A three-visit BBS was carried out to quantify the breeding bird interest at the Site and the potential impacts of the Development. A total of 24 species were recorded during the BBS, including four species of conservation concern, all typical of the habitats and geographic location of the Site. Based on the habitats available the Site is not expected to be of high value to birds during the non-breeding season.

The Development is sited in an area with limited nesting and foraging opportunities for birds and any direct adverse impacts on nesting birds are considered negligible. Mitigation is proposed to safeguard nesting birds during the construction phase of the Development and a range of enhancement measures will be implemented to offer an increase in resources for bird species within the Site, and immediate surrounds.

⁸ For example, the Schwedgler 1B nest box, or equivalent.

⁹ For example, Vivara Pro Barcelona WoodStone Open Nest Box, or equivalent.



APPENDIX A – LEGISLATION AND POLICY

The Wildlife & Countryside Act 1981

The Wildlife and Countryside Act 1981¹⁰, as amended by the Countryside and Rights of Way Act (CRoW) 2000¹¹ and the Natural Environment and Rural Communities Act (NERC) 2006¹², is the main legislation that protects wildlife in Great Britain, and is the mechanism for defining and protecting nationally important Sites of Special Scientific Interest (SSSI).

The legislation makes it offence to intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young, while it is nesting.

The Conservation of Habitats and Species a Regulations 2017

The Conservation of Habitats and Species a Regulations 2017 13 (the 'Habitat Regulations'), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019^{14} , transposes elements of the Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC) into domestic UK legislation. It establishes the requirements for protecting sites that are internationally important for threatened habitats and species – the National Site Network – and thus the requirement for a 'Habitat Regulations Assessment' of plans or developments with potential to affect them.

Natural Environment & Rural Communities (NERC) Act 2006

The NERC Act 2006¹² places a duty on local planning authorities to have due regard for biodiversity and nature conservation during the course of their operations, and thus ensures that biodiversity is a key consideration in the planning process. The Act also establishes a list of species and habitats of principal importance for the conservation of biodiversity.

National Planning Policy Framework 2019

The National Planning Policy Framework (NPPF) 2019¹⁵ sets out the Government's requirement for the planning system in England and in doing so establishes the framework within which local planning authorities can develop their own planning policies. The NPPF explicitly addresses the conservation and enhancement of the natural environment, including biodiversity, through paragraphs 174–177.

¹⁰ Wildlife and Countryside Act 1981. Available from: https://www.legislation.gov.uk/ukpga/1981/69

¹¹ The Countryside and Rights of Way Act 2000. Available from: https://www.legislation.gov.uk/ukpga/2000/37/contents

¹² Natural Environment and Rural Communities Act 2006. Available from: https://www.legislation.gov.uk/ukpga/2006/16/contents

¹³ The Conservation of Habitats and Species Regulations 2017. Available from: https://www.legislation.gov.uk/uksi/2017/1012/contents/made

¹⁴ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Available from: https://www.legislation.gov.uk/ukdsi/2019/9780111179512/contents

¹⁵ National Policy Planning Framework 2019. Available from: https://www.gov.uk/government/publications/national-planning-policy-framework--2



APPENDIX B - BIRD SPECIES NAMES AND CONSERVATION DESIGNATIONS

Table A1 list provides English vernacular and scientific names for all bird species mentioned in this report.

Nomenclature and taxonomic order are based on the BOU 'British List'1.

Table A1: List of English vernacular and scientific names of bird species, with

relevant conservation designations

Sı	pecies	Schedule 1/ Annex I Listings	SPI and/or BoCC Listing*
English (British) Vernacular Name	Scientific Name		
Canada goose	Branta canadensis		
Mallard	Anas platyrhynchos		Amber
Pheasant	Phasianus colchicus		
Moorhen	Gallinula chloropus		
Stock dove	Columba oenas		Amber
Woodpigeon	Columba palumbus		
Barn owl	Tyto alba	Schedule 1	
Tawny owl	Strix aluco		Amber
Great spotted woodpecker	Dendrocopos major		
Jay	Garrulus glandarius		
Magpie	Pica pica		
Jackdaw	Corvus monedula		
Carrion crow	Corvus corone		
Blue tit	Cyanistes caeruleus		
Great tit	Parus major		
Swallow	Hirundo rustica		
Long-tailed tit	Aegithalos caudatus		
Blackcap	Sylvia atricapilla		
Goldcrest	Regulus regulus		
Wren	Troglodytes troglodytes		
Blackbird	Turdus merula		
Fieldfare	Turdus pilaris	Schedule 1**	Red
Redwing	Turdus iliacus	Schedule 1**	Red



Spe	Schedule 1/ Annex I Listings	SPI and/or BoCC Listing*	
English (British) Vernacular Name	Scientific Name	3	•
Song thrush	Turdus philomelos		SPI, Red
Mistle thrush	Turdus viscivorus		Red
Robin	Erithacus rubecula		
Pied wagtail	Motacilla alba		
Chaffinch	Fringilla coelebs		

^{*} Where no BoCC listing is shown, species are Green-listed.

^{**} Schedule 1 offers additional protections to breeding birds. The Site is outside of the geographic range of these species' breeding areas, although they have a more widespread and southerly distribution during the winter/non-breeding season.