

REPORT

Boston Alternative Energy Facility – Environmental Statement

Appendix 17.2 Breeding Bird Survey Report

Client: Alternative Use Boston Projects Ltd
Planning Inspectorate Reference EN010095
Document Reference 6.4.19
Pursuant to APFP Regulation: 5(2)(a)
Reference: PB6934-RHD-01-ZZ-RP-N-3017_A17.2
Status: Final/0.0
Date: 23 March 2021



HASKONINGDHV UK LTD.

Rightwell House
Rightwell East
Bretton
Peterborough
PE3 8DW
Industry & Buildings
VAT registration number: 792428892

+44 1733 334455 **T**
+44 1733 262243 **F**
info@uk.rhdhv.com **E**
royalhaskoningdhv.com **W**

Document title: Boston Alternative Energy Facility – Environmental Statement

Document short title: Breeding Bird Survey Report
Reference: PB6934-RHD-01-ZZ-RP-N-3017_A17.2
Status: 0.0/Final
Date: 23 March 2021
Project name: Boston Alternative Energy Facility
Project number: PB6934-RHD-01-ZZ-RP-N-3017_A17.2
Author(s): Melisa Vural, Chris Adnitt

Drafted by: Melisa Vural, Chris Adnitt

Checked by: Gary Bower

Date: 27/11/20 GB

Approved by: Paul Salmon

Date: 23/03/21 PS

Classification

Project Related

Unless otherwise agreed with the Client, no part of this document may be reproduced or made public or used for any purpose other than that for which the document was produced. HaskoningDHV UK Ltd. accepts no responsibility or liability whatsoever for this document other than towards the Client.

Please note: this document contains personal data of employees of HaskoningDHV UK Ltd.. Before publication or any other way of disclosing, this report needs to be anonymized.

Breeding Bird Survey Monitoring at Proposed Site of Boston Alternative Energy Facility

April - June 2020

Andrew P. Chick MPhil ACIEEM
Ecological Consultant

The Old Farmhouse, Washdyke Lane, Fulbeck,
Grantham, Lincs NG32 3LB
Tel: 07880700313
E-mail: andrew@forktail.co.uk

Report Prepared by Anthony Bentley

Breeding Bird Survey Monitoring at Proposed site of Boston Alternative Energy Facility

CONTENTS

1	INTRODUCTION	4
2	Methodology	4
3	SITE DESCRIPTION	5
3.1	Site communities and habitats	5
3.1.1	Site description	6
3.1.2	OCC 4: The Red List for Birds (published in December 2015).	7
4	Notes on all RED, ORANGE and Notable species records	8
4.1	Species summary	9
5	REFERENCES	9
	Appendix 1	10
	Detailed survey results (raw data) of each survey.	10
	Appendix 2	11
	Original Survey Sheets	11

FIGURES

Figure 1.	Site map showing the various habitats..	6
-----------	---	---

TABLES

Table 1.	Weather recorded during survey work.	5
Table 2.	Summary table of BOCC Red species recorded during survey work in April, May and June 2020.	7
Table 3.	Overall analysis of breeding bird using the proposed site at Boston Alternative Energy Facility	Error! Bookmark not defined.
Table 4.	Bird species recorded during each visit.	10

PHOTOGRAPHS

Photograph 1:	Vegetated ditch and hedgerow bordering the site	13
Photograph 2:	Vegetated ditch splitting two arable fields	13
Photograph 3:	Freshwater pond with reed edge. Mature hedgerow beyond the pond	13
Photograph 4:	Arable field with a recently drilled crop	13
Photograph 5:	Area of wasteland	13
Photograph 6:	Mature Hedgerow bordering the proposed site	13
Photograph 7:	Area of wasteland	14
Photograph 8:	Saltmarsh and tidal river looking east toward the Port of Boston	14
Photograph 9:	Hedgerow and bank at the proposed Wharf site.	14
Photograph 10:	Mixed hedgerow and ditch	14
Photograph 11:	Arable land	14
Photograph 12:	Saltmarsh, tidal river and riverbank at the proposed Wharf site	14
Photograph 13:	Mixed hedgerow, arable land and wasteland	15
Photograph 14:	Livestock land with adjacent mixed hedgerow	15
Photograph 15:	Arable land with recently drilled crop	15

1 INTRODUCTION

Independent Ecologist, Anthony Bentley, was commissioned by Chris Adnitt of Royal HaskoningDHV to undertake breeding bird survey work for land at the proposed site of Boston Alternative Energy Facility. The report does not cover; Amphibians, Reptiles, Mammals or any other taxonomic groups.

This report details the methods used, describes the habitats and species found on the site, discusses the results, and makes recommendations for further work. The common English names are used for all species referred to throughout the text. The Latin name is also given following the common name the first time the species is referred to.

2 Methodology

The breeding bird surveys that were undertaken applied a modified Common Bird Census methodology. The entire site was surveyed, including the river banks and river haven at the proposed wharf site. The surveys were conducted early morning and were completed before 10:00am. Each visit took between four and five hours to complete at a slow, methodical pace.

All surveys were conducted during daylight hours and a walkover survey was undertaken during each visit. All bird species were counted. Standard BTO notation was used to record the bird's activities. The aim of the survey was to record the number of birds using the site to breed.

Records of all birds seen or heard during the survey were noted using BTO two-letter species codes. Birds were plotted on a map of the site.

During each survey the individual birds observed within the site boundary were recorded. Care was taken not to duplicate records, with birds accurately mapped as to their location. The survey methodology was repeatable, and each survey could be compared to allow a direct comparison between each visit. Additionally, by using a standard methodology the results remain comparable if different observers undertook the survey work.

An overall analysis of all species considered to be breeding on site during the survey period is given in Table 2. Overall analysis of breeding data is given in Table 3. A brief summary of the status of all species recorded is given in the systemic list (section 6). The raw data for each

visit with each site visit is given in Appendix 1. The survey sheets for each visit are attached as Appendix 2.

There are limitations and it should be noted that:

- There may be reduced detectability for some species (e.g. nocturnal species would be under-represented).
- Analysis of data can vary depending on the individual carrying analysing data

3 SITE DESCRIPTION

3.1.0 Survey summary

The surveys were undertaken each month between April and June 2020. During the surveys the following weather conditions were recorded:

Date	Average daytime temperature	Cloud Cover	Wind	Start time	End time
30/04/2020	7°C	1/8	SW 11mph	05:30	10:00
31/05/2020	11°C	0/8	NE 8mph	05:00	09:40
28/06/2020	12°C	0/8	W 14mph	05:00	09:30

Table 1. Weather recorded during survey work.

An overall analysis of all species considered to be breeding on site during the survey period is given in Table 2. Overall analysis of breeding data is given in Table 3. A brief summary of the status of all species recorded is given in the systemic list (section 6).

The raw data for each visit with each site visit is given in Appendix 1.

The survey sheets for each visit are attached as Appendix 2.

3.1.1 Site description

This site is comprised of a wide variety of habitats; mixed open arable fields, wasteland, mixed hedgerow corridors, a pond, drainage channels, riverbank, saltmarsh, livestock grazing paddock and off-road tracks.



Figure 1. Site map showing the various habitats.

Month	Bird Species Recorded	BOCC Red	BOCC Orange	Black-headed Gull	Dunnock	Linnet	Mallard	Meadow Pipit	Reed Bunting	Song Thrush	Stock Dove	Willow Warbler
April	28	1	5		6	5	6	4	4		2	
May	27	1	7	2	4	1	10	3	4		1	1
June	19	2	4		2	1		1	3	1	1	

Table 2. Summary table of BOCC Red species recorded during survey work in April, May and June 2020.

3.1.2 OCC 4: The Red List for Birds (published in December 2015).

Commonly referred to as the UK Red List for birds, this is the fourth review of the status of birds in the UK, Channel Islands and Isle of Man, and updates the last assessment of 2009. Using standardised criteria, 244 species with breeding, passage, or wintering populations in the UK were assessed by experts from a range of bird NGOs and assigned to the Red, Amber or Green lists of conservation concern.

The assessment is based on the most up-to-date evidence available and criteria include conservation status at global and European levels, and within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance.

This update shows that many bird species are increasingly at risk. Nineteen species were red-listed for the first time due to worsening population statuses, and one species (Merlin) was returned to the red list. In most cases, this is due to evidence from monitoring schemes such as BTO/JNCC/RSPB Breeding Bird Survey (BBS) of increasingly severe declines in breeding populations (e.g. for Curlew, Nightingale, Pied Flycatcher, Whinchat, Grey Wagtail, and Mistle Thrush).

4 Notes on all RED, ORANGE and Notable species records

4.1 Species summary

For each species the outlined status is within a Lincolnshire context.

Mallard *Anas platyrhynchos* **BOCC ORANGE**

A common resident, passage migrant and winter visitor. Amber Listed.

Birds were recorded on two visits. The wet drains and pond have the potential to support breeding birds and it is considered highly likely that this species would breed locally.

Black-headed Gull *Chroicocephalus ribundus* **BOCC ORANGE**

A common resident and winter visitor.

Two birds were recorded in May. As Black-headed Gulls are colony nesters it's thought that they do not use the site to breed.

Stock Dove *Columba oenas* **BOCC ORANGE**

A common resident and winter visitor.

A common farmland species recorded on all survey visits, with a peak of two in April.

Meadow Pipit *Anthus pratensis* **BOCC ORANGE**

A common resident, passage migrant and winter visitor.

A common breeding bird on saltmarsh, where all the birds were recorded. Three singing males were recorded in May.

Dunnock *Prunella modularis* **BOCC ORANGE**

A common resident.

A common species associated with hedgerows and gardens, a peak count of six in April were all singing males.

Song Thrush *Turdus philomelos* **BOCC RED**

A common resident, passage migrant and winter species.

A single singing male was recorded in the hedgerows surrounding the proposed site.

Willow Warbler *Phylloscopus trochilus* **BOCC ORANGE**

A summer migrant and passage species.

A singing male was recorded in May. The hedgerows around the site are in suitable condition for breeding Willow Warbler.

Linnet *inaria cannabina* **BOCC RED**

A common resident, passage migrant and winter visitor.

This bird is traditionally associated with scrub, with the tall hedgerows clearly favouring this species, on the coast it is also associated with saltmarsh. A peak count of five in April included three singing males.

Linnet abundance declined rapidly in the UK between the mid-1970's and mid-1980's. Numbers have subsequently remained stable, although there has been a shallow decline

in England since 1994. Survey data suggests that low productivity is still a problem for the species, possibly due to reductions in hedgerow quality, leaving nests more exposed to predation.

Reed Bunting *Emberiza schoeniclus* **BOCC ORANGE**

A common resident, passage migrant and winter species.

A species readily associated with coastal saltmarsh and vegetated ditches. Four birds were recorded in both April and May. In May all four birds were singing males.

4.2 Breeding summary

Below is a table showing the total number of potential breeding birds thought to be using the site, only data from this survey was used to evaluate the potential for breeding species. Caution should be taken when using this data as analysis can vary between individual.

Species	Number
Blackbird	6
Blackcap	3
Blue Tit	3
Chaffinch	1
Coot	1
Duncock	6
Goldfinch	3
Great Tit	2
Lesser Whitethroat	1
Linnet	3
Long-tailed Tit	1
Mallard	3
Meadow Pipit	3
Moorhen	1
Pheasant	4
Pied Wagtail	2
Reed Bunting	4
Reed Warbler	11
Robin	2
Sedge Warbler	9
Song Thrush	1
Whitethroat	9
Willow Warbler	1
Wood Pigeon	10
Wren	11

Table 3. Overall analysis of breeding birds using the proposed site at Boston Alternative Energy Facility.

5 REFERENCES

Eaton, M.A., Aebischer, N.J., Brown, A.F., Hearn, R., Lock, L. Musgrove, A., Noble, D., Stroud, D., Richard, G. (2015) Birds of conservation concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds* 108, 708-746.

Appendix 1

Detailed survey results (raw data) of each survey.

Species	30 th April 2020	31 st May 2020	28 th June 2020
Blackbird	7	8	4
Black-headed Gull		2	
Blackcap	3	1	1
Blue Tit	2	4	2
Carrion Crow		2	
Chaffinch	1	1	1
Coot	2	2	4
Duncock	6	4	2
Goldfinch	1	3	3
Great Tit	2	1	1
Grey Heron	1		
Jackdaw	1		
Lesser Whitethroat	1	1	
Linnet	5	1	1
Long-tailed Tit		2	
Magpie	1	5	2
Mallard	6	10	
Meadow Pipit	4	3	1
Moorhen	1		2
Pheasant	5	3	1
Pied Wagtail	2	1	
Reed Bunting	4	4	3
Reed Warbler	7	11	8
Robin	1	1	2
Sedge Warbler	9	4	3
Song Thrush			1
Sparrowhawk	1		
Stock Dove	2	1	1
Swallow	1		
Whitethroat	11	8	6
Willow Warbler		1	
Wood Pigeon	12	5	5
Wren	11	9	7

Table 4. Bird species recorded during each visit.

Appendix 2

Original Survey Sheets



Figure 1: Original April breeding bird survey results.

Date: 31st May 2020 Observer: A Bentley Temp: 11°C Wind: NNE 8MPH Cloud cover: 0/8 Start time: 05:00 End time: 09:40



Figure 2: Original May breeding bird survey results.

Date: 29th June 2020 Observer: A Bentley Temp: 12°C Wind: 14MPH Cloudcover: 0/8 Start time: 05:00 End time: 09:30



Figure 3: Original June breeding bird survey results.

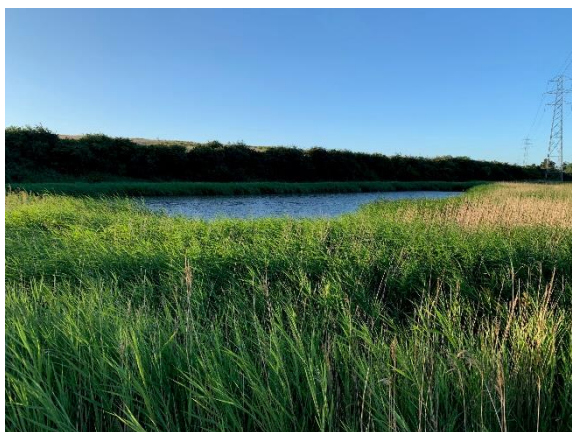
Site images



Photograph 1 Vegetated ditch and hedgerow bordering the site.



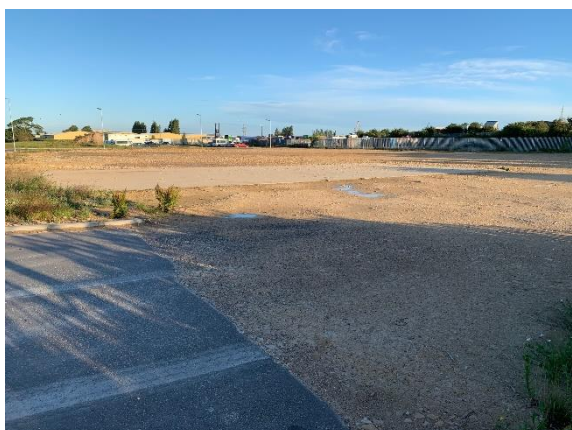
Photograph 2 Vegetated ditch splitting two arable fields.



Photograph 3 Freshwater pond with reed edge. Mature hedgerow beyond the pond.



Photograph 4 Arable field with a recently drilled crop.



Photograph 5 Area of wasteland.



Photograph 6 Mature Hedgerow bordering the proposed site.



Photograph 7 Area of wasteland.



Photograph 8 Saltmarsh and tidal river looking east toward the Port of Boston.



Photograph 9 Hedgerow and bank at the proposed Wharf site.



Photograph 10 Mixed hedgerow and ditch.



Photograph 11 Arable land.



Photograph 12 Saltmarsh, tidal river and river bank at the proposed Wharf site.



Photograph 13 Mixed hedgerow, arable land and wasteland.



Photograph 14 Livestock land with adjacent mixed hedgerow.



Photograph 15 Arable land with recently drilled crop.