
Necton Greener Grid Park
on behalf of Statkraft UK
Appendix 2: Breeding Bird Survey Report



Document Control				
Project Name:		Necton Greener Grid Park		
Project Number:		Statk-713-1606		
Report Title:		Appendix 2: Breeding Bird Survey Report		
Issue	Date	Notes	Prepared	Reviewed
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V2	27/07/2023	Revision 1		Z Hinchcliffe <i>MRes BSc (Hons.)</i>

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1 INTRODUCTION

1.1 Project Background

1.1.1 This report has been prepared by Avian Ecology Ltd. on behalf of Statkraft UK and provides an assessment of ecological effects to ornithology in relation to a proposed Greener Grid Park (the 'Proposed Development') on land north east of Necton, Norfolk (the 'Site') as shown on **Figure A4.1**.

1.1.2 The objectives of this report are to:

- provide baseline information on breeding ornithological features within the Site; and,
- identify the presence of notable breeding bird species within the Site.

1.1.3 Only common bird species names are referred to within the main text of this Appendix. A summary of all bird species referred to herein including scientific names and conservation status is presented in **Annex 1**.

1.2 Site Overview

1.2.1 The Site, as shown by the red-line boundary in **Figure A2.1**, is approximately 11.75ha situated on land north east of Necton, Norfolk. Habitats within the Site include arable and field boundaries of hedgerows and a gravel access track. Habitats within the wider survey area also consist of arable farmland and includes ponds, ditches, small pockets of broad-leaved and mixed semi-natural woodland, hedgerows, watercourses and scattered trees within field boundary hedgerows.

1.2.2 In the wider context, the Site is surrounded by further arable farmland interspersed with pockets of woodland connected by a network of hedgerows and field ditches.

1.2.3 No statutory designated sites with birds listed as qualifying features are present within 5km of the Site, however Breckland Special Protection Area (SPA) is located 6.3km to the south west and designated for woodlark, stone curlew and nightjar.

2 METHODOLOGY

2.1.1 A breeding bird survey was undertaken between April and June 2022, employing an adapted version of the British Trust for Ornithology (BTO) Common Bird Census (CBC) technique (Gilbert *et al.*, 1998¹) and comprising a series of three staggered survey visits undertaken at least seven days apart.

2.1.2 All survey visits were carried out after dawn and finished no later than 10:00hrs in conditions suitable for survey (avoiding heavy rain and strong winds). A summary of survey effort is presented in **Table 2.1** and detailed survey conditions are presented in **Annex 2**.

2.1.3 The survey area comprised the Site and also included a 100m buffer observed from the Site boundary to record the presence of Notable Species which include Birds of Conservation Concern (BoCC Amber

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

and Red List Species (Stanbury *et al.*, 2021²), NERC Act (2006)³, Annex 1⁴ raptors and owls, Schedule 1 species⁵ and Norfolk Biodiversity Action Plan⁶ (LBAP) species.

- 2.1.4 Breeding bird survey visits were undertaken by P Baker (PB), A Hulme BSc (Hons.) (AH) and J Jones BSc (Hons.) (JJ), all of whom are suitably experienced ornithologists.
- 2.1.5 During each survey visit 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 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).
- 2.1.6 Observations of non-breeding birds just visiting the Site (e.g. gulls feeding in fields) and birds flying over the Site were also made.

Table 2.1: Breeding bird survey effort.

Survey Visit	Date	Start time (24hrs)	End time (24hrs)	Sunrise (24hrs)
1	13/04/2022	07:30	09:30	06:04
2	04/05/2022	05:50	09:00	05:15
3	18/06/2022	05:00	07:40	04:33

Limitations

- 2.1.7 The results of the surveys are only a snap-shot of the habitat use and activity of the bird assemblage within the Site. However, the surveys have provided indicative evidence of the breeding bird assemblage within the Site.
- 2.1.8 It is appreciated that factors, including cropping regime/ land use and disturbance will influence habitat use within the Site by birds. It is an assumption that the cropping regime/ land use during the survey period is typical.
- 2.1.9 Access was permitted to all parts of the Site during all surveys.

3 RESULTS

3.1 Breeding Bird Survey

- 3.1.1 For the purposes of this report, although the estimated number of breeding territories for all species is provided (**Table 3.1**) only the breeding territories of Notable Species are mapped and presented on **Figure A2.1**, given these are the most relevant species to the design and assessment of development proposals.
- 3.1.2 The breeding bird assemblage recorded within the Site is representative of the locale and the arable habitats present. A total of four Notable Species were recorded breeding within the Site. No species

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>. (Accessed 10/01/2023)

³ Natural Environment and Rural Communities (NERC) Act (2006)

⁴ Annex 1 – species listed on Annex 1 of the EC Directive 2009/147/EC of the European Parliament on the conservation of wild birds.

⁵ <https://www.rspb.org.uk/birds-and-wildlife/advice/wildlife-and-the-law/wildlife-and-countryside-act/schedules/>

⁶<https://www.norfolkbiodiversity.org/habitats-and-species/birds/> (Accessed 10/01/2023)

listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) were recorded within the Site or within the 100m survey buffer.

- 3.1.3 Notable Species recorded within the Site included two Red List species (skylark and yellowhammer) and three Amber List species (wren, whitethroat and reed bunting).
- 3.1.4 Three Notable Species recorded within the study area are listed as rare and most threatened species under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act (2006) (skylark, yellowhammer and reed bunting). Skylark is also listed as the only LBAP species recorded onsite.
- 3.1.5 Within the Site, breeding territories for all notable species were considered generally low (≤ 5 territories).
- 3.1.6 Breeding territories of Notable Species were typically associated with vegetation along field boundaries, which principally comprises of hedgerow, scrub, tree-line habitats within and adjacent to the Site. Ground-nesting species recorded within the Site two skylark territory, with a further three within the 100m buffer.
- 3.1.7 All breeding species (or potential breeding species) recorded along with an estimated number of the breeding territories within the Site are detailed within **Table 3.1**. Those species in **bold** are considered Notable Species. The indicative locations of the territories of Notable Species are provided in **Figure A1**.

Table 3.1: Breeding bird territories recorded within the Site.

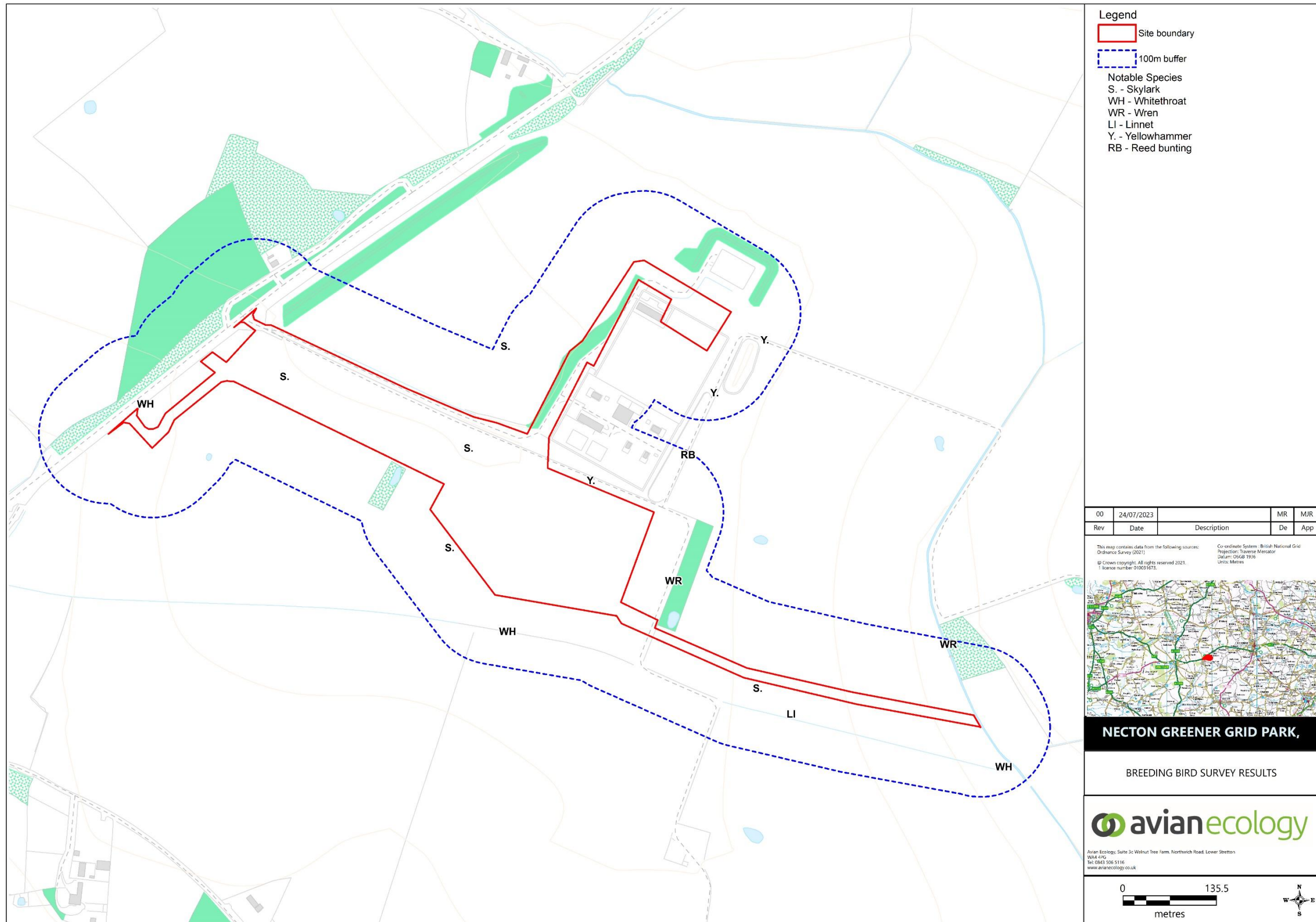
Species	Estimated Territories	Comments
Red-legged partridge	1	Located along plantation woodland edge at the far north of the Site.
Skylark	5	Associated with open arable fields within the Site and Wider Survey Area.
Blue tit	1	Recorded in hedgerow to the west of the Site.
Chiffchaff	2	Recorded in hedgerow to the west of the Site and plantation woodland to the east of the Site.
Blackcap	1	Recorded in hedgerow to the west of the Site.
Whitethroat	3	Recorded in hedgerow to the west of the Site.
Wren	2	In plantation woodland to the east of the Site.
Goldfinch	1	Recorded in hedgerow to the north of the Site.
Yellowhammer	3	Recorded along hedgerows north of the Site boundary.
Reed bunting	1	Singing adjacent to suitable habitat north east of the Proposed Development.

- 3.1.8 During the surveys, several additional species that were not considered as breeding were recorded within the Site, and which consisted of individual birds flying over the Site only, or those considered only visiting the Site to feed. Non-breeding species recorded within the Site include magpie, woodpigeon, great tit, chaffinch and reed bunting.

4 CONCLUSIONS

- 4.1.1 During survey, the Site was found to support a breeding bird assemblage typical of the locale and indicative of arable habitats present onsite. This included four Notable Species (skylark (two territories), wren (one territory), whitethroat (one territory) and yellowhammer (one territory) for which breeding evidence was recorded within the Site. The results presented in **Table 3.1** of **Appendix 4** detail the estimated number of territories recorded within the Site.
- 4.1.2 Most breeding species were associated with the field boundary vegetation (such as hedgerows and trees) which is unlikely to be directly impacted by the proposed development.
- 4.1.3 Skylark was the only ground nesting notable species recorded during the survey with two territories within the Site.
- 4.1.4 The Site has been designed to avoid or where otherwise minimise the requirement for loss of field boundary habitats. Landscaping proposals which will seek to strengthen and increase connectivity of existing field boundary habitats will also seek to benefit Notable Species including yellowhammer, whitethroat and wren. Mitigation measures will be adopted to enable legislative compliance with regards to the protection of all breeding birds during construction works. Overall, it is considered that the Site provides opportunity to result in positive impact to the breeding bird assemblage, at least at the local level including species listed on the NERC Act (2006).

FIGURE A4.1. BREEDING BIRD SURVEY RESULTS



ANNEX 1: BIRD SPECIES SUMMARY

Table A1 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:

- BoCC – Birds of Conservation Concern 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);
- Annex 1 – Species listed on Annex 1 of the Birds Directive;
- S1 – Species listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended);
- NERC S41 – species listed as rare and most threatened on the NERC Act (2006); and,
- LBAP – Species listed as a key species on the Norfolk Biodiversity Action Plan.

Table A1: Summary of bird species.

Common name	Species name	Conservation status
Red-legged partridge	<i>Alectoris rufa</i>	-
Stone-curlew	<i>Burhinus oedicnemus</i>	S1, Annex 1, NERC S41, BoCC – Amber, LBAP,
Nightjar	<i>Caprimulgus europaeus</i>	Annex 1, NERC S41, BoCC – Amber, LBAP
Woodpigeon	<i>Columba palumbus</i>	BoCC – Amber.
Skylark	<i>Alauda arvensis</i>	NERC S41, BoCC – Red, LBAP.
Woodlark	<i>Lullula arborea</i>	S1, Annex 1, NERC S41.
Magpie	<i>Pica pica</i>	-
Blue tit	<i>Cyanistes caeruleus</i>	-
Great tit	<i>Parus major</i>	-
Chiffchaff	<i>Phylloscopus collybita</i>	-
Blackcap	<i>Sylvia atricapilla</i>	-
Whitethroat	<i>Curruca comminus</i>	BoCC – Amber
Wren	<i>Troglodytes troglodytes</i>	BoCC – Amber.
Goldfinch	<i>Carduelis carduelis</i>	-
Chaffinch	<i>Fringella coelebs</i>	-
Yellowhammer	<i>Emberiza cinerea</i>	NERC S41, BoCC – Red.
Reed bunting	<i>Emberiza schoeniclus</i>	NERC S41, BoCC – Amber.

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)
13/04/2022	AH	07:30	09:30	2	S	0	2	8	2	0	0	12
04/05/2022	PB	05:50	09:00	2	S	0	2	5	2	0	0	13
18/06/2022	JJ	05:00	07:40	1	N	0	2	8	2	0	0	17

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		Light Showers	1			150-500m	1
Light breeze	2	N	Heavy Showers	2			>500m	2
Mod. breeze	4	NE	Light rain	3				
Fresh breeze	5	ENE	Heavy rain	4				
Strong breeze	6	E						
Mod. gale	7	Etc	Visibility		Snow		Frost	
Fresh gale	8		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	2
Storm	11							