



THE
ENVIRONMENT
PARTNERSHIP



HARRAS MOOR, CUMBRIA BREEDING BIRD SURVEY 2018

TEP Technical Report October 2018

TEP

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1.0 General Details

Central NGR	NX 98729 18070
Site Location	Harras Moor, Whitehaven, Cumbria
Date(s)	Visit 1 = 27/04/2018 Visit 2 = 23/05/2018 Visit 3 = 22/06/2018
Surveyor(s)	Bill Aspin
Weather	1st visit - Dry and cloudy 2nd visit – Dry and cloudy 3rd visit - Dry and cloudy
Methods	Three morning survey visits using transect method, including a buffer extending 100m around the site boundary.
Seasonal Constraints	The survey was undertaken during the optimum breeding bird survey period. There are no constraints associated with the survey.
Drawing References	G5810.66.001 Breeding Bird Survey Visit 1 30.04.2018 G5810.66.002 Breeding Bird Survey Visit 2 25.05.2018 G5810.66.003 Breeding Bird Survey Visit 3 22.06.2018

2.0 Introduction

- 2.1 TEP Ltd was commissioned in September 2017 by Homes England to provide ecology services in relation to a parcel of land at Harras Moor, Cumbria.
- 2.2 The breeding bird survey forms part of a suite of ecology services to provide input into the planning of this development. This assessment has been requested to inform future decisions regarding residential development.
- 2.3 The drawings for the breeding bird survey include two boundaries, the site boundary (S) and a 100m offset buffer (SBU). Drawings G5810.66.001 to G5810.66.003 illustrate this boundary as well as the results of each visit of the survey.

Site Location and Description

- 2.4 The site is an approximate 24.6ha parcel of land located adjacent to Harras Road, Whitehaven to the east (Grid reference NX 98729 18070). The land is bounded by the A595 to the west and residential developments to the north and south.
- 2.5 The site consists of a large, open, semi-improved grassland fields used for grazing. A number of these fields are currently unmanaged and overgrown. There are smaller areas of marshy grassland within these fields. A small area of woodland is located in the west of the site, adjacent to the southwest development boundary. Scattered scrub / trees, stone walls and hedgerows are present throughout the development site in the form of field boundaries.
- 2.6 Beyond the site, the wider landscape includes arable farmland, residential developments and the coast 1.6km west.

Pre-existing Site Data

- 2.7 Desktop records of protected or notable bird species recorded within a 1km radius of the site were gathered from the Cumbria Biodiversity Data Centre. Bird species classed as notable are those listed on any of the following:
- Schedule 1 of the Wildlife and Countryside Act 1981, as amended (WCA1)
 - Species of principal importance under Section 41 of the Natural Environment and Communities Act 2006 (S41)
 - Red and Amber listed Bird of Conservation Concern (BoCC) species (Eaton *et al.* 2015) (BRd/ BAm)

2.8 There are historical records of 14 notable bird species that have been recorded within 1 km of the site. The birds identified within these records are:

- Grasshopper Warbler (S41, BRd)
- Herring Gull (S41, BRd)
- House Sparrow (S41, BRd)
- Lesser Redpoll (S41, BRd)
- Linnet (S41, BRd)
- Mistle Thrush (BRd)
- Song Thrush (S41, BRd)
- Starling (S41, BRd)
- Meadow pipit (BAm)
- Dunnock (S41, BAm)
- Kestrel (BAm)
- Lesser Black-backed Gull (BAm)
- Willow Warbler (BAm)
- Swift (BAm)

3.0 Method

- 3.1 The survey was carried out applying methods based on the standard breeding bird survey and common bird census methods developed by the British Trust for Ornithology (Gilbert *et al.* 1998).
- 3.2 Visits were carried out in the morning period, starting at least half an hour after dawn and finishing before 11am. Each survey visit was carried out approximately 4 weeks apart, over the period April to June.
- 3.3 Bird species and activity patterns were recorded and mapped using standard BTO symbology.
- 3.4 Three survey visits were undertaken using pre-determined transect routes to cover the entire site.
- 3.5 Bird species within the 100m surrounding the site boundary were also recorded during the survey, as a proportion of the bird's foraging or nesting habitat is likely to be within the site.

4.0 Results

Visit	Date	Start Time	Finish Time
Visit 1	27/04/2018	06:00	08:50
Visit 2	23/05/2018	06:00	08:10
Visit 3	22/06/2018	06:00	08:05

Table 1: Counts of bird species recorded during the 2018 breeding bird season, including conservation and likely breeding status.

Species	Visit 1		Visit 2		Visit 3		Status	Likely Breeding Status (No. of pairs)	
	S	SBU	S	SBU	S	SBU		S	SBU
Blackbird	7	14	12	15	13	13		C (3) Pr (2)	C (3) Pr (2)
Blackcap	4	4	5	5	3	3		Pr (2)	Pr (2)
Blue Tit	6	7	4	5	9	11		C (2)	C (2) Pr (2)
Carrion Crow	6	6	3	3	3	3		Pr (1)	Pr (1)
Chaffinch	4	7	6	6	7	8		Pr (3)	Pr (4)
Chiffchaff	3	4	3	3	2	2		Pr (3)	Pr (3)
Coal Tit	1	2	2	2	4	4		Pr (1)	Pr (1)
Collard Dove				1				N	Po
Dunnock	3	7	2	6	3	5	S41 BAm	Pr (2)	Pr (5)
Garden Warbler			1	1				Po	Po
Goldcrest						2		N	Po

Species	Visit 1		Visit 2		Visit 3		Status	Likely Breeding Status (No. of pairs)	
	S	SBU	S	SBU	S	SBU		S	SBU
Goldfinch	1	7	1	2	4	7		C (2)	C (2)
Grasshopper Warbler		1					S41 BRd	N	Po
Great Spotted Woodpecker	1		1	1	2	3		Pr (1)	Pr (1)
Great Tit	5	8	8	8	6	8		C (2)	C (2)
Greenfinch		2			2	3		Po	Pr (1)
Herring Gull	3	3	1	1	1	7	S41 BRd	N	N
House Martin		1		1	3	8	BAm	N	C (1)
House Sparrow		5		4		5	S41 BRd	N	C (1 colony)
Jackdaw	1	2	9	24	4	12		Po	Po
Kestrel		1					BAm	N	Po
Lesser Black Backed Gull	1	2					BAm	N	N
Lesser Redpoll	2	2					S41 BRd	Po	Po
Linnet					1	1	S41 BRd	Po	Po
Magpie			5	5	1	1		Pr (1)	Pr (1)
Meadow Pipit	2	2					BAm	Po	Po
Mistle Thrush	1	1			1	1	BRd	Pr (1)	Pr (1)

Species	Visit 1		Visit 2		Visit 3		Status	Likely Breeding Status (No. of pairs)	
	S	SBU	S	SBU	S	SBU		S	SBU
Robin	9	10	12	13	10	10		C (3) Pr (3)	C (3) Pr (4)
Rook	1	2		1		3		N	Pr (1)
Song Thrush	3	5	7	9	2	2	S41 BRd	Pr (2)	Pr (3)
Sparrowhawk			1	1				Po	Po
Starling	9	11	3	14	25	27	S41 BRd	Po	C (1 colony)
Swallow	4	4	1	1	2	2		Po	Pr (1)
Swift					3	9	BAm	N	Po
Whitethroat				1				N	Po
Willow Warbler	2	3	2	2	1	1	BAm	Pr (1)	Pr (1)
Woodpigeon	8	9	5	7	16	18		Pr (2)	Pr (4)
Wren	12	12	8	8	16	16		C (1) Pr (9)	C (1) Pr (9)
Total Species	25	31	23	28	27	29			

S: Site; SBU: Site including 100m buffer

Status Key: WCA1 = Schedule 1, S41 = Section 41; BRd = BoCC Red List; BAm = BoCC Amber List.

Likely Breeding Status Key: C = Confirmed, Pr = probably breeding within site, Po = possibly breeding within site, N = not breeding within site.

Results Summary

- 4.1 This breeding bird survey has been conducted to identify areas of importance for birds and any constraints concerning birds for the proposed development.
- 4.2 There are historic records of fifty seven notable species that have been recorded within 1km of the site. Fourteen of these species, dunnock, grasshopper warbler,

herring gull, house martin, house sparrow, kestrel, lesser black-backed gull, lesser redpoll, linnet, meadow pipit, mistle thrush, starling, swift and willow warbler were recorded within the site and/or 100m survey buffer during the 2018 breeding bird survey.

- 4.3 A total of 38 species were recorded within the site boundary and 100m buffer during the breeding bird survey; thirty one species in visit one, twenty eight species in visit two and twenty nine species in visit three.
- 4.4 Nine bird species were confirmed to be breeding within the site boundary and 100m buffer. These are blackbird, blue tit, goldfinch, great tit, house martin, house sparrow, robin, starling and wren.
- 4.5 Of the nine species confirmed to be breeding within the site and the 100m buffer, three are considered to be notable. House martin, house sparrow and starling, none of which were confirmed as breeding within the proposed site boundary.
- 4.6 Fifteen probable breeding bird species were recorded within the site and 100m buffer during the breeding bird survey.
- 4.7 Of the eight probable breeding bird species recorded, dunnoek, mistle thrush, song thrush and willow warbler are considered to be notable, all of which were confirmed as breeding within the proposed site boundary.

5.0 Evaluation and Recommendations

- 5.1 The 38 bird species recorded within the site boundary and 100m survey buffer represents a moderate species diversity with the majority of species recorded being commonplace and widespread.
- 5.2 Fuller (1980) devised a method of classifying the ornithological interest of sites for conservation based on three site attributes: population size, rarity and diversity.
- 5.3 No significant breeding bird concentrations (i.e. 1% or more of the national breeding population) or nationally rare breeding bird species (i.e. between 1 and 1,000 breeding pairs) (Musgrove *et al.* 2013) were recorded during the survey.
- 5.4 The total number of confirmed, probable and possible breeding bird species recorded within a site also indicates its significance. Table 2 includes the breeding diversity criteria devised by Fuller.

Table 2: Significance of the total number of breeding species recorded at a site

Local	County	Regional	National
25-49	50-69	70-84	85+

- 5.5 Based on the above criteria the 36 confirmed, probable and possible breeding bird species recorded within the site and 100m survey buffer indicate it may be of local significance. However, the majority of the 27 confirmed, probable and possible breeding bird species recorded within the proposed site boundary are commonplace and widespread, indicating it is of less than local significance for breeding birds.
- 5.6 Three notable bird species were confirmed to be breeding, these are house martin, house sparrow and starling, evidenced by the presence of active house martin and house sparrow nests, a starling family and adult birds carrying food during survey visits. All of these species are likely nesting within the residential properties and gardens in the 100m survey buffer and foraging within the proposed site boundary.
- 5.7 House martin, house sparrow and starling are species that nest in residential areas, occupied or vacant, including houses, stables, bridges or occasionally walls / trees. There are currently no buildings on site or structures that could provide ideal nesting habitat for these species, with the exception of dry stone walls and scattered trees.
- 5.8 The other notable species recorded as probable breeding species, were likely nesting within the site itself, rather than in the land surrounding site. These species include dunnock, willow warbler, mistle thrush and song thrush.

-
- 5.9 The woodland and scrub areas within and adjacent to the proposed site provide habitat for dunnoek, mistle thrush, song thrush and willow warbler. These areas should be retained as far as possible in order to prevent the loss of nesting habitat for these notable bird species.
- 5.10 If trees and scrub are to be removed, they should be replaced using a range of native species to create a varied vegetation structure and suit a wider range of breeding bird species. Fruiting tree and shrub species and/or species that are attractive to insects will also provide additional foraging resources for numerous bird species.
- 5.11 A nest box scheme undertaken as part of the development, including small nest boxes with holes and open fronted nest boxes, would provide additional nesting sites for a number of species such as blue tit and robin. As house sparrow, house martin and starling were confirmed to be nesting within site and the surrounding area, specialised nest boxes for these species should also be provided within the development.
- 5.12 All wild birds and their nests and eggs are protected under the *Wildlife and Countryside Act 1981*, as amended. It is recommended that all tree and vegetation clearance across site avoids the core breeding bird season, March to August inclusive; although bird nesting can take place outside this period. If vegetation clearance works are necessary during the core breeding bird season, or at any time when bird nesting is suspected, a nesting bird check of the affected area by an ecologist is required immediately prior to the clearance works taking place. Extensive clearance of potential bird nesting habitat is not always practical and development programmes should take this constraint into account.

6.0 References

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

Gilbert, G., Gibbons, D.W. and Evans, J., 1998. Bird Monitoring Methods: a manual of techniques for key UK species.

Fuller, R.J., 1980. A method for assessing the ornithological interest of sites for conservation. *Biological Conservation*, 17(3), pp.229-239.

Musgrove, A., Aebischer, N., Eaton, M., Hearn, R., Newson, S., Noble, D., Parsons, M., Risely, K. and Stroud, D., 2013. Population estimates of birds in Great Britain and the United Kingdom. *British Birds*, 106, pp.64-100.

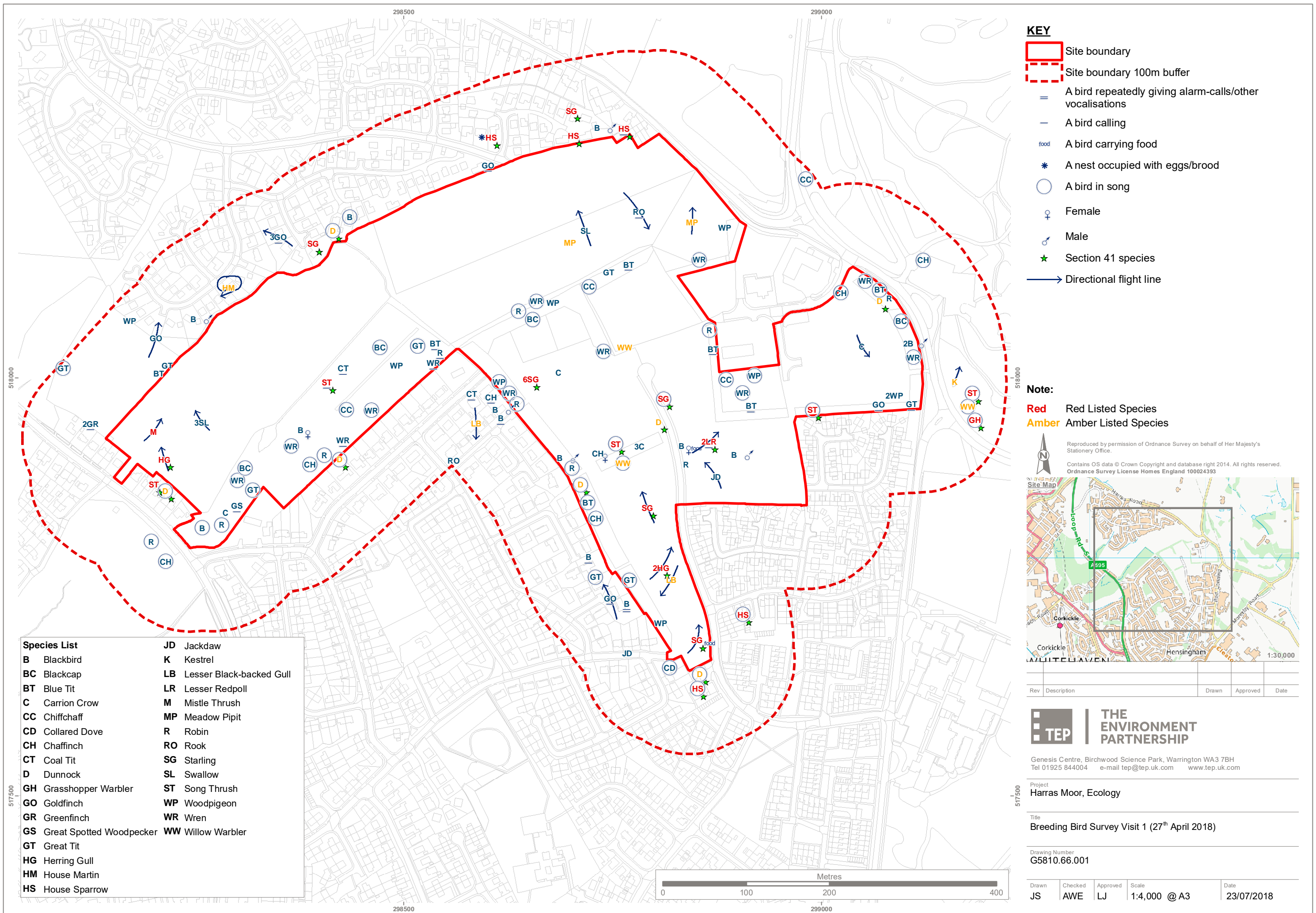
Cumbria Biodiversity Centre & Cumbria Bird Club. 2015. Cumbria Birds Atlas Map Volume 1. 2007 – 2011. p.100, 182, 272.

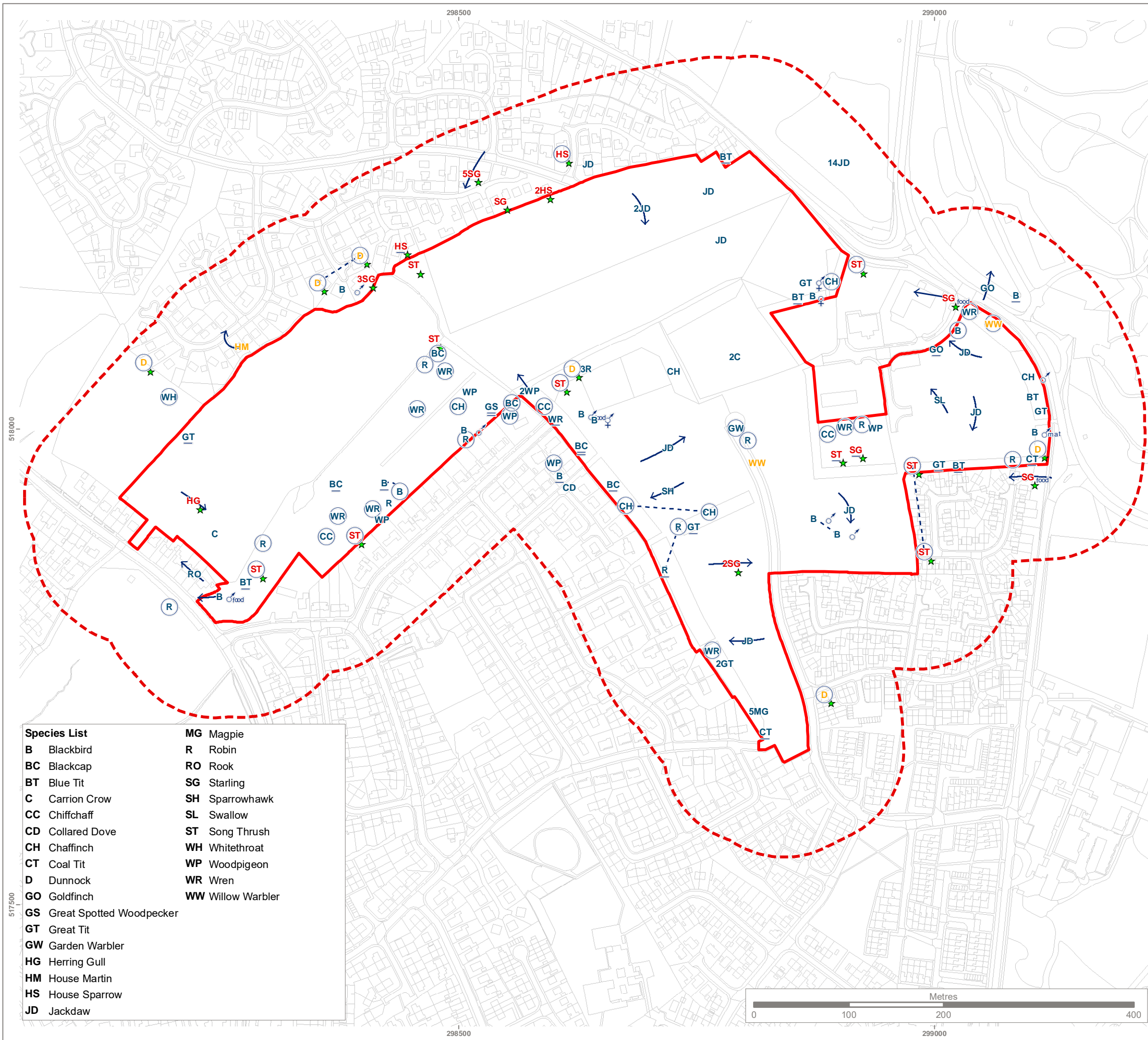
DRAWINGS

G5810.66.001 Breeding Bird Survey Visit 1 30.04.2018

G5810.66.002 Breeding Bird Survey Visit 2 25.05.2018

G5810.66.003 Breeding Bird Survey Visit 3 22.06.2018





Species List	
B	Blackbird
BC	Blackcap
BT	Blue Tit
C	Carrion Crow
CC	Chiffchaff
CD	Collared Dove
CH	Chaffinch
CT	Coal Tit
D	Dunnock
GO	Goldfinch
GS	Great Spotted Woodpecker
GT	Great Tit
GW	Garden Warbler
HG	Herring Gull
HM	House Martin
HS	House Sparrow
JD	Jackdaw
MG	Magpie
R	Robin
RO	Rook
SG	Starling
SH	Sparrowhawk
SL	Swallow
ST	Song Thrush
WH	Whitethroat
CT	Woodpigeon
WR	Wren
WW	Willow Warbler

KEY

- Site boundary
- Site boundary 100m buffer
- A bird repeatedly giving alarm-calls/other vocalisations
- A bird calling
- A bird carrying food
- A bird carrying nesting material
- A bird in song
- Female
- Male
- Male and female pair
- Section 41 species
- Directional flight line
- Simultaneous registration (different birds)

Note:

Red Red Listed Species
Amber Amber Listed Species

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Rev	Description	Drawn	Approved	Date

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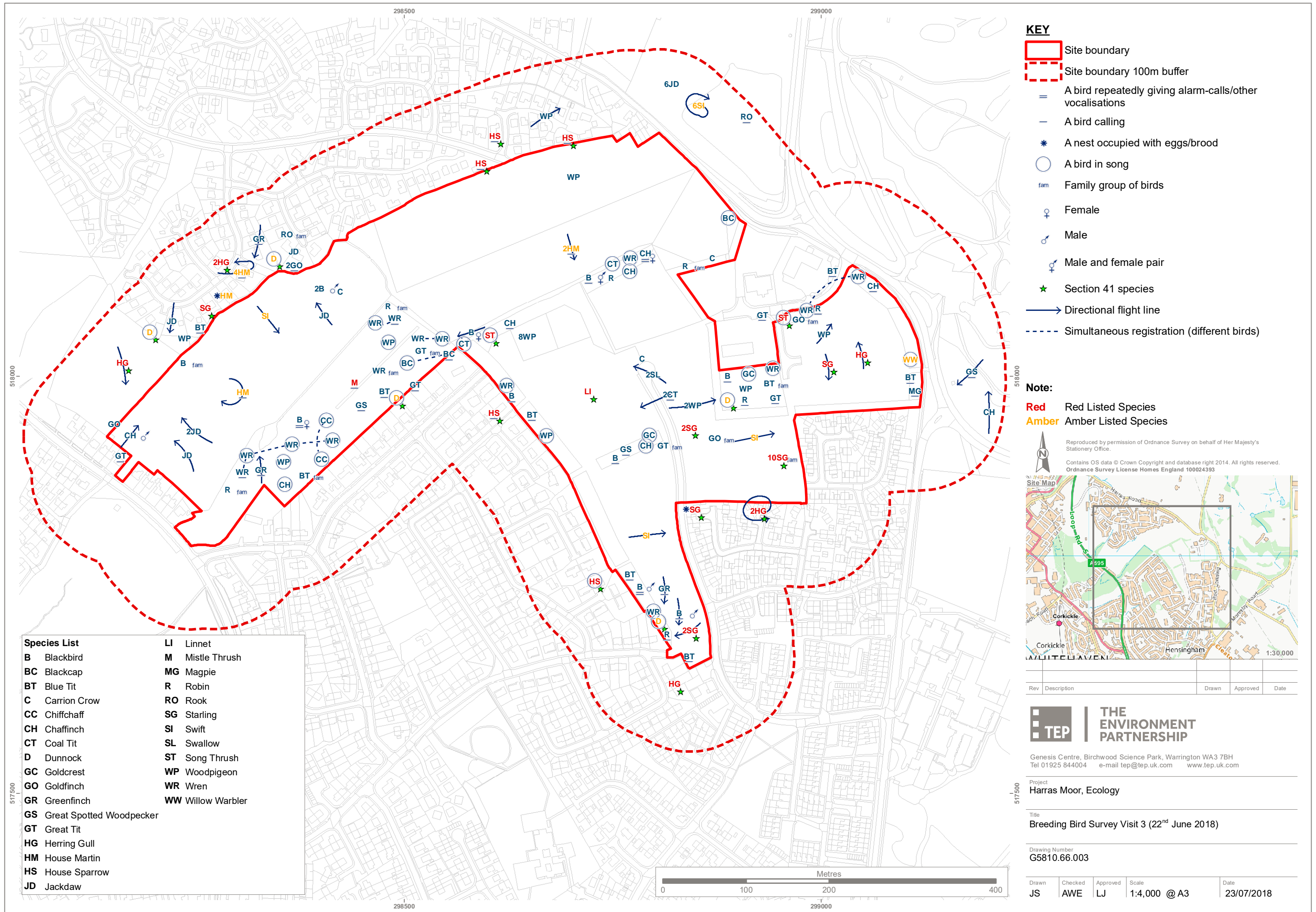
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Project
Harras Moor, Ecology

Title
Breeding Bird Survey Visit 2 (23rd May 2018)

Drawing Number
G5810.66.002

Drawn JS	Checked AWE	Approved LJ	Scale 1:4,000 @ A3	Date 23/07/2018
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Species List	
B	Blackbird
BC	Blackcap
BT	Blue Tit
C	Carrion Crow
CC	Chiffchaff
CH	Chaffinch
CT	Coal Tit
D	Dunnock
GC	Goldcrest
GO	Goldfinch
GR	Greenfinch
GS	Great Spotted Woodpecker
GT	Great Tit
HG	Herring Gull
HM	House Martin
HS	House Sparrow
JD	Jackdaw
LI	Linnet
M	Mistle Thrush
MG	Magpie
R	Robin
RO	Rook
SG	Starling
SI	Swift
SL	Swallow
ST	Song Thrush
WP	Woodpigeon
WR	Wren
WW	Willow Warbler

- KEY**
- Site boundary
 - Site boundary 100m buffer
 - A bird repeatedly giving alarm-calls/other vocalisations
 - A bird calling
 - A nest occupied with eggs/brood
 - A bird in song
 - Family group of birds
 - Female
 - Male
 - Male and female pair
 - Section 41 species
 - Directional flight line
 - Simultaneous registration (different birds)

Note:

Red Listed Species
Amber Listed Species

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Site Map

1:30,000

Rev	Description	Drawn	Approved	Date
JS	AWE	LJ		23/07/2018

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Project
Harras Moor, Ecology

Title
Breeding Bird Survey Visit 3 (22nd June 2018)

Drawing Number
G5810.66.003

Scale
1:4,000 @ A3



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