Elton Reservoir, Bury

GM Allocation 7

WINTERING AND BREEDING BIRD SURVEYS 2017

March 2019

[ERAP (Consultant Ecologists) Ltd ref: 2017-001]

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Document Control

Survey Type:	Surveyors	Survey Date(s)
Wintering bird surveys	Chris Swindells B.Sc. (Hons)	Repetition A1: 1st & 2nd February 2017
		Repetition A2: 16th & 17th February 2017
		Repetition A3: 4 th & 5 th March 2017
		Repetition A4: 4 th & 5 th September 2017
		Repetition A5: 3 rd & 4 th October 2017
		Repetition A6: 1st & 3rd November 2017
		Repetition A7: 4 th & 5 th December 2017
Breeding bird surveys	Chris Swindells B.Sc. (Hons)	Repetition B1: 9th & 10th April 2017
		Repetition B2: 16th & 17th May 2017
		Repetition B3: 12 th & 13 th June 2017
		Repetition B4: 4 th & 5 th July 2017
		Repetition B5: 3 rd & 4 th August 2017
Reporting	Personnel	Date
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1.0 INTRODUCTION

1.1 Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Peel Holdings (Land and Property) Limited to carry out the relevant ecological surveys and assessment of the Elton Reservoir site, Bury / Greater Manchester (GM) Allocation 7 area (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 786 089.
- 1.1.2 The surveys were requested in connection with proposals to promote the site for development within the Greater Manchester Spatial Framework (GMSF) (Greater Manchester Combined Authority, January 2019).
- 1.1.3 This report presents the results of surveys for wintering and breeding birds.

1.2 Survey Objectives

1.2.1 The objective of the survey and assessment was to determine the ecological baseline at the Elton Reservoir site and inform the iterative process of the preparation of the Sketch Masterplan.

1.2.2 The aims were to:

- a. Carry out an appropriate scope of survey to determine the diversity of bird species using the relevant areas of the site/survey area, including an inventory of bird species that are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and Priority Species, as listed on Section 41 of the Natural Environment and Rural Communities Act 2006;
- b. Use the survey data to determine, where possible, any temporal or spatial patterns or habitat associations; and
- c. Provide guidance in accordance with wildlife legislation, the National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2019).

2.0 METHOD OF SURVEY

2.1 Bird Surveys

Wintering Bird Survey

- 2.1.1 With the exception of February 2017¹, one site visit was undertaken per month for the following dates presented at **Table 2.1**, below. Due to the size of the site, one survey was split over two days.
- 2.1.2 The survey conditions are also presented for each survey date.

¹ No survey was completed in January 2017. To compensate for this one survey was completed in early February (i.e. 2nd February 2017) with another completed mid-February 2017.



Table 2.1: Survey Dates and Weather Conditions for Wintering Bird Surveys

Repetition	Survey Date	Survey Conditions
No.		
A1	1st February 2017	Overcast in the morning, with sunny intervals later. 10°C maximum temperature. A light air (Beaufort scale 1)
	2 nd February 2017	Cloudy with occasional showers and sunny intervals. 11°C maximum air temperature. A light breeze (Beaufort scale 2)
A2	16 th February 2017	Sunny with scattered cloud. 11°C maximum air temperature. A light air (Beaufort scale 1)
	17 th February 2017	Sunny with scattered cloud. 12°C maximum air temperature. A light air (Beaufort scale 1)
A3	4 th March 2017	Sunny with scattered cloud. 10°C maximum air temperature. A light air (Beaufort scale 1)
	5 th March 2017	Rain at first, then cloudy, then sunny. 9°C maximum air temperature. A light air (Beaufort scale 1)
A4	4 th September 2017	Overcast with occasional drizzle. Sunny with scattered cloud. 18°C maximum air temperature. A light air (Beaufort scale 1)
	5 th September 2017	Heavy rain. 16°C maximum air temperature. A light air (Beaufort scale 1)
A5	3 rd October 2017	Cloudy with sunny intervals and occasional showers. 18°C maximum air temperature. A light breeze (Beaufort scale 2).
	4 th October 2017	Cloudy with sunny intervals and occasional showers. 18°C maximum air temperature. A light breeze (Beaufort scale 2).
A6	1 st November 2017	Hazy sunshine. 13°C maximum air temperature. A light air (Beaufort scale 1)
	3 rd November 2017	Overcast. 11°C maximum air temperature. A light breeze (Beaufort scale 2).
A7	4 th December 2017	Overcast, occasional drizzle and sunny intervals. 9°C maximum air temperature. A light breeze (Beaufort scale 2).
	5 th December 2017	Overcast, occasional light rain. 9°C maximum air temperature. A light breeze (Beaufort scale 2).

- 2.1.3 The surveys were completed by Mr Chris Swindells via walked transects and use of vantage points. Owing to the enclosed nature of the site (i.e. the site is bordered by built development on wall boundaries), the study area comprised land within the site boundary only.
- 2.1.4 The extent of the study area is considered appropriate to reliably assess the use of the habitats within and in close proximity to the site by wintering birds to determine the impact of the proposed development on the designated sites in the wider area.
- 2.1.5 All visible and audible birds detected were identified and recorded during the surveys following the standard recording methodology and codes of the *British Trust for Ornithology (BTO) Common Birds Census* (Marchant, 1983).

Breeding Bird Survey

- 2.1.6 Breeding bird surveys were conducted by Mr. Chris Swindells, an experienced bird surveyor.
- 2.1.7 The site was walked over a set transect, and all visible and audible birds were recorded following the standard recording methodology and codes of the *British Trust for Ornithology (BTO) Common Birds Census* (Marchant, 1983).
- 2.1.8 The dates and time of each survey are presented at **Table 2.2**, below.



Table 2.2: Survey Dates and Weather Conditions for Breeding Bird Surveys

Repetition No.	Survey Date	Survey Conditions
B1	9 th April 2017	Sunny. 18°C maximum air temperature. A light air (Beaufort scale 1)
	10 th April 2017	Cloudy with sunny intervals. 18°C maximum air temperature. A light breeze (Beaufort scale 2)
B2	16 th May 2017	Heavy rain. 16°C maximum air temperature. A light breeze (Beaufort scale 2)
	17 th May 2017	Sunny intervals with prolonged scattered showers. 18°C maximum air temperature. A light breeze (Beaufort scale 2)
В3	12 th June 2017	Overcast with occasional showers. 18°C maximum air temperature. A light breeze (Beaufort scale 2)
	13 th June 2017	Cloudy with occasional sunny intervals. 16°=C maximum air temperature. A light air (Beaufort scale 1).
B4	4 th July 2017	Overcast with light rain. 18°C maximum air temperature. A light air (Beaufort scale 1)
	5 th July 2017	Overcast with occasional drizzle. 16°C maximum air temperature. Variable wind conditions throughout the day.
B5	3 rd August 2017	Cloudy, occasional rain, long sunny intervals. 19°C maximum air temperature. A light air (Beaufort scale 1)
	4 th August 2017	Showers then sunny intervals. 18°C maximum air temperature. A light breeze (Beaufort scale 2)

2.2 Survey Limitations

- 2.2.1 The surveys were conducted under generally suitable conditions. Where survey conditions were unfavourable this was typically for a single day of the survey repetition, and it is considered that (by completing surveys over two days each month of 2017) a reliable assessment of the usage of birds at the site could be completed.
- 2.2.2 No surveys were completed in January 2017, however the first survey was carried out in early February (1st and 2nd) and it is considered that the timings do not represent a significant survey limitation.

2.3 Evaluation Methodology

- 2.3.1 Government advice on wildlife, as set out in the *National Planning Policy Framework* (Ministry of Housing, Communities and Local Government, 2019) and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedule 1 (Part 1), of the *Wildlife and Countryside Act 1981* (as amended) is referenced where applicable, and any impacts to protected bird species are evaluated in accordance with current guidance.
- 2.3.2 The presence of any Priority Species, as listed under Section 41 of the *NERC Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of species listed by the Greater Manchester Biodiversity Action Plans has been taken into account in the evaluation of the site.



3.0 SURVEY RESULTS

3.1 Wintering Bird Surveys

- 3.1.1 Maps to show the results of each wintering bird survey are appended at **Section 6.3** (**Figures A.1** to **A.7**). Tables of each survey repetition are appended at **Section 6.1**, **Tables 8.1** to **8.7**.
- 3.1.2 A summary of the wintering bird surveys is presented at **Table 3.1**, below.

Table 3.1: Summary of Wintering Bird Surveys

Scientific Name	Common Name	A1	A2	А3	A4	A5	A6	A7
		Feb. 1	Feb. 2	Mar	Sep	Oct	Nov	Dec
Accipiter nisus	Sparrowhawk	1	-	1	-	1	-	1
Aegithalos caudatus	Long-tailed tit	8	19	18	12	20	27	18
Alauda arvensis	Skylark	-	1	6	-	-	-	-
Alcedo atthis	Kingfisher	1	-	-	1	2	1	-
Anas clypeata	Shoveler*	-	-	-	-	-	-	5
Anas crecca	Teal	-	11	4	9	-	19	5
Anas platyrhynchos	Mallard	75	66	44	96	126	79	50
Anas strepera	Gadwall	-	-	-	-	4	2	3
Anser anser	Greylag goose	1	1	-	-	-	-	-
Anser brachyrhynchus	Pink-footed goose*	-	-	4	-	35	-	-
Anthus pratensis	Meadow pipit	-	-	-	-	8	3	-
Ardea cinerea	Grey heron	1	3	1	1	1	4	2
Aythya ferina	Pochard	7	10	8	-	2	4	-
Aythya fuligula	Tufted duck	19	-	16	-	119	74	29
Branta canadensis	Canada goose	61	121	91	16	90	16	82
Bucephala clangula	Goldeneye	-	2	1	-	-	4	2
Buteo buteo	Buzzard	-	-	-	1	-	-	-
Carduelis cabaret	Lesser redpoll	-	2	-	-	-	4	2
Carduelis cannabina	Linnet	-	-	-	2	2	4	-
Carduelis carduelis	Goldfinch	41	132	44	132	42	42	68
Carduelis chloris	Greenfinch	15	23	26	30	25	15	27
Certhia familiaris	Treecreeper	-	-	1	-	-	-	-
Columba livia	Feral pigeon	30	38	65	26	22	61	10
Columba palumbus	Wood pigeon	30	195	100	91	104	59	47
Corvus corax	Raven	-	-	-	-	2	-	-
Corvus corone corone	Carrion crow	20	19	9	26	26	22	17
Corvus monedula	Jackdaw	-	-	4	8	6	17	8
Cyanistes caeruleus	Blue tit	26	42	30	25	21	27	32
Cygnus olor	Mute swan	4	3	2	10	8	6	5
Dendrocopos major	Greater spotted woodpecker	1	1	1	2	-	3	-
Egretta garzetta	Little egret	-	1	-	-	-	-	1
Emberiza schoeniclus	Reed bunting	2	6	7	7	1	7	5
Erithacus rubecula	Robin	39	43	38	52	40	42	27
Falco tinnunculus	Kestrel	-	1	3	1	1	-	1
Fringilla coelebs	Chaffinch	17	48	35	31	34	40	32
Fulica atra	Coot	19	30	26	80	109	102	61
Gallinago gallinago	Snipe	2	2	2	3	-	6	-
Gallinula chloropus	Moorhen	16	6	17	30	30	20	11
Garrulus glandarius	Jay	1	1	-	6	5	5	2
Haematopus ostralegus	Oystercatcher	-	3	-	-	-	-	-
Hirundo rustica	Swallow	-	-	-	30	1	-	-



Scientific Name	Common Name	A1	A2	A3	A4	A5	A6	A7
		Feb. 1	Feb. 2	Mar	Sep	Oct	Nov	Dec
Larus argentatus	Herring gull	9	4	12	-	-	10	-
Larus canus	Common gull	6	18	16	3	2	11	2
Larus fuscus	Lesser black-backed gull	4	13	11	3	1	21	2
Larus marinus	Great black-backed gull	-	2	-	8	-	-	4
Larus ridibundus	Black-headed gull	118	227	624	84	30	257	66
Mergus merganser	Goosander	1	1	1	-	2	-	11
Motacilla alba	Pied wagtail	3	6	4	13	38	12	12
Motacilla cinerea	Grey wagtail	-	-	-	-	-	1	-
Parus ater	Coal tit	3	4	1	12	4	2	1
Parus major	Great tit	14	23	21	29	12	21	19
Parus montanus	Willow tit	2	2	2	-	-	-	2
Passer domesticus	House sparrow	30	38	35	70	71	73	60
Phalacrocorax carbo	Cormorant	4	2	1	24	44	30	4
Phasianus colchicus	Pheasant	1	-	1	-	-	1	-
Phylloscopus collybita	Chiffchaff	-	-	-	4	3	-	-
Phylloscopus trochilus	Willow warbler	-	-	-	14	-	-	-
Pica pica	Magpie	27	42	43	39	41	33	41
Podiceps cristatus	Great crested grebe	6	6	7	7	5	11	2
Prunella modularis	Dunnock	16	25	32	15	18	25	22
Pyrrhula pyrrhula	Bullfinch	6	8	6	2	2	5	8
Rallus aquaticus	Water rail	-	-	-	1	-	1	-
Regulus regulus	Goldcrest	-	-	-	1	-	3	1
Saxicola rubetra	Whinchat	-	-	-	1	-	-	-
Saxicola torquata	Stonechat	1	-	1	-	-	-	-
Scolopax rusticola	Woodcock	-	1	-	-	-	-	-
Streptopelia decaocto	Collared dove	3	2	4	19	4	10	4
Sturnus vulgaris	Starling	33	36	26	86	22	45	35
Sylvia communis	Whitethroat	-	-	-	12	-	-	-
Tachybaptus ruficollis	Little grebe	-	-	-	-	2	-	-
Troglodytes troglodytes	Wren	20	25	32	37	42	44	37
Turdus iliacus	Redwing*	6	-	-	-	-	-	2
Turdus merula	Blackbird	26	37	52	32	41	57	67
Turdus philomelos	Song thrush	11	13	6	1	1	3	-
Turdus pilaris	Fieldfare*	40	-	-	-	-	-	46
Turdus viscivorus	Mistle thrush	3	11	3	2	4	7	5
Vanellus vanellus	Lapwing	-	42	11	30	-	45	13
	Total No. species	49	54	53	53	50	55	51
	Total No. birds	830	1421	1557	1279	1276	1450	1019

Priority Species as defined by Section 41 of the NERC Act 2006 are presented in Bold.

Willow tit are additionally a GM BAP Priority Species.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are presented in italics.

Birds which overwinter in the UK (WM) and passage migrants (PM), in accordance with The British List: A Checklist of Birds of Britain (McInerny, 2018), are highlighted in grey (this includes species that are listed as PM and WM and also resident breeders (RB)) Species that are WM or PM only (and not resident breeders) have an asterisk (*).

A total of 77 species were detected during the wintering bird species². One GM BAP Priority Species was 3.1.3 detected, namely willow tit (Parus montanus); this species is also a Priority Species.

² In total, 93 species were detected across the whole site over the course of the wintering bird surveys and breeding bird surveys combined.



- 3.1.4 Twelve Priority Species were detected, namely bullfinch (*Pyrrhula pyrrhula*), dunnock (*Prunella modularis*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), linnet (*Carduelis cannabina*), lesser redpoll (*Carduelis cabaret*), reed bunting (*Emberiza schoeniclus*), skylark (*Alauda arvensis*), starling (*Sturnus vulgaris*), song thrush (*Turdus philomelos*) and willow tit.
- 3.1.5 Three species listed under Schedule 1 (Part 1) of the *Wildlife and Countryside Act 1981* (as amended) were detected, namely fieldfare (*Turdus pilaris*), kingfisher (*Alcedo atthis*) and redwing (*Turdus iliacus*).
- 3.1.6 Fifty-three species listed as passage migrants or winter migrants were recorded. This includes bird species also recorded as resident breeders in *The British List: A Checklist of Birds of Britain* (McInerny, 2018). Only four species not listed as resident breeders were detected namely fieldfare, redwing, pink-footed goose (*Anser brachyrhynchus*) and shoveler (*Anas clypeata*).
- 3.1.7 Of the 53 species listed as passage migrants or winter migrants it is considered that the following 11 species are typically reported as wintering in north-west Britain: Little egret (*Egretta garzetta*), fieldfare (*Turdus pilaris*), goosander (*Mergus merganser*), lapwing, greylag goose (*Anser anser*), lesser redpoll, pinkfooted goose (*Anser brachyrhynchus*), pochard (*Aythya ferina*), redwing, shoveler (*Anas clypeata*) and teal (*Anas crecca*) and the data have been analysed further below.
- 3.1.8 The presence of the Priority Species, Schedule 1 (Part 1) species and GM BAP species is considered in combination with the results of the breeding bird surveys below. A main wintering bird and passage migrants detected at the site is presented at **Table 3.2**, below.

Table 3.2: Winter Migrant, Passage Migrant and Visiting Birds Detected 2017

Common Name	A1	A2	А3	A4	A5	A6	A7	Total	No. Repetitions
	Feb. 1	Feb. 2	Mar	Sep	Oct	Nov	Dec	No.	Species Seen
								Birds	
								Seen	
Fieldfare	40	-	-	-	-	-	46	86	2
Goosander	1	1	1	-	2	-	11	16	5
Greylag goose	1	1	-	-	-	-	-	2	2
Lapwing	-	42	11	30	-	45	13	141	5
Lesser redpoll	-	2	-	-	-	4	2	8	3
Little egret	-	1	-	-	-	-	1	2	2
Pink-footed goose	-	-	4	-	35	-	-	39	2
Pochard	7	10	8	-	2	4	-	31	5
Redwing	6	-	-	-	-	-	2	8	2
Shoveler	-	-	-	-	-	-	5	5	1
Teal	-	11	4	9	-	19	5	48	5
Total No. species	5	7	5	2	3	4	8		

- 3.1.9 **Figure A.8** shows the locations the wintering birds listed in **Table 3.2** were detected within the site during all surveys³.
- 3.1.10 The following statements can be made from examination of the results:

³ For ease of reference, actual locations of birds have been moved slightly from their original locations where species records overlap. Records have been kept within the habitat type they were found within.



- a. Fieldfare were recorded in 'good' numbers but on two survey repetitions only (A1 and A7). All were detected near field boundary features at the northern and southern ends of the site, in flocks of between 6 and 46+;
- b. Goosander were recorded in low numbers on 5 survey repetitions, at the Withins and Elton Reservoirs and on the section of the River Irwell to the east of the site;
- c. Greylag goose were detected on two survey repetitions only, and on both occasions only individual birds were detected at Elton Reservoir;
- d. Lapwing were recorded in flocks of up to 28 birds and were particularly associated with the fields of semi-improved grassland in the south-western corner of the site;
- e. Lesser redpoll were detected in low numbers during three survey repetitions, near scrub, hedgerows and tracks at the north-eastern and southern ends of the site;
- f. Little egret were detected during two survey repetitions only, with individual birds being noted near scrub at the north-eastern end of the site and along the River Irwell to the east of the site;
- g. Pink-footed goose were noted on two survey repetitions only, with four birds noted at Withins Reservoir and a flock of 35 birds noted in flight over fields at the southern end of the site;
- h. Pochard were noted during 5 of the 7 survey repetitions, with low numbers frequently recorded at Elton Reservoir;
- i. Redwing were recorded infrequently and in low numbers, with two birds noted near a track at the southern end of the site, and a further six noted in a field at the northern end of the site;
- j. Shoveler were detected during one survey repetition only, with birds detected at Elton reservoir and near the Manchester Bolton and Bury Canal at the southern end of the site; and
- k. Teal were recorded on Elton Reservoir, the marshy grasslands at Elton Goyt SBI and at the smaller field ponds, particularly in the southern area of the site.

3.2 Breeding Bird Survey Results

3.2.1 Maps of each breeding bird survey are appended at **Section 6.3** (**Figures B.1** to **B.5**). Tables of each survey repetition are appended at **Section 6.2**, **Tables 6.8** to **6.12**. A summary of the breeding bird surveys is presented at **Table 3.3**, below.



Table 3.3: Summary of Breeding Bird Survey Data

Scientific Name	Common Name	B1	B2	В3	B4	B5
		Apr	May	Jun	Jul	Aug
Accipiter nisus	Sparrowhawk	-	-	-	-	1
Acrocephalus schoenobaenus	Sedge warbler	-	4	2	2	1
Acrocephalus scirpaceus	Reed warbler	-	1	-	1	-
Aegithalos caudatus	Long-tailed tit	8	3	-	2	4
Alauda arvensis	Skylark	4	1	2	-	-
Alcedo atthis	Kingfisher	-	-	-	-	2
Anas platyrhynchos	Mallard	18	63	26	25	26
Anser anser	Greylag goose	2	-	-	-	-
Apus apus	Swift	-	100	58	44	-
Ardea cinerea	Grey heron	-	1	-	2	-
Aythya fuligula	Tufted duck	9	-	4	-	-
Branta bernicla	Brent goose¹	-	-	8	1	-
Branta canadensis	Canada goose	60	97	35	62	46
Buteo buteo	Buzzard	1	-	-	-	-
Carduelis cannabina	Linnet	-	_	4	2	2
Carduelis carduelis	Goldfinch	7	12	19	43	53
Carduelis chloris	Greenfinch	20	14	20	16	30
Columba livia	Feral pigeon	28	26	24	20	24
Columba palumbus	Wood pigeon	94	89	144	88	75
Corvus corone corone	Carrion crow	14	13	14	20	19
Corvus monedula	Jackdaw	2	4	21	4	_
Cyanistes caeruleus	Blue tit	14	9	9	8	11
Cygnus olor	Mute swan	2	2	6	1	3
Delichon urbica	House martin	5	67	86	50	94
		2		2	2	1
Dendrocopos major Emberiza schoeniclus	Greater spotted woodpecker	5	8	13	6	5
	Reed bunting	<u> </u>	-	ļ	1	_
Erithacus rubecula	Robin	36	50	26	26	31
Falco tinnunculus	Kestrel	3	-	2	1	1
Fringilla coelebs	Chaffinch	29	37	28	25	20
Fulica atra	Coot	17	44	42	32	45
Gallinago gallinago	Snipe	1	-	-	-	1
Gallinula chloropus	Moorhen	13	12	11	11	14
Garrulus glandarius	Jay	-	-	1	2	1
Haematopus ostralegus	Oystercatcher	2	-	-	4	4
Hirundo rustica	Swallow	2	99	77	102	80
Larus argentatus	Herring gull	-	-	1	-	-
Larus canus	Common gull	1	-	-	-	-
Larus fuscus	Lesser black-backed gull	-	1	3	5	-
Larus minutus	Little gull	-	1	-	-	-
Larus ridibundus	Black-headed gull	24	7	16	24	32
Locustella naevia	Grasshopper warbler	-	-	-	-	1
Motacilla alba	Pied wagtail	5	3	7	6	7
Motacilla cinerea	Grey wagtail	1	1	1	4	1
Numenius arquata	Curlew	2	-	-	-	-
Parus ater	Coal tit	3	-	-	-	-
Parus major	Great tit	15	6	6	4	8
Passer domesticus	House sparrow	41	34	74	73	119
Phalacrocorax carbo	Cormorant	1	-	-	-	1
Phasianus colchicus	Pheasant	1	1	1	-	-
Philomachus pugnax	Ruff	1	-	-	-	_



Scientific Name	Common Name	B1	B2	В3	B4	B5
		Apr	May	Jun	Jul	Aug
Phylloscopus collybita	Chiffchaff	6	3	5	7	2
Phylloscopus trochilus	Willow warbler	6	24	14	8	7
Pica pica	Magpie	50	18	19	17	20
Podiceps cristatus	Great Crested grebe	6	11	6	3	10
Prunella modularis	Dunnock	25	27	27	22	16
Pyrrhula pyrrhula	Bullfinch	2	7	4	4	4
Rallus aquaticus	Water rail	-	2	-	1	1
Riparia riparia	Sand martin	200	30	110	140	100
Sitta europaea	Nuthatch	-	-	-	1	-
Streptopelia decaocto	Collared dove	5	3	6	1	17
Sturnus vulgaris	Starling	32	71	135	110	77
Sylvia atricapilla	Blackcap	5	6	8	10	-
Sylvia borin	Garden warbler	-	1	-	-	-
Sylvia communis	Whitethroat	-	8	6	6	1
Sylvia curruca	Lesser whitethroat	-	-	-	2	-
Tachybaptus ruficollis	Little grebe	-	2	-	-	-
Troglodytes troglodytes	Wren	42	43	53	51	28
Turdus merula	Blackbird	46	72	56	83	48
Turdus philomelos	Song thrush	8	13	6	9	3
Turdus viscivorus	Mistle thrush	2	2	1	-	1
Tyto alba	Barn owl	-	1	-	-	1
Vanellus vanellus	Lapwing	13	12	9	17	34
	Total No. species	53	51	50	53	50
	Total No. birds	943	1166	1258	1211	1133

Priority Species are presented in Bold.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are presented in italics.

- 3.2.2 A total of 72 species were detected during the breeding bird surveys, of which 13 are Priority Species, namely skylark (Alauda arvensis), brent goose (Branta bernicla), linnet, reed bunting, herring gull, grasshopper warbler (Locustella naevia), curlew (Numenius arquata), house sparrow (Passer domesticus), dunnock, bullfinch, starling, song thrush and lapwing.
- 3.2.3 Four species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) were detected, namely kingfisher, ruff (Philomachus puqnax), barn owl (Tyto alba) and little gull (Larus minutus).

3.3 **Priority Species and Schedule 1 Listed Birds**

3.3.1 Tables 3.4 and 3.5, below present the data between February 2017 to December 2017 for all Priority Species and species listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended)4. Figure C.1 shows where all Priority Species of bird were detected within the site to demonstrate any habitat associations. Figure C.2 provides same with birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended). Figure 1 provides a Phase 1 Habitat Map of the site for reference.

¹ No distinction has been made between the dark-bellied brent goose (Branta bernicla subspecies bernicla), a Priority Species, and the brent goose (Branta bernicla); for the purposes of this report, all have been listed as a Priority Species.

⁴ The rationale for presenting data for the whole year is that significant increases in numbers during the breeding season will be more obvious and therefore the site's importance as breeding habitat for these species may be determined.



3.3.2	Also of note is the presence of 200 sand martin during the April surveys; this species was recorded in 'good' numbers for the local areas during four of the five survey repetitions, and has been included in the habitat associations maps presented at Figure C.1 .



Table 3.4: Number of Priority Species and Schedule 1 (Part 1) Species Detected at the Site in 2017 By Repetition

Repetition:	A1	A2	А3	B1	B2	В3	B4	B5	A4	A5	A6	A6
Common Name	Feb 1	Feb 2	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Priority Species												
Brent goose	0	0	0	0	0	8	1	0	0	0	0	0
Bullfinch	6	8	6	2	7	4	4	4	2	2	5	8
Curlew	0	0	0	2	0	0	0	0	0	0	0	0
Dunnock	16	25	32	25	27	27	22	16	15	18	25	22
Grasshopper warbler	0	0	0	0	0	0	0	1	0	0	0	0
Herring gull	9	4	12	0	0	1	0	0	0	0	10	0
House sparrow	30	38	35	41	34	74	73	119	70	71	73	60
Lapwing	0	42	11	13	12	9	17	34	30	0	45	13
Lesser redpoll	0	2	0	0	0	0	0	0	0	0	0	2
Linnet	0	0	0	0	0	4	2	2	2	2	4	0
Reed bunting	2	6	7	5	8	13	6	5	7	1	7	5
Skylark	0	1	6	4	1	2	0	0	0	0	0	0
Song thrush	11	13	6	8	13	6	9	3	1	1	3	0
Starling	33	36	26	32	71	135	110	77	86	22	45	35
Willow tit ¹	2	2	2	0	0	0	0	0	0	0	0	2
WCAS1 Species ²												
Barn owl	0	0	0	0	1	0	0	1	0	0	0	0
Fieldfare	40	0	0	0	0	0	0	0	0	0	0	46
Kingfisher	1	0	0	0	0	0	0	2	1	2	1	0
Little gull	0	0	0	0	1	0	0	0	0	0	0	0
Redwing	6	0	0	0	0	0	0	0	0	0	0	2
Ruff	0	0	0	1	0	0	0	0	0	0	0	0

¹ Willow tit is additionally a GM BAP Priority Species.

² WCAs1 = Birds listed under Schedule 1 (Part 1) of the *Wildlife and Countryside Act 1981* (as amended).



Table 3.5: Analysis and Comparison of Number of Priority Species and Schedule 1 (Part 1) Species Observed During Wintering and Breeding Bird Surveys

Common Name	Total No. Repetitions			Total No. Birds Detected			ls Detected Per tition ³	Percentage of Total Birds Observed ⁴	
	Detected	In winter	Breeding	In winter	Breeding	In winter	Breeding	In winter	Breeding
Priority Species									
Bullfinch	12	7	5	37	21	5	4	64%	36%
Brent goose	2	0	2	0	9	0	5	0%	100%
Curlew	1	0	1	0	2	0	0	0%	100%
Dunnock	12	7	5	153	117	22	23	57%	43%
Grasshopper warbler	1	0	1	0	1	0	1	0%	100%
Herring gull	5	4	1	35	1	9	1	97%	3%
House sparrow	12	7	5	377	341	54	68	53%	47%
Lapwing	10	5	5	141	85	28	17	62%	38%
Linnet	6	3	3	8	8	3	3	50%	50%
Lesser redpoll	2	2	0	4	0	2	0	100%	0
Reed bunting	12	7	5	35	37	5	7	49%	51%
Skylark	5	2	3	7	7	4	2	50%	50%
Starling	12	7	5	283	425	40	85	40%	60%
Song thrush	11	6	5	35	39	6	8	47%	53%
Willow tit	4	4	0	8	0	2	0	100%	0
WCAs1 Species ⁵									
Barn owl	2	0	2	0	2	0	1	0%	100%
Fieldfare	2	2	0	86	0	43	0	100%	0
Kingfisher	5	4	1	5	2	1	2	71%	29%
Little gull	1	0	1	0	1	0	1	0	100%
Redwing	2	2	0	8	0	4	0	100%	0
Ruff	1	0	1	0	1	0	1	0%	100%

¹ i.e. Wintering bird surveys, A1 to A7

For example, the mean number of bullfinch detected per repetition during the wintering bird surveys is:

²i.e. Breeding bird surveys, B1 to B5

³ Calculated from the total number of that species detected during the wintering or breeding bird surveys, divided by the total number of survey repetitions completed for the wintering (7) or breeding (5) bird surveys, rounded to the nearest whole number.

^{37 (}i.e. total number of bullfinch detected during wintering bird surveys) ÷ 7 (i.e. total number of wintering bird survey repetitions completed) = 5.

⁴ Calculated by dividing the total number of that species detected during either the wintering or breeding bird surveys, divided by the total number of that species detected during *all* surveys, multiplied by 100. For example, the percentage of bullfinch detected during winter is:

^{37 (}i.e. the total number of bullfinch detected during wintering bird surveys) ÷ 58 (i.e. the total number of bullfinch detected throughout the year) x 100 = 64%.

⁵ WCAs1 = Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended).



- 3.3.3 In summary and in accordance with **Tables 3.4** and **3.5** and **Figures C.1** and **C.2**, the following statements can be made in respect of the status of the Priority Species and species listed under Schedule 1 (Part 1) of the *Wildlife and Countryside Act 1981* (as amended) detected within the site, in respect of their abundance and frequency of use of the site, and any habitat associations:
 - a. Bullfinch were detected regularly (i.e. each survey repetition) in good numbers during both the wintering and breeding bird surveys; bullfinch uses the site all year round. This species was recorded to be associated with the scrub habitats at the north-eastern end of the site, the marshy grassland at the south-eastern end of the site, and the tall-herb and scrub vegetation at the weirs to the southeast of Withins Reservoir;
 - b. Brent goose were detected in low numbers and during summer only, at a field of improved grassland at the north-western end of the site;
 - c. Curlew were detected in low numbers (i.e. two birds) on one survey repetition only, in a field of improved grassland at the north-western end of the site. Breeding was not confirmed in 2017;
 - d. Dunnock were detected regularly (i.e. each survey repetition) in good numbers during both the wintering and breeding bird surveys; dunnock uses the site all year round, and was detected throughout, chiefly associated with the field boundary scrub and hedgerows within the site;
 - e. Grasshopper warbler: One bird detected during one survey repetition in summer only, located within the marshy grassland at the northern end of Elton Goyt SBI;
 - f. Herring gull: Detected regularly in low numbers during winter and on one occasion only in summer, again in low numbers. The birds were detected at Elton Reservoir but also at the fields of improved grassland at the north-western end of the site and semi-improved grassland at the south-western end of the site;
 - g. House sparrow: Detected regularly (i.e. each survey repetition) in good numbers during both the wintering and breeding bird surveys; house sparrow uses the site all year round. Associated chiefly with the buildings and hedgerows at the site boundaries and buildings within the site, particularly at the western site boundary;
 - h. Lapwing: Detected regularly and in good numbers during both the wintering and breeding bird surveys; lapwing uses the site all year round. Breeding lapwing were typically detected within the fields of semi-improved grassland at the southern end of the site (west of Crow Trees Farm), and within the fields around the margins of Elton Goyt SBI;
 - i. Linnet: Detected infrequently in low numbers during both the wintering and breeding bird surveys; linnet uses the site all year round, and is associated with the fields of semi-improved grassland and field boundary hedgerows at the southern end of the site;
 - j. Little gull: One bird detected during one survey repetition in summer only, located in a field to the north of Withins Reservoir;
 - k. Lesser redpoll: A winter migrant, recorded in low numbers and infrequently during the winter surveys, near scrub, hedgerows and tracks at the north-eastern and southern ends of the site;
 - I. Reed bunting: Detected regularly (i.e. each survey repetition) in good numbers during both the wintering and breeding bird surveys; reed bunting uses the site all year round. Associated with the



- marshy grassland at Elton Goyt SBI, the stream corridor at the outlet from Withins Brook and the canalside habitats;
- m. Skylark: Detected infrequently in low numbers during both the wintering and breeding bird surveys; skylark uses the site all year round, and is chiefly associated with the semi-improved grassland at the southern end of the site (i.e. the species-rich grasslands at Old Hall Farm) and the fields near Doffer Fold Farm;
- n. Starling: Detected regularly (i.e. each survey repetition) in good numbers during both the wintering and breeding bird surveys; starling uses the site all year round. Starling were detected throughout the site, although were more frequently encountered at the semi-improved grassland near housing to the south-western end of the site;
- Song thrush: Detected regularly and in good numbers during both the wintering and breeding bird surveys; song thrush uses the site all year round, and were chiefly associated with field boundary hedgerows, with a greater number of birds detected within the southern end of the site, particularly along the canal;
- p. Willow tit: Recorded in low numbers during the wintering bird surveys only; it is possible that the species breeds at the site but this was not recorded. Associated with the ponds and scrub at the north-eastern corner of the site;
- q. Barn owl: Recorded infrequently and in low numbers during the summer surveys, however it is considered likely that the daylight surveys will have under-recorded this nocturnal species. Habitats within the site (i.e. unmanaged and/or semi-improved grassland which will provide an abundance of prey items) are suitable for foraging barn owl;
- I. Fieldfare: A winter migrant, recorded infrequently but in good numbers during the winter surveys. All observations were near field boundary features at the northern and southern ends of the site, in flocks of between 6 and 46+;
- Kingfisher: Recorded infrequently and in low numbers during the winter and summer surveys, associated with the margins of Elton Reservoir;
- s. Redwing: A winter migrant, recorded in low numbers and infrequently during the winter surveys. Associated with field boundaries at the north-western and south-western ends of the site;
- t. Ruff: Recorded in low numbers (i.e. one bird) during one repetition of the summer surveys, associated with Elton Reservoir. The site is not considered important or core habitat for this species.
- 3.3.4 Sand martin were regularly detected in good numbers over Elton Reservoir during the breeding bird surveys.

4.0 EVALUATION, ASSESSMENT AND GUIDANCE

4.1 Evaluation and Assessment

4.1.1 The site is used by a diversity of bird species both during the wintering and breeding periods. This includes 15 Priority Species and 6 species listed under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended).



- 4.1.2 The diversity of habitats and habitat mosaic, particularly in the land south-east and east of Elton Reservoir clearly provide opportunities for a range of bird species. The diversity of bird species at the site is comprised of both the breeding species and wintering / passage migrants (including the likely influx of species listed as resident breeder but populations are supplemented in the winter months by passage migrants).
- 4.1.3 In the absence of a carefully considered development framework there is a risk of a significant impact on the bird species diversity in the area. This is of particular relevance in consideration of Priority Species (which are capable of being a material consideration in a planning decision).
- 4.1.4 It is recognised that the proposals will result in the loss of habitats used by birds, particularly nesting birds. The guidance presented below is in accordance with 'The Mitigation Hierarchy' (which seeks to avoid, mitigate then compensate).
- 4.1.5 In many instances and for specific bird species, mitigation and effective compensation is entirely feasible within a reasonable timeframe (for example by planting replacement hedgerows to provide opportunities for displaced dunnock and the creation of reedbed and marshy grassland and opportunities for species such as reed bunting at areas of enhanced wetland and surface water drainage ponds). However, for the species identified to be particularly sensitive (or species with specific habitat requirements) such as lapwing and skylark it will be essential to allocate areas of the site for these species and possibly identity loss of habitat / displacement as an impact of the proposals.
- 4.1.6 It must also be recognised that the proposals provide an opportunity to secure and apply measures to enhance the opportunities for nesting birds in the following ways:
 - a. By securing the appropriate management of habitats to increase the carrying capacity for specific species;
 - b. By removal of management practices, (particularly associated with farming) that may not be compatible with bird conservation;
 - c. By providing nesting opportunities for species, including Priority Species, that are currently poorly represented at the site; and
 - d. The creation and management of habitats that will increase the food availability for birds.

4.2 Guidance

- 4.2.1 The development framework / masterplan for the site must consider the conservation value of the site for the diversity of bird species, and the ecological niches provided by those habitats for the bird species associated with the site.
- 4.2.2 The conservation value of the habitats must be considered in terms of their extent and in combination; the value of the site for the variety of bird species detected is derived from the size of the habitats present, their diversity, and their connected nature.
- 4.2.3 Proposals must therefore seek to retain large expanses of those habitats identified as being most favoured by ground nesting and perching species, as well as waterfowl. Areas of open grassland, suitable for use by ground nesting species, hedgerows, scrub and trees, marshy grassland and swamp and open water are all of value to the bird species detected individually and in combination. The development must seek to



retain large areas of these habitats, and ensure they remain connected both within the site and to the wider area.

- 4.2.4 The broad specifications / recommendations of relevance to birds comprise:
 - a. Conservation of habitats regarded as high or moderate suitability for use by birds, particularly open water (reservoirs and canals), trees, scrub, ponds, species-rich grassland, ditches, marshy grassland, hedgerows (where feasible), particularly within a contiguous area and away from activities that may cause disturbance;
 - b. Concentration of the dense areas of development on the large fields of improved pasture, particularly in the north-western corner of the site, which no record or use or reliance, particularly by more sensitive ground nesting bird species, has been recorded;
 - c. Replacement of the nesting opportunities at the hedgerows to be inevitably lost by appropriate landscape planting of native hedgerows and trees of a comparable length / area;
 - d. Maximising the green infrastructure and habitat connectivity through and around the site and between the centre of the site and habitats in the wider area / outer perimeter for use by wildlife, including birds. This will involve retention of habitat connectivity between retained habitats / areas of moderate and high suitability for use by foraging, roosting and nesting birds, and creation of habitats and implementation of appropriate management of new links and corridors as mitigation if needed;
 - e. Implementation of a sensitive design and restricted use of lighting throughout the site, including mitigation in form of selection of appropriate light products and screening, as appropriate, where lighting is essential;
 - f. Provision of a net gain for biodiversity by installation of a range of types of new nesting opportunities, particularly for Priority Species such as areas of young scrub for willow tit;
 - g. Avoidance of severance and fragmentations of favourable habitats such as the land between Withins and Elton Reservoirs and creation of additional areas of favourable habitat, as appropriate;
 - h. Where the loss of habitat (namely a portion of the marshy grassland and wetland habitats at Elton Goyt SBI) has been identified as unavoidable owing to other constraints, the following measures must be secured and delivered as part of the scheme:
 - Creation of additional wetland to ensure there is no net loss of wetland habitat resource and favourable opportunity for birds such as grasshopper warbler and reed bunting (Priority Species), at the site;
 - Siting of the new wetland habitats adjacent to the existing habitats to ensure a similar soil type and condition (including a local source of plant seed) with the aim that the area would act as an extension to the existing wetland and bird species would be displaced to the nearby extended habitats, ideally before loss of the existing habitats (rather than deterred from using the local area entirely); and
 - Completion of appropriate studies (e.g. hydrological studies and modelling) to demonstrate that the extension to the wetland habitats is functional and the habitat is sustainable in the long-term.
 - i. Maintaining the current conditions at the improved pasture up until the commencement of soil stripping and construction (i.e. not permitting the identified development parcels to lie fallow).



- j. Careful consideration of the siting of habitats and landscape planting. For example, avoidance of planting trees and woodland within proximity to the semi-improved grasslands as the trees may provide a perch for corvids and other predators of ground nesting birds;
- k. Avoid fragmenting the large fields suitable for use by ground nesting birds that are to be retained with hedgerows;
- Retaining areas of habitat at the site as a refuge for more sensitive bird species such as lapwing (i.e.
 conservation of fields that are not accessible by the public and consideration of control of visitor
 pressures such as closure of footpaths in the bird nesting season);
- m. Enhancement of opportunities for nesting birds, including Priority Species, within the built environment by installation of bird boxes to provide for Priority Species (house sparrow and starling) and other species such as swift and work towards off-setting any adverse effects on other Priority Species;
- n. Installation of opportunities for additional species that may be attracted to the area such as nesting opportunities for barn owl, tern and possibly sand martins; and
- o. Ensure the birds are considered as a high conservation priority in the Landscape and Habitat Management Plan.

4.3 Conclusion

- 4.3.1 It is recognised that whilst mitigation and enhancement of habitats associated with the proposals will achieve benefits for a number of bird species (including Priority Species), not all bird species will tolerate the encroachment of development and other disturbances associated with visitor and recreational pressures. The preliminary recommendations and guidance outlined in **Section 4.2** aim to provide an approach that will off-sett and mitigate any significant impacts associated with habitat loss, displacement of birds and disturbance.
- 4.3.2 Overall, in the presence of a sensitive design and the implementation of the outlined mitigation and enhancement measures described it is concluded that development at Elton Reservoir can be achieved whilst securing the positive conservation and management of habitats for the bird species recorded and creation of additional habitats as enhancement.

5.0 REFERENCES

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6.0 APPENDIX: TABLES AND FIGURES

6.1 Wintering Bird Surveys Tables

Table 6.1: Wintering Bird Survey A1, 1st and 2nd February 2017 (49 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Accipiter nisus	Sparrowhawk	1	1	Green	0	0	0	0	0	1	0
Aegithalos caudatus	Long-tailed tit	2	8	Green	0	0	0	0	0	0	8
Alcedo atthis	Kingfisher	1	1	Amber	0	0	0	0	0	0	1
Anas platyrhynchos	Mallard	13	75	Amber	0	0	0	0	0	0	69
Anser anser	Greylag goose	1	1	Amber	0	0	0	0	0	0	1
Ardea cinerea	Grey heron	1	1	Green	0	0	0	1	0	0	0
Aythya ferina	Pochard	1	7	Amber	0	0	0	0	0	0	7
Aythya fuligula	Tufted duck	3	19	Amber	0	0	0	0	0	0	19
Branta canadensis	Canada goose	4	61	Green	0	0	0	0	0	0	61
Carduelis carduelis	Goldfinch	5	41	Green	1	0	0	0	0	0	40
Carduelis chloris	Greenfinch	7	15	Green	0	4	1	0	0	0	10
Columba livia	Feral pigeon	2	30	Green	0	0	0	0	0	0	30
Columba palumbus	Wood pigeon	11	30	Green	1	0	0	2	0	0	27
Corvus corone corone	Carrion crow	9	20	Green	0	0	0	2	0	0	18
Cyanistes caeruleus	Blue tit	13	26	Green	0	5	0	0	0	0	21
Cygnus olor	Mute swan	2	4	Green	0	0	0	0	0	0	4
Dendrocopos major	Greater spotted woodpecker	1	1	Green	0	0	0	0	0	0	1
Emberiza schoeniclus	Reed bunting	2	2	Amber	0	0	0	0	2	0	0
Erithacus rubecula	Robin	38	39	Green	30	8	0	0	0	0	1
Fringilla coelebs	Chaffinch	14	17	Green	0	13	0	0	0	0	4
Fulica atra	Coot	8	19	Green	0	0	0	0	0	0	19
Gallinago gallinago	Snipe	1	2	Amber	0	0	0	0	0	0	2
Gallinula chloropus	Moorhen	11	16	Green	0	0	0	0	0	0	16
Garrulus glandarius	Jay	1	1	Green	0	1	0	0	0	0	0
Larus argentatus	Herring gull	2	9	Red	0	0	0	0	0	0	9
Larus canus	Common gull	3	6	Amber	0	0	0	0	0	0	6
Larus fuscus	Lesser black-backed gull	2	4	Amber	0	0	0	1	0	0	3
Larus ridibundus	Black-headed gull	6	118	Amber	0	0	0	7	0	0	111
Mergus merganser	Goosander	1	1	Green	0	0	0	0	0	1	0



Scientific Name	Common Name	Times	Total seen	BOCC1	Singing	Calling	Alarm call	In flight	Male	Female	None
		observed									
Motacilla alba	Pied wagtail	3	3	Green	0	0	0	0	0	0	3
Parus ater	Coal tit	2	3	Green	0	1	0	0	0	0	2
Parus major	Great tit	8	14	Green	0	5	0	0	0	0	9
Parus montanus	Willow Tit	1	2	Red	0	0	0	0	0	0	2
Passer domesticus	House sparrow	12	30	Red	0	5	0	0	0	0	23
Phalacrocorax carbo	Cormorant	4	4	Green	0	0	0	1	0	0	3
Phasianus colchicus	Pheasant	1	1	Green	0	1	0	0	0	0	0
Pica pica	Magpie	12	27	Green	0	0	0	0	0	0	27
Podiceps cristatus	Great Crested grebe	1	6	Green	0	0	0	0	0	0	6
Prunella modularis	Dunnock	16	16	Amber	14	2	0	0	0	0	0
Pyrrhula pyrrhula	Bullfinch	3	6	Amber	0	0	0	0	0	0	0
Saxicola torquata	Stonechat	1	1	Green	0	0	0	0	0	1	0
Streptopelia decaocto	Collared dove	2	3	Green	0	0	0	0	0	0	3
Sturnus vulgaris	Starling	3	33	Red	0	1	0	30	0	0	2
Troglodytes troglodytes	Wren	20	20	Green	16	3	0	0	0	0	1
Turdus iliacus	Redwing	1	6	Red	0	0	0	0	0	0	6
Turdus merula	Blackbird	22	26	Green	5	3	0	0	7	0	11
Turdus philomelos	Song thrush	11	11	Red	11	0	0	0	0	0	0
Turdus pilaris	Fieldfare	1	40	Red	0	0	0	0	0	0	40
Turdus viscivorus	Mistle thrush	2	3	Amber	0	0	0	0	0	0	3

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**. Willow tit is additionally a GM BAP Priority Species.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.2: Wintering Bird Survey A2, 16th and 17th February 2017 (54 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Aegithalos caudatus	Long-tailed tit	3	19	Green	0	0	0	0	0	0	19
Alauda arvensis	Skylark	1	1	Red	0	1	0	0	0	0	0
Anas crecca	Teal	3	11	Amber	0	0	0	0	1	0	10
Anas platyrhynchos	Mallard	11	66	Amber	0	0	0	0	0	0	64
Anser anser	Greylag goose	1	1	Amber	0	0	0	0	0	0	1
Anthus pratensis	Meadow pipit	1	2	Amber	0	0	0	0	0	0	2
Ardea cinerea	Grey heron	2	3	Green	0	0	0	2	0	0	1
Aythya ferina	Pochard	1	10	Amber	0	0	0	0	0	0	10
Branta canadensis	Canada goose	8	121	Green	0	0	0	0	0	0	121
Bucephala clangula	Goldeneye	1	2	Amber	0	0	0	0	0	0	2
Carduelis cabaret	Lesser redpoll	1	2	Red	0	0	0	0	0	0	2
Carduelis carduelis	Goldfinch	5	132	Green	0	0	0	0	0	0	132
Carduelis chloris	Greenfinch	15	23	Green	1	5	6	0	1	0	8
Columba livia	Feral pigeon	2	38	Green	0	0	0	0	0	0	38
Columba palumbus	Wood pigeon	21	195	Green	3	0	0	2	0	0	190
Corvus corone corone	Carrion crow	11	19	Green	0	0	0	2	0	0	17
Cyanistes caeruleus	Blue tit	17	42	Green	0	3	1	0	0	0	38
Cygnus olor	Mute swan	1	3	Green	0	0	0	0	0	0	3
Dendrocopos major	Greater spotted woodpecker	1	1	Green	0	0	0	1	0	0	0
Egretta garzetta	Little egret	1	1	Amber	0	0	0	0	0	0	1
Emberiza schoeniclus	Reed bunting	5	6	Amber	0	4	0	0	0	0	0
Erithacus rubecula	Robin	43	43	Green	37	4	1	0	0	0	1
Falco tinnunculus	Kestrel	1	1	Amber	0	0	0	0	1	0	0
Fringilla coelebs	Chaffinch	37	48	Green	29	7	0	0	0	0	12
Fulica atra	Coot	11	30	Green	0	0	0	0	0	0	30
Gallinago gallinago	Snipe	1	2	Amber	0	0	0	2	0	0	0
Gallinula chloropus	Moorhen	4	6	Green	0	0	0	0	0	0	6
Garrulus glandarius	Jay	1	1	Green	0	0	0	0	0	0	1
Haematopus ostralegus	Oystercatcher	2	3	Amber	0	0	0	1	0	0	2
Larus argentatus	Herring gull	1	4	Red	0	0	0	4	0	0	0
Larus canus	Common gull	2	18	Amber	0	0	0	0	0	0	18
Larus fuscus	Lesser black-backed gull	4	13	Amber	0	0	0	7	0	0	6
Larus marinus	Great Black-backed gull	1	2	Amber	0	0	0	0	0	0	2
Larus ridibundus	Black-headed gull	7	227	Amber	0	0	0	0	0	0	227
Mergus merganser	Goosander	1	1	Green	0	0	0	0	1	0	0



Scientific Name	Common Name	Times	Total	BOCC1	Singing	Calling	Alarm	In flight	Male	Female	None
		observed	seen				call				
Motacilla alba	Pied wagtail	3	6	Green	0	0	0	0	0	0	6
Parus ater	Coal tit	1	4	Green	0	0	0	0	0	0	4
Parus major	Great tit	17	23	Green	0	9	5	0	0	0	9
Parus montanus	Willow Tit	1	2	Red	0	0	0	0	0	0	2
Passer domesticus	House sparrow	21	38	Red	0	15	0	0	1	0	22
Phalacrocorax carbo	Cormorant	2	2	Green	0	0	0	1	0	0	1
Pica pica	Magpie	16	42	Green	0	0	0	0	0	0	42
Podiceps cristatus	Great Crested grebe	3	6	Green	0	0	0	0	0	0	6
Prunella modularis	Dunnock	25	25	Amber	25	0	0	0	0	0	0
Pyrrhula pyrrhula	Bullfinch	3	8	Amber	0	2	0	0	0	0	6
Regulus regulus	Goldcrest	1	1	Green	0	0	0	0	0	0	1
Scolopax rusticola	Woodcock	1	1	Amber	0	0	0	1	0	0	0
Streptopelia decaocto	Collared dove	1	2	Green	0	0	0	0	0	0	2
Sturnus vulgaris	Starling	9	36	Red	0	4	1	0	0	0	31
Troglodytes troglodytes	Wren	25	25	Green	17	7	0	0	0	0	1
Turdus merula	Blackbird	30	37	Green	4	3	0	0	16	0	14
Turdus philomelos	Song thrush	13	13	Red	13	0	0	0	0	0	0
Turdus viscivorus	Mistle thrush	6	11	Amber	0	0	2	0	0	0	9
Vanellus vanellus	Lapwing	2	42	Red	0	0	0	0	0	0	42

¹ BOCC: Status given by Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man (Eaton, et al., 2015) Priority Species are highlighted in **bold**. Willow tit is additionally a GM BAP Priority Species. Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.3: Wintering Bird Survey A3, 4th and 5th March 2017 (53 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Accipiter nisus	Sparrowhawk	1	1	Green	0	0	0	1	0	0	0
Aegithalos caudatus	Long-tailed tit	4	18	Green	0	0	0	0	0	0	18
Alauda arvensis	Skylark	6	6	Red	6	0	0	0	0	0	0
Anas crecca	Teal	1	4	Amber	0	0	0	0	0	0	4
Anas platyrhynchos	Mallard	16	44	Amber	0	0	0	0	0	0	23
Anser brachyrhynchus	Pink-footed goose	1	4	Amber	0	0	0	0	0	0	4
Ardea cinerea	Grey heron	1	1	Green	0	0	0	0	0	0	1
Aythya ferina	Pochard	2	8	Amber	0	0	0	0	0	0	8
Aythya fuligula	Tufted duck	1	16	Amber	0	0	0	0	0	0	16
Branta canadensis	Canada goose	9	91	Green	0	0	0	0	0	0	91
Bucephala clangula	Goldeneye	1	1	Amber	0	0	0	0	1	0	0
Carduelis carduelis	Goldfinch	4	44	Green	2	0	0	0	0	0	42
Carduelis chloris	Greenfinch	14	26	Green	1	4	5	0	0	0	14
Certhia familiaris	Treecreeper	1	1	Green	0	0	0	0	0	0	1
Columba livia	Feral pigeon	4	65	Green	0	0	0	0	0	0	65
Columba palumbus	Wood pigeon	16	100	Green	5	0	0	1	0	0	94
Corvus corone corone	Carrion crow	5	9	Green	0	0	0	1	0	0	8
Corvus monedula	Jackdaw	1	4	Green	0	0	0	0	0	0	4
Cyanistes caeruleus	Blue tit	13	30	Green	0	6	1	0	0	0	23
Cygnus olor	Mute swan	1	2	Green	0	0	0	0	0	0	2
Dendrocopos major	Greater spotted woodpecker	1	1	Green	0	0	0	0	0	0	1
Emberiza schoeniclus	Reed bunting	7	7	Amber	0	2	4	0	0	1	0
Erithacus rubecula	Robin	38	38	Green	31	6	0	0	0	0	1
Falco tinnunculus	Kestrel	3	3	Amber	0	0	0	1	0	2	0
Fringilla coelebs	Chaffinch	29	35	Green	20	7	0	0	0	0	6
Fulica atra	Coot	11	26	Green	0	0	0	0	0	0	26
Gallinago gallinago	Snipe	1	2	Amber	0	0	0	2	0	0	0
Gallinula chloropus	Moorhen	12	17	Green	0	0	0	0	0	0	17
Larus argentatus	Herring gull	5	12	Red	0	0	0	2	0	0	10
Larus canus	Common gull	1	16	Amber	0	0	0	0	0	0	16
Larus fuscus	Lesser black-backed gull	1	11	Amber	0	0	0	0	0	0	11
Larus ridibundus	Black-headed gull	11	624	Amber	0	0	0	6	0	0	618
Mergus merganser	Goosander	1	1	Green	0	0	0	0	0	1	0
Motacilla alba	Pied wagtail	3	4	Green	0	0	0	1	0	0	3



Scientific Name	Common Name	Times	Total	BOCC ¹	Singing	Calling	Alarm	In flight	Male	Female	None
		observed	seen				call				
Parus ater	Coal tit	1	1	Green	0	0	1	0	0	0	0
Parus major	Great tit	13	21	Green	0	1	8	0	0	0	12
Parus montanus	Willow Tit	1	2	Red	0	0	0	0	0	0	2
Passer domesticus	House sparrow	14	35	Red	0	9	0	0	0	0	26
Phalacrocorax carbo	Cormorant	1	1	Green	0	0	0	0	0	0	1
Phasianus colchicus	Pheasant	1	1	Green	0	0	0	0	1	0	0
Pica pica	Magpie	19	43	Green	0	0	0	0	0	0	43
Podiceps cristatus	Great Crested grebe	3	7	Green	0	0	0	0	0	0	7
Prunella modularis	Dunnock	32	32	Amber	31	1	0	0	0	0	0
Pyrrhula pyrrhula	Bullfinch	2	6	Amber	0	0	0	0	0	0	4
Saxicola torquata	Stonechat	1	1	Green	0	0	0	0	0	1	0
Streptopelia decaocto	Collared dove	3	4	Green	2	0	0	0	0	0	2
Sturnus vulgaris	Starling	5	26	Red	0	0	0	0	0	0	26
Sylvia atricapilla	Blackcap	1	1	Green	1	0	0	0	0	0	0
Troglodytes troglodytes	Wren	32	32	Green	26	6	0	0	0	0	0
Turdus merula	Blackbird	39	52	Green	6	3	0	0	21	1	13
Turdus philomelos	Song thrush	6	6	Red	6	0	0	0	0	0	0
Turdus viscivorus	Mistle thrush	2	3	Amber	0	0	0	0	0	0	3
Vanellus vanellus	Lapwing	10	11	Red	9	2	0	0	0	0	0

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**. Willow tit is additionally a GM BAP Priority Species.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.4: Wintering Bird Survey A4, 4th and 5th September 2017 (53 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Aegithalos caudatus	Long-tailed tit	2	12	Green	0	0	0	0	0	0	12	0
Alcedo atthis	Kingfisher	1	1	Amber	0	0	0	0	0	0	1	0
Anas crecca	Teal	1	9	Amber	0	0	0	0	0	0	9	0
Anas platyrhynchos	Mallard	7	96	Amber	0	0	0	6	0	0	90	0
Anas strepera	Gadwall	1	2	Amber	0	0	0	0	0	0	2	0
Ardea cinerea	Grey heron	1	1	Green	0	0	0	0	0	0	1	0
Branta canadensis	Canada goose	5	16	Green	0	0	0	0	0	0	16	0
Buteo buteo	Buzzard	1	1	Green	0	0	0	0	0	0	1	0
Carduelis cannabina	Linnet	1	2	Red	0	0	0	0	0	0	2	0
Carduelis carduelis	Goldfinch	8	132	Green	0	0	0	0	0	0	132	0
Carduelis chloris	Greenfinch	10	30	Green	0	2	0	0	0	0	28	0
Columba livia	Feral pigeon	2	26	Green	0	0	0	0	0	0	26	0
Columba palumbus	Wood pigeon	34	91	Green	0	0	0	2	0	0	89	0
Corvus corone corone	Carrion crow	10	26	Green	0	1	0	0	0	0	25	0
Corvus monedula	Jackdaw	3	8	Green	0	0	0	2	0	0	6	0
Cyanistes caeruleus	Blue tit	13	25	Green	0	6	0	0	0	0	19	0
Cygnus olor	Mute swan	2	10	Green	0	0	0	0	0	0	10	0
Dendrocopos major	Greater spotted woodpecker	2	2	Green	0	2	0	0	0	0	0	0
Emberiza schoeniclus	Reed bunting	6	7	Amber	0	4	0	0	0	0	3	0
Erithacus rubecula	Robin	52	52	Green	19	27	0	0	0	0	6	0
Falco tinnunculus	Kestrel	1	1	Amber	0	0	0	0	0	0	1	0
Fringilla coelebs	Chaffinch	25	31	Green	1	19	0	0	0	0	11	0
Fulica atra	Coot	4	80	Green	0	0	0	0	0	0	80	0
Gallinago gallinago	Snipe	1	3	Amber	0	0	0	0	0	0	3	0
Gallinula chloropus	Moorhen	11	30	Green	0	0	0	0	0	0	22	8
Garrulus glandarius	Jay	4	6	Green	0	1	0	0	0	0	5	0
Hirundo rustica	Swallow	5	30	Green	0	0	0	12	0	0	18	0
Larus canus	Common gull	2	3	Amber	0	0	0	0	0	0	3	0
Larus fuscus	Lesser black-backed gull	2	3	Amber	0	0	0	3	0	0	0	0
Larus marinus	Great Black-backed	2	8	Amber	0	0	0	0	0	0	8	0
Larus ridibundus	Black-headed gull	4	84	Amber	0	0	0	42	0	0	41	1
Motacilla alba	Pied wagtail	6	13	Green	0	0	0	0	0	0	13	0



Scientific Name	Common Name	Times	Total	BOCC ¹	Singing	Calling	Alarm	In	Male	Female	None	Family
		observed	seen				call	flight				
Parus ater	Coal tit	4	12	Green	0	2	0	0	0	0	10	0
Parus major	Great tit	12	29	Green	0	5	1	0	0	0	23	0
Passer domesticus	House sparrow	12	70	Red	0	1	0	0	0	0	69	0
Phalacrocorax carbo	Cormorant	2	24	Green	0	0	0	0	0	0	24	0
Phylloscopus collybita	Chiffchaff	4	4	Green	3	1	0	0	0	0	0	0
Phylloscopus trochilus	Willow warbler	7	14	Amber	0	1	0	0	0	0	13	0
Pica pica	Magpie	13	39	Green	0	0	0	0	0	0	39	0
Podiceps cristatus	Great Crested grebe	2	7	Green	0	0	0	0	0	0	7	0
Prunella modularis	Dunnock	15	15	Amber	0	13	0	0	0	0	2	0
Pyrrhula pyrrhula	Bullfinch	1	2	Amber	0	0	0	0	0	0	2	0
Rallus aquaticus	Water rail	1	1	Green	0	0	0	0	0	0	1	0
Regulus regulus	Goldcrest	1	1	Green	1	0	0	0	0	0	0	0
Saxicola rubetra	Whinchat	1	1	Amber	0	0	0	0	0	0	1	0
Streptopelia decaocto	Collared dove	5	19	Green	0	1	0	0	0	0	18	0
Sturnus vulgaris	Starling	3	86	Red	0	0	0	0	0	0	86	0
Sylvia communis	Whitethroat	9	12	Amber	1	0	0	0	0	0	11	0
Troglodytes troglodytes	Wren	34	37	Green	21	10	0	0	0	0	6	0
Turdus merula	Blackbird	24	32	Green	0	6	0	0	0	0	26	0
Turdus philomelos	Song thrush	1	1	Red	0	0	0	0	0	0	1	0
Turdus viscivorus	Mistle thrush	1	2	Amber	0	0	0	0	0	0	2	0
Vanellus vanellus	Lapwing	1	30	Red	0	0	0	0	0	0	30	0

¹ BOCC: Status given by *Birds of Conservation Concern 4:* the population status of birds in the United Kingdom, Channel Islands and the Isle of Man (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.5: Wintering Bird Survey A5, 3rd and 4th October 2017 (50 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Accipiter nisus	Sparrowhawk	1	1	Green	0	0	0	1	0	0	0
Aegithalos caudatus	Long-tailed tit	5	20	Green	0	0	0	0	0	0	20
Alcedo atthis	Kingfisher	2	2	Amber	0	0	0	1	0	0	1
Anas platyrhynchos	Mallard	10	126	Amber	0	0	0	4	0	0	122
Anas strepera	Gadwall	1	4	Amber	0	0	0	0	0	0	4
Anser brachyrhynchus	Pink-footed goose	1	35	Amber	0	0	0	35	0	0	0
Anthus pratensis	Meadow pipit	2	8	Amber	0	0	0	8	0	0	0
Ardea cinerea	Grey heron	1	1	Green	0	0	0	0	0	0	1
Aythya ferina	Pochard	1	2	Amber	0	0	0	0	0	0	2
Aythya fuligula	Tufted duck	4	119	Amber	0	0	0	13	0	0	106
Branta canadensis	Canada goose	6	90	Green	0	0	0	37	0	0	53
Carduelis cannabina	Linnet	1	2	Red	0	0	0	0	0	0	2
Carduelis carduelis	Goldfinch	11	42	Green	0	0	0	2	0	0	40
Carduelis chloris	Greenfinch	12	25	Green	0	5	0	0	0	0	20
Columba livia	Feral pigeon	2	22	Green	0	0	0	0	0	0	22
Columba palumbus	Wood pigeon	30	104	Green	0	0	0	5	0	0	99
Corvus corax	Raven	1	2	Green	0	0	0	2	0	0	0
Corvus corone corone	Carrion crow	11	26	Green	0	6	0	4	0	0	16
Corvus monedula	Jackdaw	3	6	Green	0	0	0	2	0	0	4
Cyanistes caeruleus	Blue tit	13	21	Green	0	7	0	0	0	0	14
Cygnus olor	Mute swan	2	8	Green	0	0	0	0	0	0	8
Emberiza schoeniclus	Reed bunting	1	1	Amber	0	1	0	0	0	0	0
Erithacus rubecula	Robin	40	40	Green	16	24	0	0	0	0	0
Falco tinnunculus	Kestrel	1	1	Amber	0	0	0	1	0	0	0
Fringilla coelebs	Chaffinch	23	34	Green	1	19	0	0	0	0	14
Fulica atra	Coot	6	109	Green	0	0	0	0	0	0	109
Gallinula chloropus	Moorhen	16	30	Green	0	1	0	0	0	0	29
Garrulus glandarius	Jay	4	5	Green	0	3	0	0	0	0	2
Hirundo rustica	Swallow	1	1	Green	0	0	0	1	0	0	0
Larus canus	Common gull	1	2	Amber	0	0	0	0	0	0	2
Larus fuscus	Lesser black-backed gull	1	1	Amber	0	0	0	0	0	0	1
Larus ridibundus	Black-headed gull	9	30	Amber	0	0	0	17	0	0	13
Mergus merganser	Goosander	1	2	Green	0	0	0	0	0	0	2
Motacilla alba	Pied wagtail	12	38	Green	0	1	0	2	0	0	35
Parus ater	Coal tit	2	4	Green	0	0	0	0	0	0	4



Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Parus major	Great tit	10	12	Green	0	8	0	0	0	0	4
Passer domesticus	House sparrow	14	71	Red	0	3	0	0	0	0	68
Phalacrocorax carbo	Cormorant	5	44	Green	0	0	0	12	0	0	32
Phylloscopus collybita	Chiffchaff	3	3	Green	2	1	0	0	0	0	0
Pica pica	Magpie	20	41	Green	0	1	0	0	0	0	40
Podiceps cristatus	Great Crested grebe	3	5	Green	0	0	0	0	0	0	5
Prunella modularis	Dunnock	17	18	Amber	0	14	0	0	0	0	4
Pyrrhula pyrrhula	Bullfinch	2	2	Amber	0	1	0	0	0	0	1
Streptopelia decaocto	Collared dove	2	4	Green	0	0	0	0	0	0	4
Sturnus vulgaris	Starling	4	22	Red	0	0	0	0	0	0	22
Tachybaptus ruficollis	Little grebe	1	2	Amber	0	0	0	0	0	0	2
Troglodytes troglodytes	Wren	42	42	Green	16	25	0	0	0	0	1
Turdus merula	Blackbird	33	41	Green	1	20	0	0	0	0	20
Turdus philomelos	Song thrush	1	1	Red	0	0	0	0	0	0	1
Turdus viscivorus	Mistle thrush	2	4	Amber	0	0	0	0	0	0	4

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.6: Wintering Bird Survey A6, 1st and 3rd November 2017 (55 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Aegithalos caudatus	Long-tailed tit	4	27	Green	0	0	0	0	0	0	27
Alcedo atthis	Kingfisher	1	1	Amber	0	0	0	1	0	0	0
Anas crecca	Teal	4	19	Amber	0	0	0	0	0	0	19
Anas platyrhynchos	Mallard	9	79	Amber	0	0	0	0	0	0	79
Anas strepera	Gadwall	1	2	Amber	0	0	0	0	0	0	2
Anthus pratensis	Meadow pipit	2	3	Amber	0	1	0	0	0	0	2
Ardea cinerea	Grey heron	4	4	Green	0	1	0	0	0	0	3
Aythya ferina	Pochard	1	4	Amber	0	0	0	0	0	0	4
Aythya fuligula	Tufted duck	4	74	Amber	0	0	0	0	0	0	74
Branta canadensis	Canada goose	3	16	Green	0	0	0	0	0	0	16
Bucephala clangula	Goldeneye	2	4	Amber	0	0	0	0	0	0	4
Carduelis cabaret	Lesser redpoll	1	4	Red	0	0	0	0	0	0	4
Carduelis cannabina	Linnet	1	4	Red	0	0	0	0	0	0	4
Carduelis carduelis	Goldfinch	9	42	Green	0	0	0	0	0	0	42
Carduelis chloris	Greenfinch	6	15	Green	0	2	0	0	0	0	13
Columba livia	Feral pigeon	4	61	Green	0	0	0	0	0	0	61
Columba palumbus	Wood pigeon	13	59	Green	0	0	0	0	0	0	59
Corvus corone corone	Carrion crow	8	22	Green	0	0	0	0	0	0	22
Corvus monedula	Jackdaw	7	17	Green	0	0	0	5	0	0	12
Cyanistes caeruleus	Blue tit	19	27	Green	0	14	0	0	0	0	13
Cygnus olor	Mute swan	3	6	Green	0	0	0	0	0	0	6
Dendrocopos major	Greater spotted woodpecker	2	3	Green	0	0	0	0	0	0	3
Emberiza schoeniclus	Reed bunting	4	7	Amber	0	0	0	0	0	0	7
Erithacus rubecula	Robin	42	42	Green	6	33	0	1	0	0	2
Fringilla coelebs	Chaffinch	30	40	Green	0	23	0	1	0	0	16
Fulica atra	Coot	4	102	Green	0	0	0	0	0	0	102
Gallinago gallinago	Snipe	1	6	Amber	0	0	0	0	0	0	6
Gallinula chloropus	Moorhen	10	20	Green	0	0	0	0	0	0	20
Garrulus glandarius	Jay	3	5	Green	0	1	0	0	0	0	4
Larus argentatus	Herring gull	2	10	Red	0	0	0	1	0	0	9
Larus canus	Common gull	2	11	Amber	0	0	0	4	0	0	7
Larus fuscus	Lesser black-backed gull	1	21	Amber	0	0	0	0	0	0	21
Larus ridibundus	Black-headed gull	16	257	Amber	0	0	0	31	0	0	226
Motacilla alba	Pied wagtail	8	12	Green	0	0	0	0	0	0	12
Motacilla cinerea	Grey wagtail	1	1	Amber	0	0	0	0	0	0	1



Scientific Name	Common Name	Times	Total	BOCC ¹	Singing	Calling	Alarm	In	Male	Female	None
		observed	seen				call	flight			
Parus ater	Coal tit	1	2	Green	0	0	0	0	0	0	2
Parus major	Great tit	11	21	Green	0	7	0	0	0	0	14
Passer domesticus	House sparrow	17	73	Red	0	5	0	0	0	0	68
Phalacrocorax carbo	Cormorant	11	30	Green	0	0	0	6	0	0	24
Phasianus colchicus	Pheasant	1	1	Green	0	0	0	0	0	0	1
Pica pica	Magpie	16	33	Green	0	0	0	0	0	0	33
Podiceps cristatus	Great Crested grebe	4	11	Green	0	2	0	0	0	0	9
Prunella modularis	Dunnock	24	25	Amber	0	21	0	0	0	0	4
Pyrrhula pyrrhula	Bullfinch	3	5	Amber	0	1	0	0	0	0	4
Rallus aquaticus	Water rail	1	1	Green	0	0	0	0	0	0	1
Regulus regulus	Goldcrest	3	3	Green	0	0	0	0	0	0	3
Sitta europaea	Nuthatch	1	1	Green	0	0	0	0	0	0	1
Streptopelia decaocto	Collared dove	4	10	Green	0	0	0	0	0	0	10
Sturnus vulgaris	Starling	7	45	Red	0	1	0	0	0	0	44
Troglodytes troglodytes	Wren	43	44	Green	8	31	0	0	0	0	5
Turdus merula	Blackbird	40	57	Green	0	6	0	0	0	0	51
Turdus philomelos	Song thrush	3	3	Red	0	0	0	0	0	0	3
Turdus pilaris	Fieldfare	1	6	Red	0	0	0	0	0	0	6
Turdus viscivorus	Mistle thrush	3	7	Amber	0	0	0	0	0	0	7
Vanellus vanellus	Lapwing	1	45	Red	0	0	0	0	0	0	45

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.7: Wintering Bird Survey A7, 4th and 5th December 2017 (51 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Accipiter nisus	Sparrowhawk	1	1	Green	0	0	0	1	0	0	0
Aegithalos caudatus	Long-tailed tit	3	18	Green	0	0	0	0	0	0	18
Anas clypeata	Shoveler	2	5	Amber	0	0	0	0	0	0	5
Anas crecca	Teal	1	5	Amber	0	0	0	0	0	0	5
Anas platyrhynchos	Mallard	6	50	Amber	0	0	0	0	0	0	50
Anas strepera	Gadwall	1	3	Amber	0	0	0	0	0	0	3
Ardea cinerea	Grey heron	2	2	Green	0	0	0	0	0	0	2
Aythya fuligula	Tufted duck	3	29	Amber	0	0	0	0	0	0	29
Branta canadensis	Canada goose	4	82	Green	0	0	0	0	0	0	82
Bucephala clangula	Goldeneye	1	2	Amber	0	0	0	0	0	0	2
Carduelis cabaret	Lesser redpoll	1	2	Red	0	0	0	0	0	0	2
Carduelis carduelis	Goldfinch	4	68	Green	0	0	0	0	0	0	68
Carduelis chloris	Greenfinch	6	27	Green	0	1	0	0	0	0	26
Columba livia	Feral pigeon	1	10	Green	0	0	0	0	0	0	10
Columba palumbus	Wood pigeon	10	47	Green	0	0	0	2	0	0	45
Corvus corone corone	Carrion crow	10	17	Green	0	0	0	1	0	0	16
Corvus monedula	Jackdaw	3	8	Green	0	0	0	6	0	0	2
Cyanistes caeruleus	Blue tit	16	32	Green	0	11	0	0	0	0	21
Cygnus olor	Mute swan	1	5	Green	0	0	0	0	0	0	5
Egretta garzetta	Little egret	1	1	Amber	0	0	0	0	0	0	1
Emberiza schoeniclus	Reed bunting	5	5	Amber	0	2	0	0	0	0	3
Erithacus rubecula	Robin	27	27	Green	0	24	0	0	0	0	3
Falco tinnunculus	Kestrel	1	1	Amber	0	0	0	0	0	0	1
Fringilla coelebs	Chaffinch	18	32	Green	0	11	0	0	0	0	21
Fulica atra	Coot	6	61	Green	0	0	0	0	0	0	61
Gallinula chloropus	Moorhen	8	11	Green	0	0	0	0	0	0	11
Garrulus glandarius	Jay	1	2	Green	0	0	0	0	0	0	2
Larus canus	Common gull	1	2	Amber	0	0	0	0	0	0	2
Larus fuscus	Lesser black-backed gull	2	2	Amber	0	0	0	1	0	0	1
Larus marinus	Great Black-backed gull	1	4	Amber	0	0	0	0	0	0	4
Larus ridibundus	Black-headed gull	10	66	Amber	0	0	0	22	0	0	44
Mergus merganser	Goosander	1	11	Green	0	0	0	0	0	0	11
Motacilla alba	Pied wagtail	6	12	Green	0	0	0	0	0	0	12
Parus ater	Coal tit	1	1	Green	0	0	0	0	0	0	1
Parus major	Great tit	7	19	Green	0	3	0	0	0	0	16



Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Parus montanus	Willow Tit	1	2	Red	0	0	0	0	0	0	2
Passer domesticus	House sparrow	13	60	Red	0	21	0	0	0	0	39
Phalacrocorax carbo	Cormorant	3	4	Green	0	0	0	0	0	0	4
Pica pica	Magpie	15	41	Green	0	0	0	1	0	0	40
Podiceps cristatus	Great Crested grebe	1	2	Green	0	0	0	0	0	0	2
Prunella modularis	Dunnock	22	22	Amber	0	21	0	0	0	0	1
Pyrrhula pyrrhula	Bullfinch	3	8	Amber	0	0	0	0	0	0	8
Regulus regulus	Goldcrest	1	1	Green	0	1	0	0	0	0	0
Streptopelia decaocto	Collared dove	2	4	Green	0	0	0	0	0	0	4
Sturnus vulgaris	Starling	4	35	Red	0	0	0	0	0	0	35
Troglodytes troglodytes	Wren	36	37	Green	13	22	0	0	0	0	2
Turdus iliacus	Redwing	1	2	Red	0	0	0	0	0	0	2
Turdus merula	Blackbird	38	67	Green	0	0	0	0	0	0	67
Turdus pilaris	Fieldfare	2	46	Red	0	0	0	40	0	0	6
Turdus viscivorus	Mistle thrush	3	5	Amber	0	0	0	1	0	0	4
Vanellus vanellus	Lapwing	1	13	Red	0	0	0	0	0	0	13

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



6.2 Breeding Bird Survey Tables

Table 6.8: Breeding Bird Survey B1, 9th and 10th April 2017 (53 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None
Aegithalos caudatus	Long-tailed tit	4	8	Green	0	0	0	0	0	0	8
Alauda arvensis	Skylark	4	4	Red	4	0	0	0	0	0	0
Anas platyrhynchos	Mallard	7	18	Amber	0	0	0	0	0	0	18
Anas strepera	Gadwall	1	2	Amber	0	0	0	0	0	0	2
Anser anser	Greylag goose	1	2	Amber	0	0	0	0	0	0	2
Aythya fuligula	Tufted duck	3	9	Amber	0	0	0	0	0	0	9
Branta canadensis	Canada goose	17	60	Green	0	0	0	0	0	0	60
Buteo buteo	Buzzard	1	1	Green	0	0	0	1	0	0	0
Carduelis carduelis	Goldfinch	2	7	Green	1	0	0	0	0	0	6
Carduelis chloris	Greenfinch	16	20	Green	0	2	11	0	1	0	6
Columba livia	Feral pigeon	3	28	Green	0	0	0	0	0	0	28
Columba palumbus	Wood pigeon	27	94	Green	10	0	0	0	0	0	84
Corvus corone corone	Carrion crow	9	14	Green	0	1	0	0	0	0	13
Corvus monedula	Jackdaw	1	2	Green	0	0	0	2	0	0	0
Cyanistes caeruleus	Blue tit	10	14	Green	0	9	1	0	0	0	4
Cygnus olor	Mute swan	1	2	Green	0	0	0	0	0	0	2
Delichon urbica	House martin	2	5	Amber	0	1	0	4	0	0	0
Dendrocopos major	Greater spotted woodpecker	1	2	Green	0	0	0	0	0	0	2
Emberiza schoeniclus	Reed bunting	5	5	Amber	0	3	2	0	0	0	0
Erithacus rubecula	Robin	36	36	Green	35	1	0	0	0	0	0
Falco tinnunculus	Kestrel	2	3	Amber	0	0	0	1	0	0	2
Fringilla coelebs	Chaffinch	29	29	Green	27	2	0	0	0	0	0
Fulica atra	Coot	9	17	Green	0	0	0	0	0	0	17
Gallinago gallinago	Snipe	1	1	Amber	0	0	0	0	0	0	1
Gallinula chloropus	Moorhen	8	13	Green	0	0	0	0	0	0	13
Haematopus ostralegus	Oystercatcher	1	2	Amber	0	0	0	0	0	0	2
Hirundo rustica	Swallow	1	2	Green	0	0	0	2	0	0	0
Larus canus	Common gull	1	1	Amber	0	0	0	1	0	0	0
Larus ridibundus	Black-headed gull	4	24	Amber	0	0	0	5	0	0	19
Motacilla alba	Pied wagtail	4	5	Green	0	0	0	0	0	0	5
Motacilla cinerea	Grey wagtail	1	1	Amber	0	0	0	0	0	0	1
Numenius arquata	Curlew	1	2	Amber	0	0	2	0	0	0	0
Parus ater	Coal tit	2	3	Green	0	0	0	0	0	0	3



Scientific Name	Common Name	Times	Total	BOCC ¹	Singing	Calling	Alarm	In flight	Male	Female	None
		observed	seen				call				
Parus major	Great tit	13	15	Green	1	2	8	0	0	0	4
Passer domesticus	House sparrow	22	41	Red	0	9	8	0	0	0	24
Phalacrocorax carbo	Cormorant	1	1	Green	0	0	0	0	0	0	1
Phasianus colchicus	Pheasant	1	1	Green	0	1	0	0	0	0	0
Philomachus pugnax	Ruff	1	1	Red	0	0	0	0	0	0	1
Phylloscopus collybita	Chiffchaff	6	6	Green	6	0	0	0	0	0	0
Phylloscopus trochilus	Willow warbler	6	6	Amber	6	0	0	0	0	0	0
Pica pica	Magpie	19	50	Green	1	1	0	0	0	0	48
Podiceps cristatus	Great Crested grebe	4	6	Green	0	0	0	0	0	0	6
Prunella modularis	Dunnock	25	25	Amber	25	0	0	0	0	0	0
Pyrrhula pyrrhula	Bullfinch	1	2	Amber	0	0	0	0	0	0	2
Riparia riparia	Sand martin	1	200	Amber	0	0	0	200	0	0	0
Streptopelia decaocto	Collared dove	3	5	Green	1	0	0	0	0	0	4
Sturnus vulgaris	Starling	7	32	Red	0	1	0	0	0	0	31
Sylvia atricapilla	Blackcap	5	5	Green	5	0	0	0	0	0	0
Troglodytes troglodytes	Wren	42	42	Green	42	0	0	0	0	0	0
Turdus merula	Blackbird	41	46	Green	34	0	0	0	6	0	6
Turdus philomelos	Song thrush	8	8	Red	8	0	0	0	0	0	0
Turdus viscivorus	Mistle thrush	1	2	Amber	0	0	0	0	0	0	2
Vanellus vanellus	Lapwing	12	13	Red	10	1	0	0	0	0	2

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.9: Breeding Bird Survey B2, 16th and 17th May 2017 (51 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	ВОСС	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Acrocephalus schoenobaenus	Sedge warbler	4	4	Green	4	0	0	0	0	0	0	0
Acrocephalus scirpaceus	Reed warbler	1	1	Green	1	0	0	0	0	0	0	0
Aegithalos caudatus	Long-tailed tit	2	3	Green	0	0	0	0	0	0	3	0
Alauda arvensis	Skylark	1	1	Red	1	0	0	0	0	0	0	0
Anas platyrhynchos	Mallard	15	63	Amber	0	0	0	4	1	0	58	0
Apus apus	Swift	2	100	Amber	0	0	0	100	0	0	0	0
Ardea cinerea	Grey heron	1	1	Green	0	0	0	1	0	0	0	0
Branta canadensis	Canada goose	15	97	Green	0	0	0	0	0	0	97	0
Carduelis carduelis	Goldfinch	6	12	Green	3	0	0	0	0	0	9	0
Carduelis chloris	Greenfinch	13	14	Green	0	5	7	0	0	0	2	0
Columba livia	Feral pigeon	2	26	Green	0	0	0	0	0	0	26	0
Columba palumbus	Wood pigeon	36	89	Green	15	0	0	0	0	0	74	0
Corvus corone corone	Carrion crow	8	13	Green	0	0	0	0	0	0	13	0
Corvus monedula	Jackdaw	2	4	Green	0	0	0	2	0	0	2	0
Cyanistes caeruleus	Blue tit	8	9	Green	1	2	0	0	0	0	5	1
Cygnus olor	Mute swan	1	2	Green	0	0	0	0	0	0	2	0
Delichon urbica	House martin	3	67	Amber	0	0	0	47	0	0	20	0
Emberiza schoeniclus	Reed bunting	8	8	Amber	0	2	6	0	0	0	0	0
Erithacus rubecula	Robin	50	50	Green	50	0	0	0	0	0	0	0
Fringilla coelebs	Chaffinch	37	37	Green	37	0	0	0	0	0	0	0
Fulica atra	Coot	18	44	Green	0	0	0	0	0	0	42	2
Gallinula chloropus	Moorhen	9	12	Green	0	0	0	0	0	0	10	2
Hirundo rustica	Swallow	13	99	Green	0	0	0	61	0	0	38	0
Larus fuscus	Lesser black-backed gull	1	1	Amber	0	0	0	1	0	0	0	0
Larus minutus	Little gull	1	1	Amber	0	0	1	0	0	0	0	0
Larus ridibundus	Black-headed gull	3	7	Amber	0	0	0	5	0	0	2	0
Motacilla alba	Pied wagtail	3	3	Green	0	0	0	0	0	0	3	0
Motacilla cinerea	Grey wagtail	1	1	Amber	0	0	0	0	0	0	1	0
Parus major	Great tit	6	6	Green	1	1	3	0	0	0	1	0
Passer domesticus	House sparrow	18	34	Red	0	8	5	0	0	0	21	0
Phasianus colchicus	Pheasant	1	1	Green	0	1	0	0	0	0	0	0
Phylloscopus collybita	Chiffchaff	3	3	Green	3	0	0	0	0	0	0	0
Phylloscopus trochilus	Willow warbler	24	24	Amber	24	0	0	0	0	0	0	0
Pica pica	Magpie	11	18	Green	0	0	0	0	0	0	18	0
Podiceps cristatus	Great Crested grebe	7	11	Green	0	0	0	0	0	0	10	1



Scientific Name	Common Name	Times observed	Total seen	ВОСС	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Prunella modularis	Dunnock	27	27	Amber	27	0	0	0	0	0	0	0
Pyrrhula pyrrhula	Bullfinch	4	7	Amber	0	0	1	0	0	0	6	0
Rallus aquaticus	Water rail	2	2	Green	0	0	2	0	0	0	0	0
Riparia riparia	Sand martin	1	30	Amber	0	0	0	30	0	0	0	0
Streptopelia decaocto	Collared dove	3	3	Green	3	0	0	0	0	0	0	0
Sturnus vulgaris	Starling	10	71	Red	0	2	0	0	0	0	69	0
Sylvia atricapilla	Blackcap	6	6	Green	6	0	0	0	0	0	0	0
Sylvia borin	Garden warbler	1	1	Green	1	0	0	0	0	0	0	0
Sylvia communis	Whitethroat	8	8	Amber	8	0	0	0	0	0	0	0
Tachybaptus ruficollis	Little grebe	1	2	Amber	0	0	0	0	0	0	2	0
Troglodytes troglodytes	Wren	43	43	Green	43	0	0	0	0	0	0	0
Turdus merula	Blackbird	66	72	Green	61	0	0	0	3	0	8	0
Turdus philomelos	Song thrush	13	13	Red	13	0	0	0	0	0	0	0
Turdus viscivorus	Mistle thrush	2	2	Amber	0	0	0	0	0	0	2	0
Tyto alba	Barn owl	1	1	Amber	0	0	0	1	0	0	0	0
Vanellus vanellus	Lapwing	12	12	Red	7	0	0	1	0	0	4	0

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.10: Breeding Bird Survey B3, 12th and 13th June (50 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Acrocephalus schoenobaenus	Sedge warbler	2	2	Green	2	0	0	0	0	0	0	0
Alauda arvensis	Skylark	2	2	Red	2	0	0	0	0	0	0	0
Anas platyrhynchos	Mallard	7	26	Amber	0	0	0	0	1	0	22	3
Apus apus	Swift	4	58	Amber	0	0	0	58	0	0	0	0
Aythya fuligula	Tufted duck	1	4	Amber	0	0	0	0	0	0	4	0
Branta bernicla	Brent goose	1	8	Amber	0	0	0	0	0	0	8	0
Branta canadensis	Canada goose	8	35	Green	0	0	0	0	0	0	35	0
Carduelis cannabina	Linnet	2	4	Red	0	0	0	0	0	0	4	0
Carduelis carduelis	Goldfinch	9	19	Green	2	0	0	0	0	0	16	1
Carduelis chloris	Greenfinch	19	20	Green	0	1	17	0	0	0	2	0
Columba livia	Feral pigeon	2	24	Green	0	0	0	0	0	0	24	0
Columba palumbus	Wood pigeon	37	144	Green	14	0	0	5	0	0	125	0
Corvus corone corone	Carrion crow	7	14	Green	0	0	0	2	0	0	12	0
Corvus monedula	Jackdaw	6	21	Green	0	0	0	7	0	0	14	0
Cyanistes caeruleus	Blue tit	9	9	Green	0	0	0	0	0	0	0	9
Cygnus olor	Mute swan	4	6	Green	0	0	0	0	0	0	4	2
Delichon urbica	House martin	3	86	Amber	0	0	0	86	0	0	0	0
Dendrocopos major	Greater spotted woodpecker	2	2	Green	0	1	1	0	0	0	0	0
Emberiza schoeniclus	Reed bunting	12	13	Amber	0	1	10	0	0	0	2	0
Erithacus rubecula	Robin	26	26	Green	23	1	0	0	0	0	0	2
Falco tinnunculus	Kestrel	2	2	Amber	0	0	0	1	0	1	0	0
Fringilla coelebs	Chaffinch	28	28	Green	28	0	0	0	0	0	0	0
Fulica atra	Coot	19	42	Green	0	0	0	0	0	0	35	7
Gallinula chloropus	Moorhen	11	11	Green	0	0	0	0	0	0	6	5
Garrulus glandarius	Jay	1	1	Green	0	0	1	0	0	0	0	0
Hirundo rustica	Swallow	12	77	Green	0	0	0	77	0	0	0	0
Larus argentatus	Herring gull	1	1	Red	0	0	0	1	0	0	0	0
Larus fuscus	Lesser black-backed gull	3	3	Amber	0	0	0	3	0	0	0	0
Larus ridibundus	Black-headed gull	8	16	Amber	0	0	0	7	0	0	9	0
Motacilla alba	Pied wagtail	6	7	Green	0	0	0	0	0	0	7	0
Motacilla cinerea	Grey wagtail	1	1	Amber	0	0	0	0	0	0	0	1
Parus major	Great tit	6	6	Green	0	1	2	0	0	0	0	3
Passer domesticus	House sparrow	27	74	Red	0	7	7	0	1	0	59	0



Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Phasianus colchicus	Pheasant	1	1	Green	0	1	0	0	0	0	0	0
Phylloscopus collybita	Chiffchaff	5	5	Green	5	0	0	0	0	0	0	0
Phylloscopus trochilus	Willow warbler	14	14	Amber	14	0	0	0	0	0	0	0
Pica pica	Magpie	12	19	Green	0	0	0	1	0	0	17	1
Podiceps cristatus	Great Crested grebe	6	6	Green	0	0	0	0	0	0	1	5
Prunella modularis	Dunnock	27	27	Amber	25	0	0	0	0	0	0	2
Pyrrhula pyrrhula	Bullfinch	3	4	Amber	0	0	2	0	0	0	2	0
Riparia riparia	Sand martin	2	110	Amber	0	0	0	110	0	0	0	0
Streptopelia decaocto	Collared dove	3	6	Green	2	0	0	0	0	0	4	0
Sturnus vulgaris	Starling	13	135	Red	0	0	0	4	0	0	131	0
Sylvia atricapilla	Blackcap	8	8	Green	8	0	0	0	0	0	0	0
Sylvia communis	Whitethroat	6	6	Amber	6	0	0	0	0	0	0	0
Troglodytes troglodytes	Wren	53	53	Green	52	0	0	0	0	0	1	0
Turdus merula	Blackbird	50	56	Green	41	1	2	0	2	0	9	0
Turdus philomelos	Song thrush	6	6	Red	6	0	0	0	0	0	0	0
Turdus viscivorus	Mistle thrush	1	1	Amber	0	0	0	0	0	0	0	1
Vanellus vanellus	Lapwing	9	9	Red	4	0	0	1	0	0	4	0

¹ BOCC: Status given by Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.11: Breeding Bird Survey B4, 4th and 5th July (53 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Acrocephalus schoenobaenus	Sedge warbler	2	2	Green	2	0	0	0	0	0	0	0
Acrocephalus scirpaceus	Reed warbler	1	1	Green	1	0	0	0	0	0	0	0
Aegithalos caudatus	Long-tailed tit	2	2	Green	0	0	0	0	0	0	0	2
Anas platyrhynchos	Mallard	6	25	Amber	0	0	0	0	0	0	21	4
Apus apus	Swift	2	44	Amber	0	0	0	44	0	0	0	0
Ardea cinerea	Grey heron	2	2	Green	0	0	0	0	0	0	2	0
Branta bernicla	Brent goose	1	1	Amber	0	0	0	0	0	0	0	1
Branta canadensis	Canada goose	2	62	Green	0	0	0	0	0	0	62	0
Carduelis cannabina	Linnet	1	2	Red	0	0	0	0	0	0	2	0
Carduelis carduelis	Goldfinch	17	43	Green	5	0	0	0	0	0	38	0
Carduelis chloris	Greenfinch	16	16	Green	0	1	13	0	1	0	0	1
Columba livia	Feral pigeon	1	20	Green	0	0	0	0	0	0	20	0
Columba palumbus	Wood pigeon	39	88	Green	12	0	0	2	0	0	74	0
Corvus corone corone	Carrion crow	10	20	Green	0	0	0	1	0	0	19	0
Corvus monedula	Jackdaw	2	4	Green	0	0	0	4	0	0	0	0
Cyanistes caeruleus	Blue tit	8	8	Green	1	1	0	0	0	0	0	5
Cygnus olor	Mute swan	1	1	Green	0	0	0	0	0	0	0	1
Delichon urbica	House martin	2	50	Amber	0	0	0	50	0	0	0	0
Dendrocopos major	Greater spotted woodpecker	2	2	Green	0	2	0	0	0	0	0	0
Emberiza schoeniclus	Reed bunting	6	6	Amber	0	2	4	0	0	0	0	0
Erithacus rubecula	Robin	26	26	Green	8	12	0	0	0	0	1	5
Falco tinnunculus	Kestrel	1	1	Amber	0	0	0	1	0	0	0	0
Fringilla coelebs	Chaffinch	25	25	Green	12	13	0	0	0	0	0	0
Fulica atra	Coot	10	32	Green	0	0	0	0	0	0	29	3
Gallinula chloropus	Moorhen	10	11	Green	0	0	0	0	0	0	6	5
Garrulus glandarius	Jay	2	2	Green	0	1	0	0	0	0	0	1
Haematopus ostralegus	Oystercatcher	1	4	Amber	0	0	0	0	0	0	4	0
Hirundo rustica	Swallow	12	102	Green	0	0	0	84	0	0	18	0
Larus fuscus	Lesser black-backed gull	4	5	Amber	0	0	0	3	0	0	2	0
Larus melanocephalus	Mediterranean gull	1	1	Amber	0	0	0	1	0	0	0	0
Larus ridibundus	Black-headed gull	2	24	Amber	0	0	0	1	0	0	23	0
Motacilla alba	Pied wagtail	6	6	Green	0	0	0	0	0	0	1	5
Motacilla cinerea	Grey wagtail	3	4	Amber	0	1	0	2	0	0	0	1



Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Parus major	Great tit	4	4	Green	2	0	0	0	0	0	0	2
Passer domesticus	House sparrow	17	73	Red	0	2	2	0	2	0	67	0
Phylloscopus collybita	Chiffchaff	7	7	Green	6	0	0	0	0	0	0	1
Phylloscopus trochilus	Willow warbler	8	8	Amber	7	0	0	0	0	0	0	1
Pica pica	Magpie	8	17	Green	0	0	0	0	0	0	15	2
Podiceps cristatus	Great Crested grebe	3	3	Green	0	0	0	0	0	0	0	3
Prunella modularis	Dunnock	22	22	Amber	21	0	0	0	0	0	0	1
Pyrrhula pyrrhula	Bullfinch	2	4	Amber	0	0	0	0	0	0	4	0
Rallus aquaticus	Water rail	1	1	Green	0	1	0	0	0	0	0	0
Riparia riparia	Sand martin	2	140	Amber	0	0	0	140	0	0	0	0
Sitta europaea	Nuthatch	1	1	Green	0	0	1	0	0	0	0	0
Streptopelia decaocto	Collared dove	1	1	Green	1	0	0	0	0	0	0	0
Sturnus vulgaris	Starling	6	110	Red	0	0	0	0	0	0	110	0
Sylvia atricapilla	Blackcap	10	10	Green	10	0	0	0	0	0	0	0
Sylvia communis	Whitethroat	6	6	Amber	6	0	0	0	0	0	0	0
Sylvia curruca	Lesser whitethroat	2	2	Green	2	0	0	0	0	0	0	0
Troglodytes troglodytes	Wren	51	51	Green	49	2	0	0	0	0	0	0
Turdus merula	Blackbird	53	83	Green	28	0	0	0	8	2	43	2
Turdus philomelos	Song thrush	9	9	Red	9	0	0	0	0	0	0	0
Vanellus vanellus	Lapwing	4	17	Red	0	0	0	0	0	0	16	1

¹ BOCC: Status given by Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Table 6.12: Breeding Bird Survey B5, 3rd and 4th August (50 Species Observed)

Scientific Name	Common Name	Times observed	Total seen	BOCC ¹	Singing	Calling	Alarm call	In flight	Male	Female	None	Family
Accipiter nisus	Sparrowhawk	1	1	Green	0	0	0	1	0	0	0	0
Acrocephalus schoenobaenus	Sedge warbler	1	1	Green	0	0	0	0	0	0	0	1
Aegithalos caudatus	Long-tailed tit	1	4	Green	0	0	0	0	0	0	4	0
Alcedo atthis	Kingfisher	2	2	Amber	0	0	0	0	0	0	2	0
Anas platyrhynchos	Mallard	6	26	Amber	0	0	0	0	0	0	24	2
Branta canadensis	Canada goose	7	46	Green	0	0	0	0	0	0	46	0
Carduelis cannabina	Linnet	1	2	Red	0	0	0	0	0	0	2	0
Carduelis carduelis	Goldfinch	18	53	Green	1	0	0	6	0	0	46	0
Carduelis chloris	Greenfinch	15	30	Green	0	2	5	0	0	0	20	3
Columba livia	Feral pigeon	2	24	Green	0	0	0	0	0	0	24	0
Columba palumbus	Wood pigeon	34	75	Green	11	0	0	4	0	0	60	0
Corvus corone corone	Carrion crow	10	19	Green	0	0	0	0	0	0	18	1
Cyanistes caeruleus	Blue tit	10	11	Green	0	5	1	0	0	0	3	2
Cygnus olor	Mute swan	2	3	Green	0	0	0	0	0	0	2	1
Delichon urbica	House martin	5	94	Amber	0	0	0	94	0	0	0	0
Dendrocopos major	Greater spotted woodpecker	1	1	Green	0	0	1	0	0	0	0	0
Emberiza schoeniclus	Reed bunting	5	5	Amber	0	2	2	0	0	0	0	1
Erithacus rubecula	Robin	31	31	Green	4	21	0	0	0	0	0	6
Falco tinnunculus	Kestrel	1	1	Amber	0	0	0	0	0	0	1	0
Fringilla coelebs	Chaffinch	19	20	Green	0	18	0	0	0	0	2	0
Fulica atra	Coot	8	45	Green	0	0	0	0	0	0	44	0
Gallinago gallinago	Snipe	1	1	Amber	0	0	0	1	0	0	0	0
Gallinula chloropus	Moorhen	10	14	Green	0	0	0	0	0	0	7	7
Garrulus glandarius	Jay	1	1	Green	0	0	0	0	0	0	0	1
Haematopus ostralegus	Oystercatcher	2	4	Amber	0	2	0	0	0	0	2	0
Hirundo rustica	Swallow	10	80	Green	0	0	0	64	0	0	16	0
Larus ridibundus	Black-headed gull	8	32	Amber	0	0	0	4	0	0	28	0
Locustella naevia	Grasshopper warbler	1	1	Red	1	0	0	0	0	0	0	0
Motacilla alba	Pied wagtail	5	7	Green	0	0	0	1	0	0	5	1
Motacilla cinerea	Grey wagtail	1	1	Amber	0	0	0	0	0	0	1	0
Parus major	Great tit	6	8	Green	0	0	0	0	0	0	4	4
Passer domesticus	House sparrow	17	119	Red	0	1	1	0	0	0	117	0
Phalacrocorax carbo	Cormorant	1	1	Green	0	0	0	1	0	0	0	0



Scientific Name	Common Name	Times	Total	BOCC ¹	Singing	Calling	Alarm	In flight	Male	Female	None	Family
		observed	seen				call	flight				
Phylloscopus collybita	Chiffchaff	2	2	Green	2	0	0	0	0	0	0	0
Phylloscopus trochilus	Willow warbler	7	7	Amber	4	2	0	0	0	0	0	1
Pica pica	Magpie	8	20	Green	0	0	0	0	0	0	20	0
Podiceps cristatus	Great Crested grebe	3	10	Green	0	0	0	0	0	0	8	2
Prunella modularis	Dunnock	15	16	Amber	2	9	0	0	0	0	2	3
Pyrrhula pyrrhula	Bullfinch	2	4	Amber	0	0	0	0	0	0	4	0
Rallus aquaticus	Water rail	1	1	Green	0	0	0	0	0	0	1	0
Riparia riparia	Sand martin	2	100	Amber	0	0	0	100	0	0	0	0
Streptopelia decaocto	Collared dove	8	17	Green	0	0	0	2	0	0	12	3
Sturnus vulgaris	Starling	5	77	Red	0	0	0	0	0	0	77	0
Sylvia communis	Whitethroat	1	1	Amber	0	0	0	0	0	0	0	1
Troglodytes troglodytes	Wren	28	28	Green	28	0	0	0	0	0	0	0
Turdus merula	Blackbird	33	48	Green	2	7	0	0	0	0	36	3
Turdus philomelos	Song thrush	3	3	Red	1	0	0	0	0	0	2	0
Turdus viscivorus	Mistle thrush	1	1	Amber	0	0	0	0	0	0	1	0
Tyto alba	Barn owl	1	1	Amber	0	0	0	1	0	0	0	0
Vanellus vanellus	Lapwing	3	34	Red	0	0	0	0	0	0	34	0

¹ BOCC: Status given by *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man* (Eaton, et al., 2015) Priority Species are highlighted in **bold**.

6.3 Figures

Birds listed under Schedule 1 (Part 1) of the Wildlife and Countryside Act 1981 (as amended) are highlighted via italics.



Figure A.1: Wintering Bird Survey Results, Repetition 1

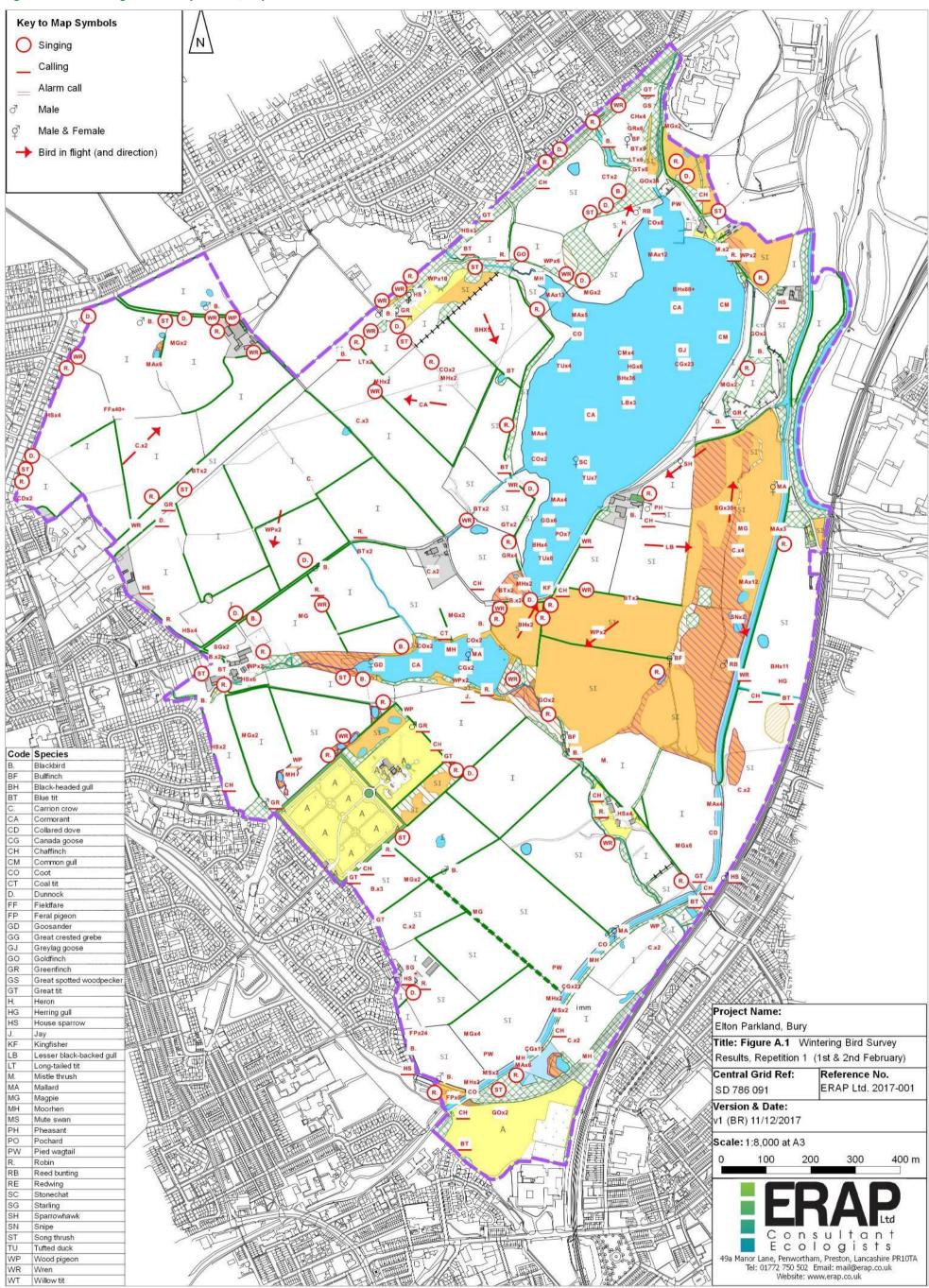




Figure A.2: Wintering Bird Survey Results, Repetition 2

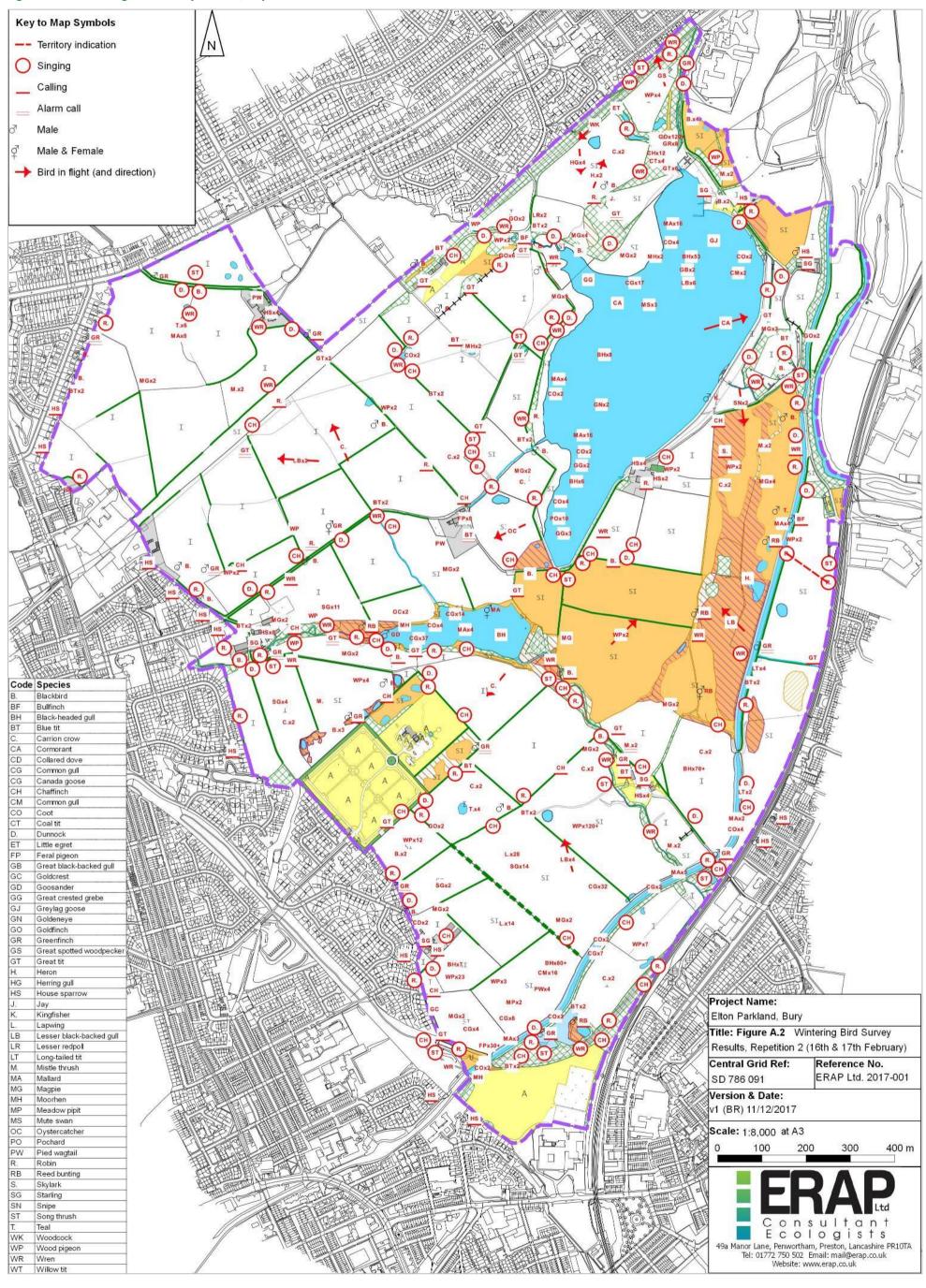




Figure A.3: Wintering Bird Survey Results, Repetition 3

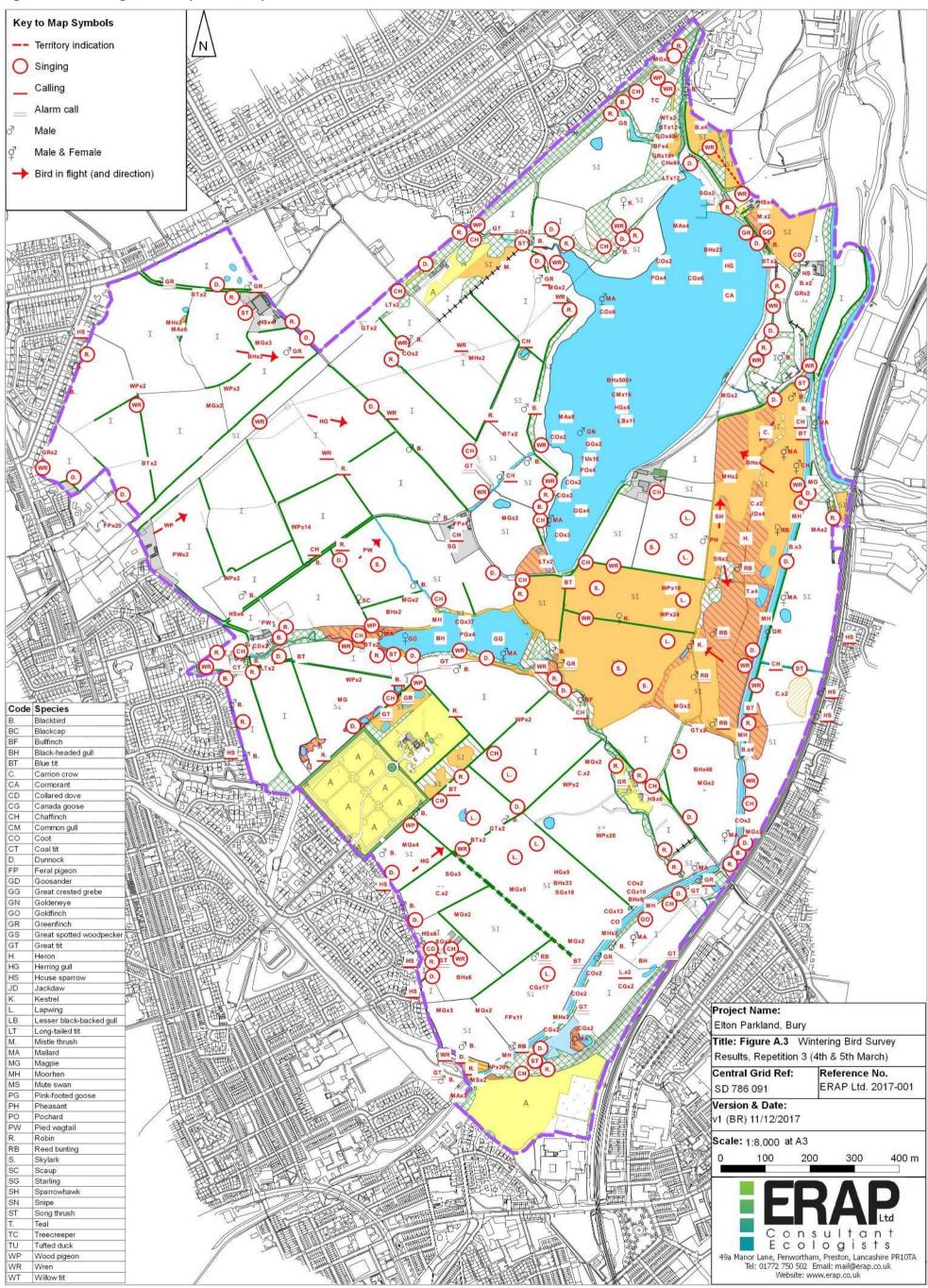




Figure A.4: Wintering Bird Survey Results, Repetition 4

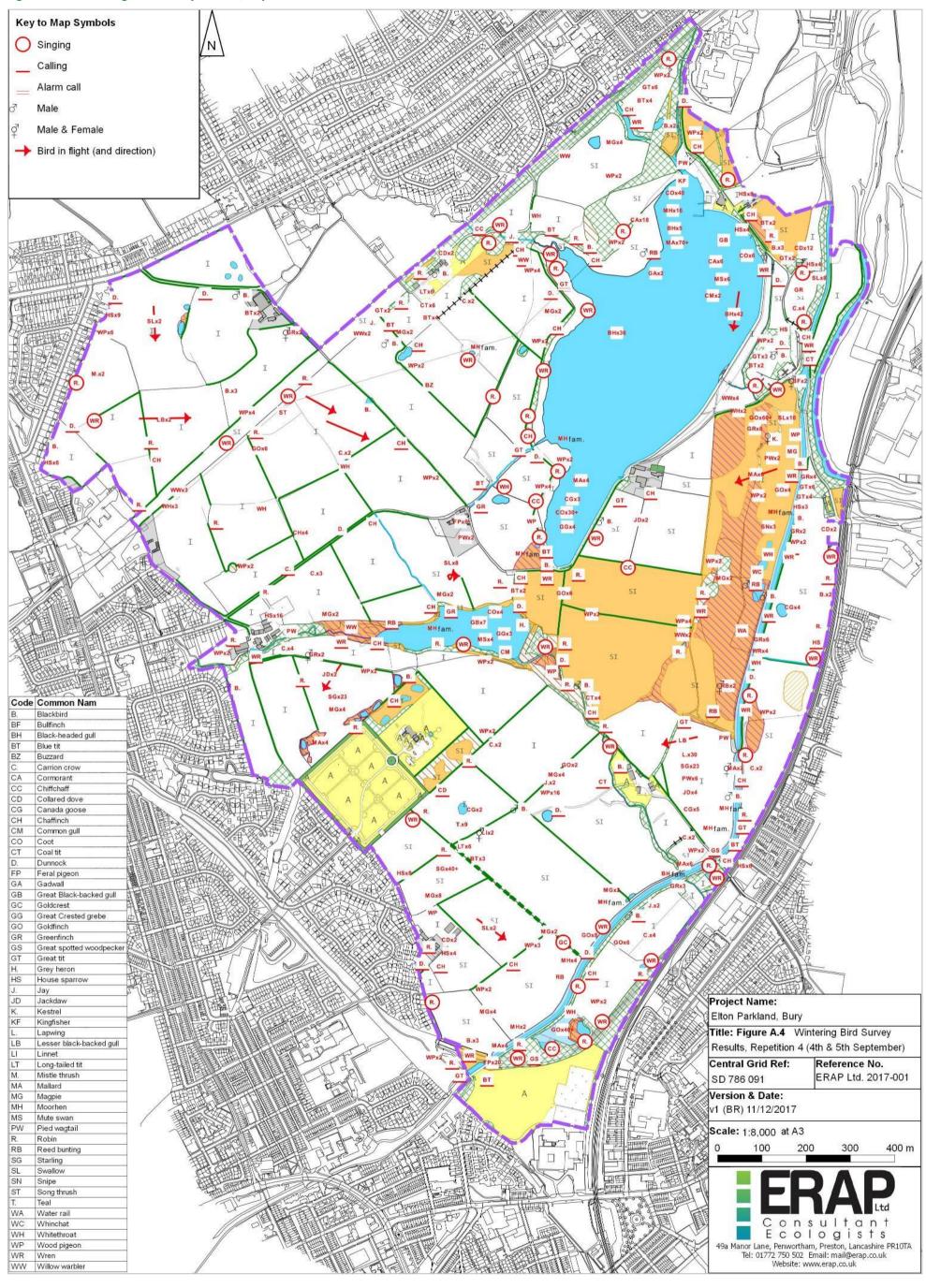




Figure A.5: Wintering Bird Survey Results, Repetition 5

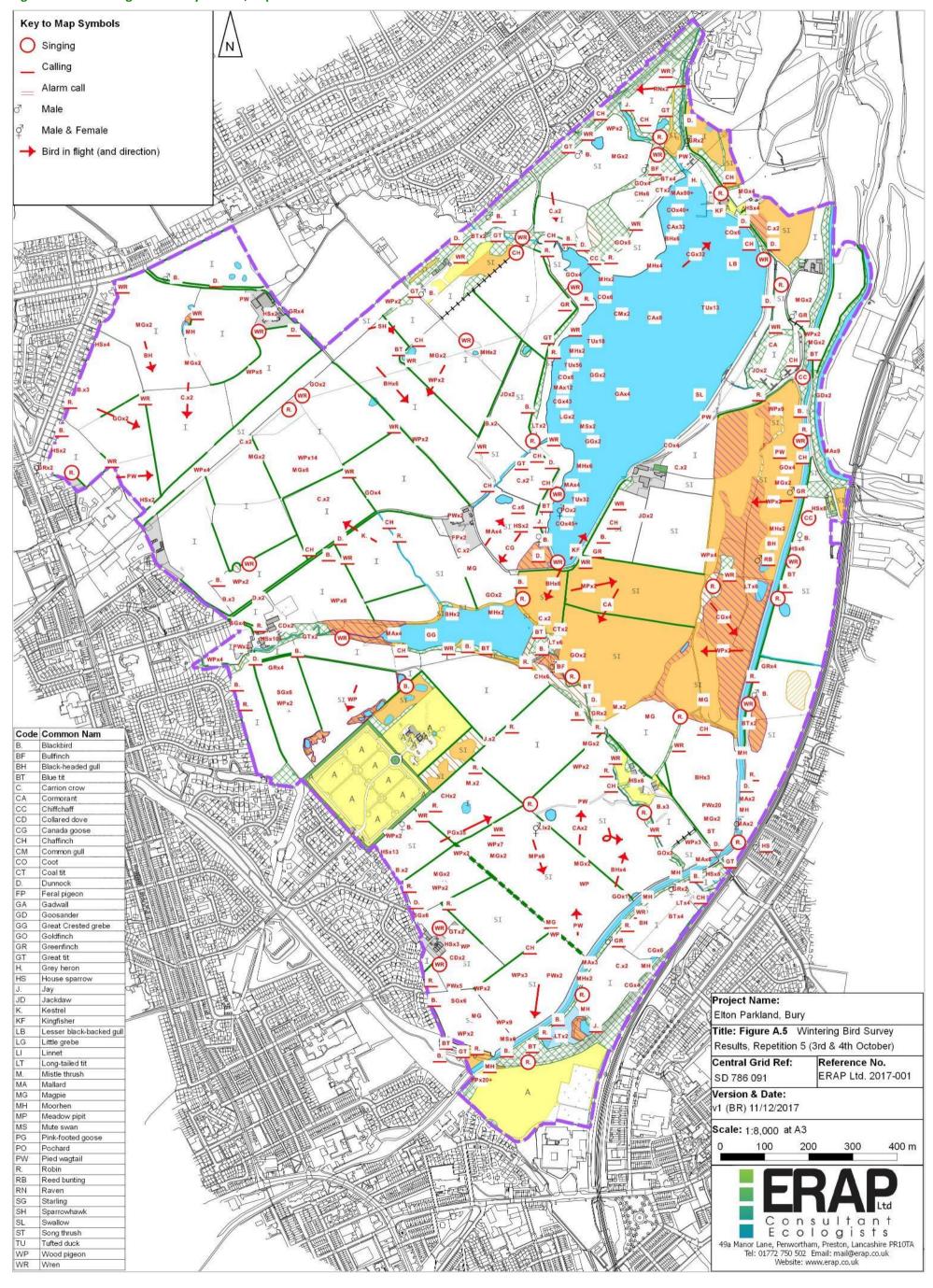




Figure A.6: Wintering Bird Survey Results, Repetition 6

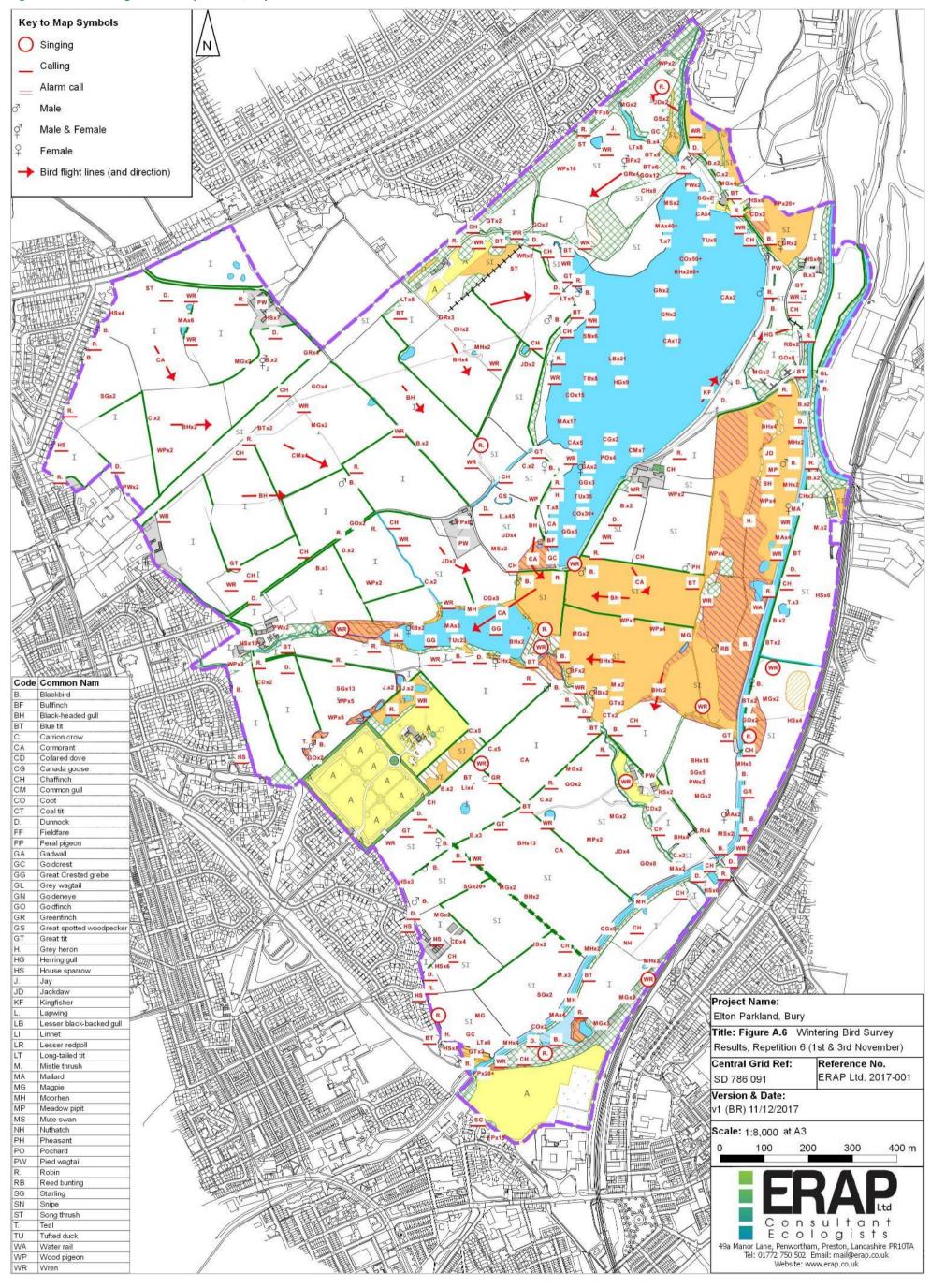




Figure A.7: Wintering Bird Survey Results, Repetition 7

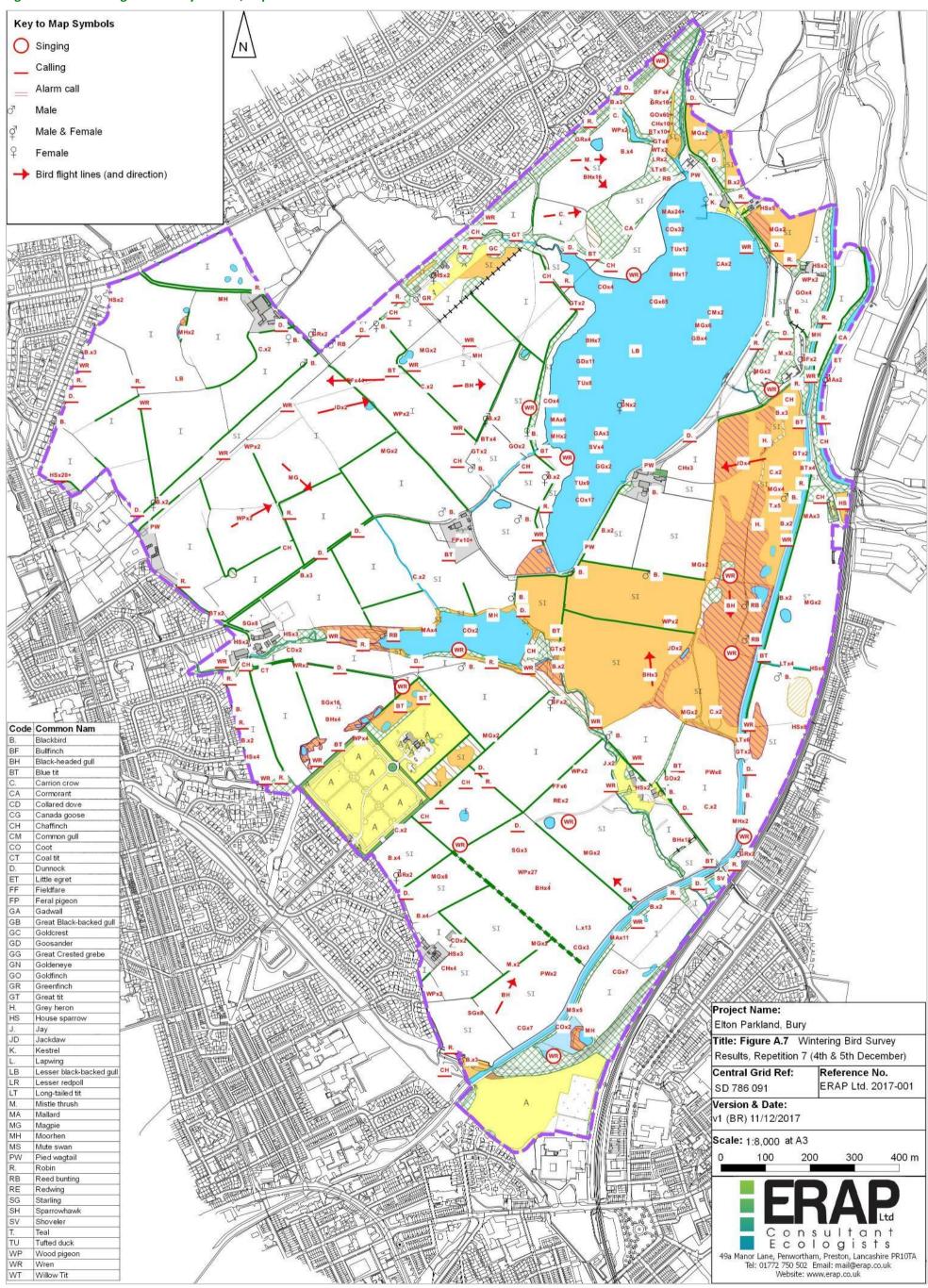


Figure A.8: Plan to Show Locations of Typical Wintering Bird Species Over Whole Survey

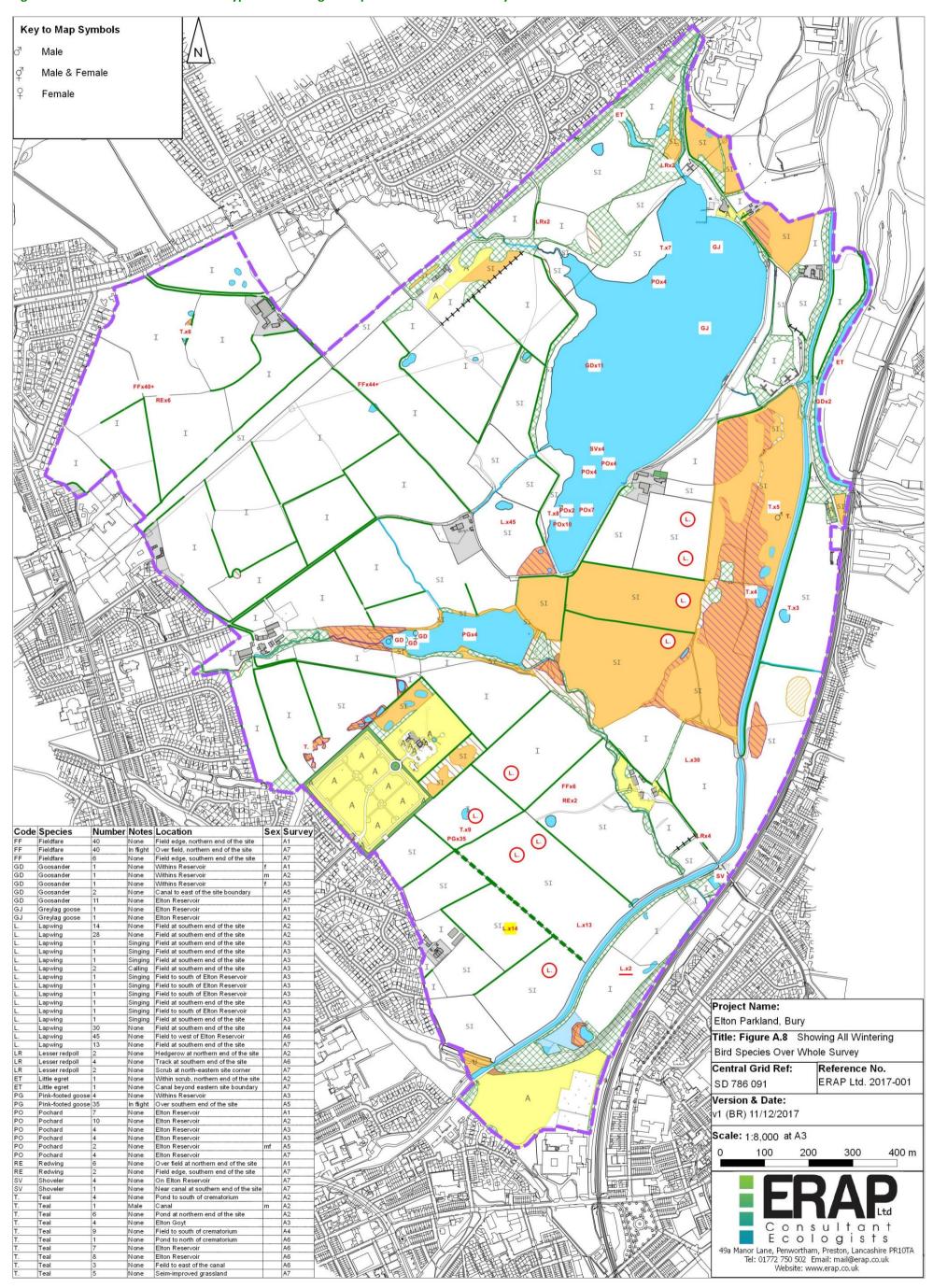




Figure B.1: Breeding Bird Survey Results, Repetition 1

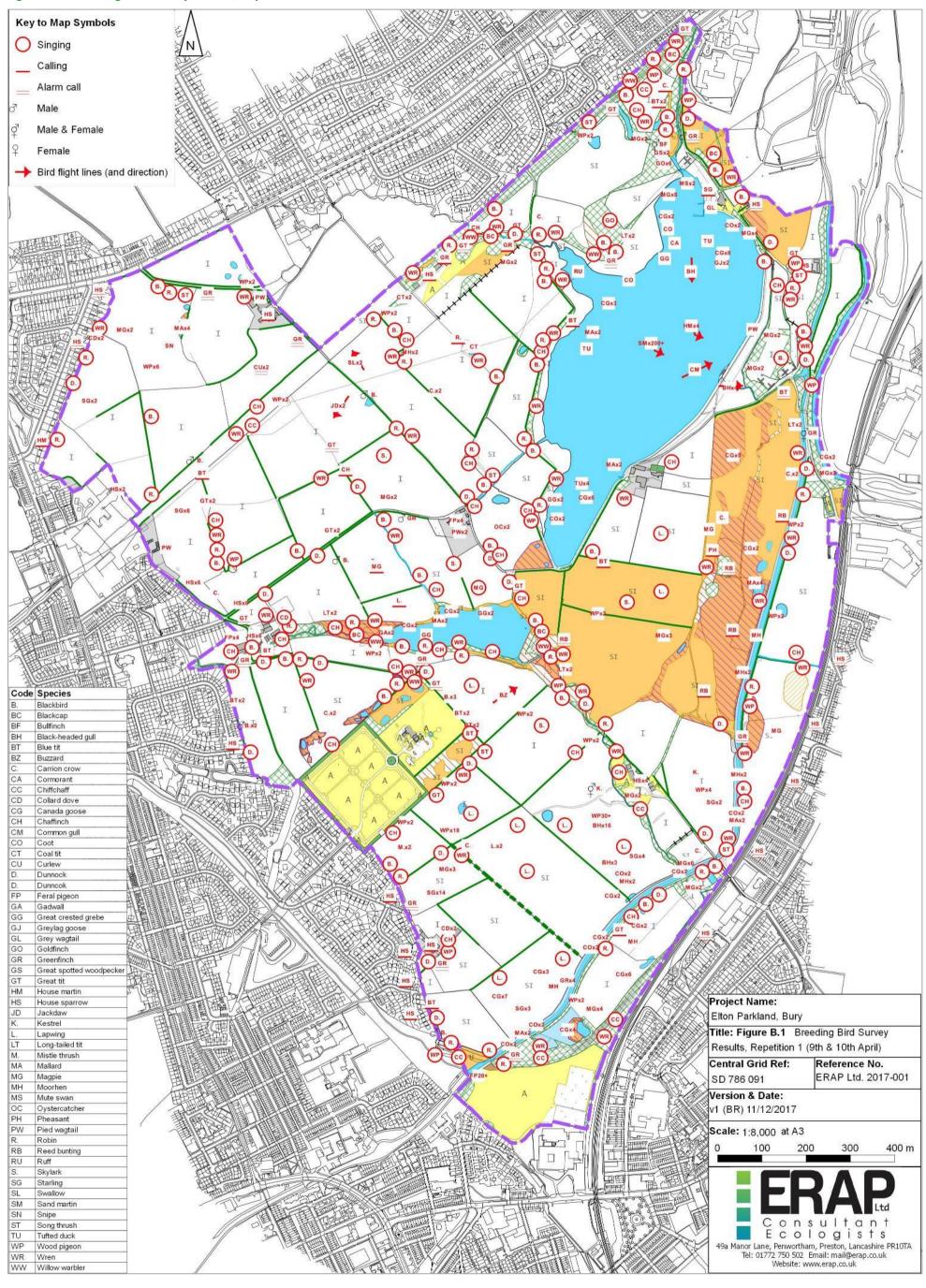




Figure B.2: Breeding Bird Survey Results, Repetition 2

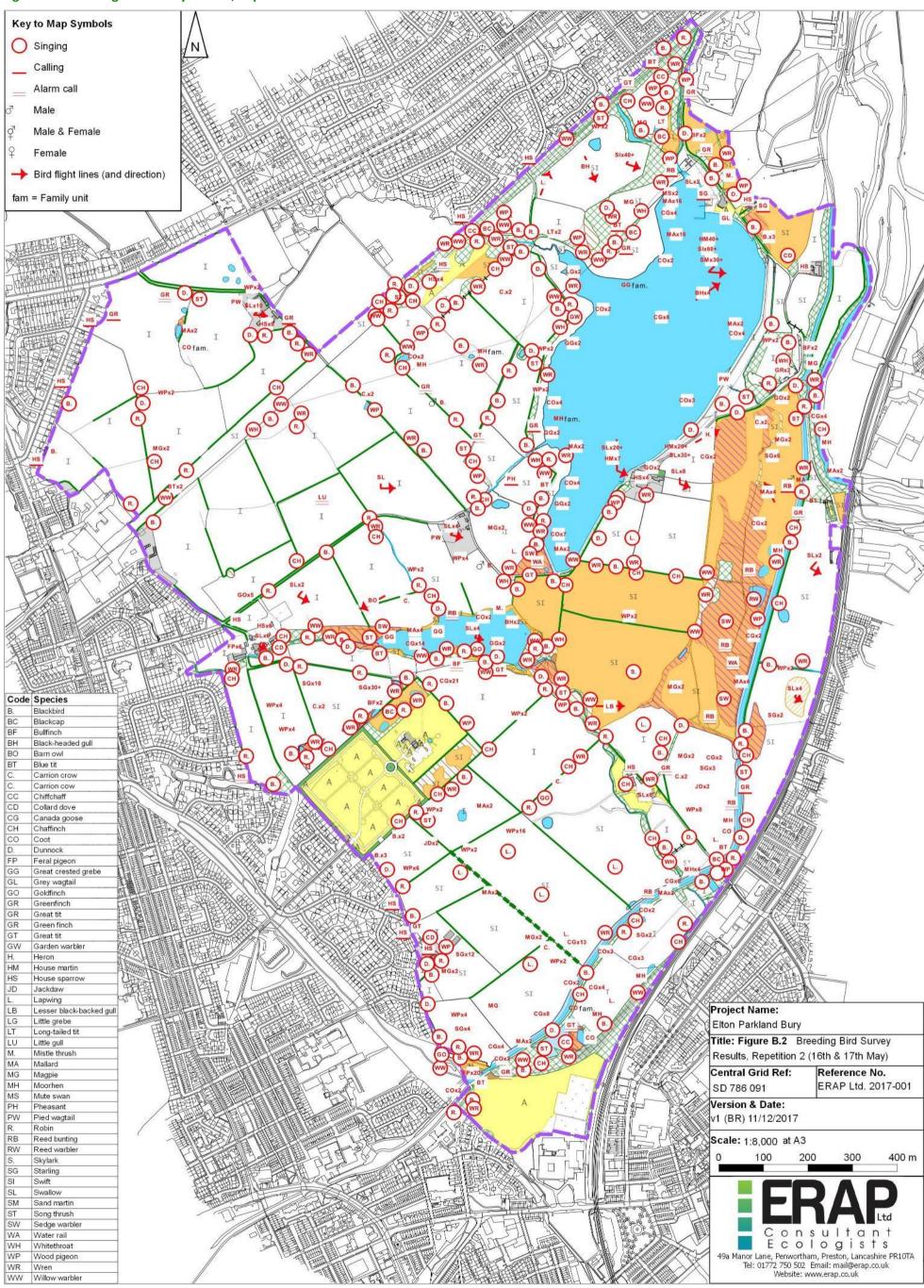




Figure B.3: Breeding Bird Survey Results, Repetition 3

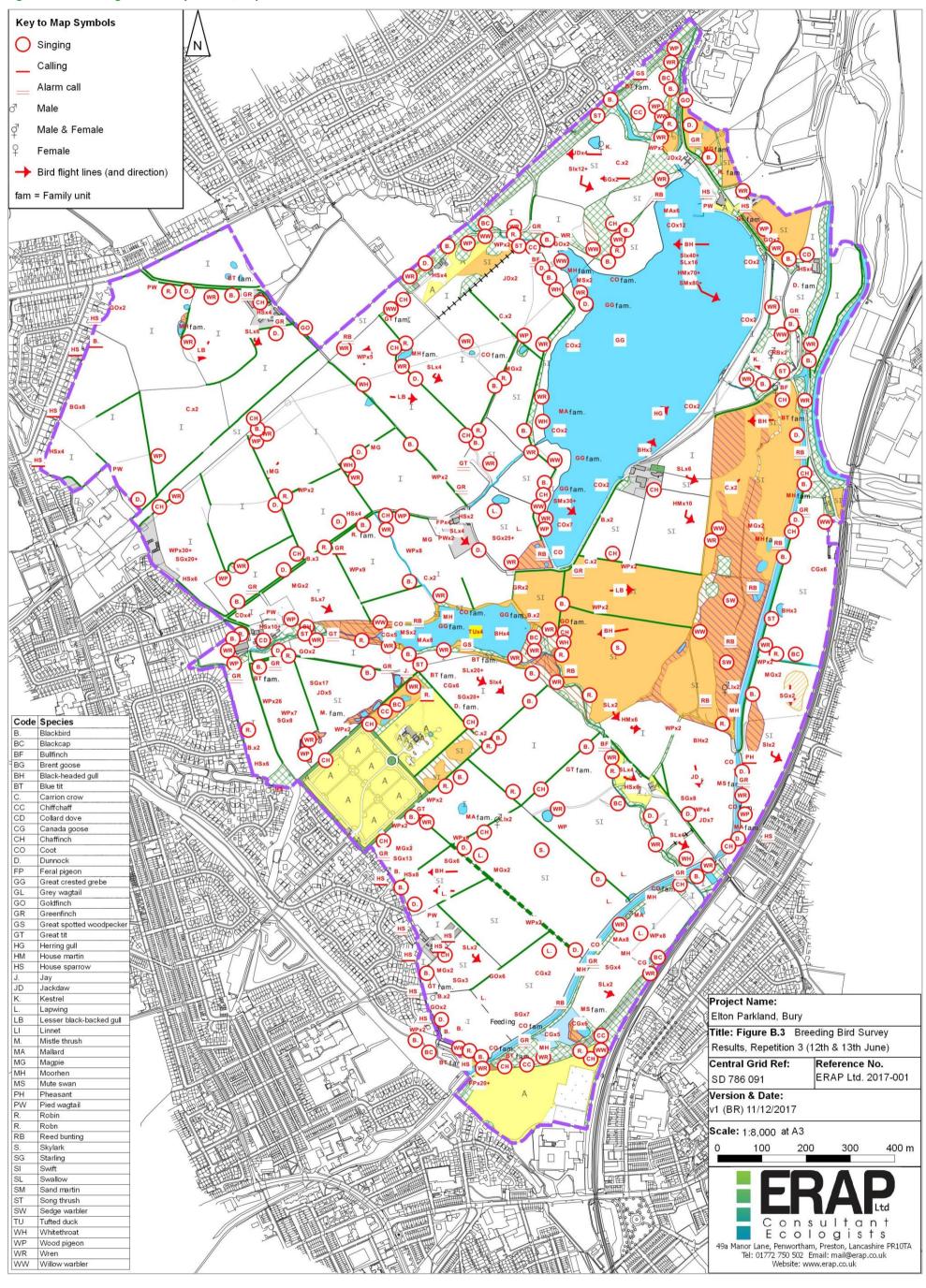




Figure B.4: Breeding Bird Survey Results, Repetition 4

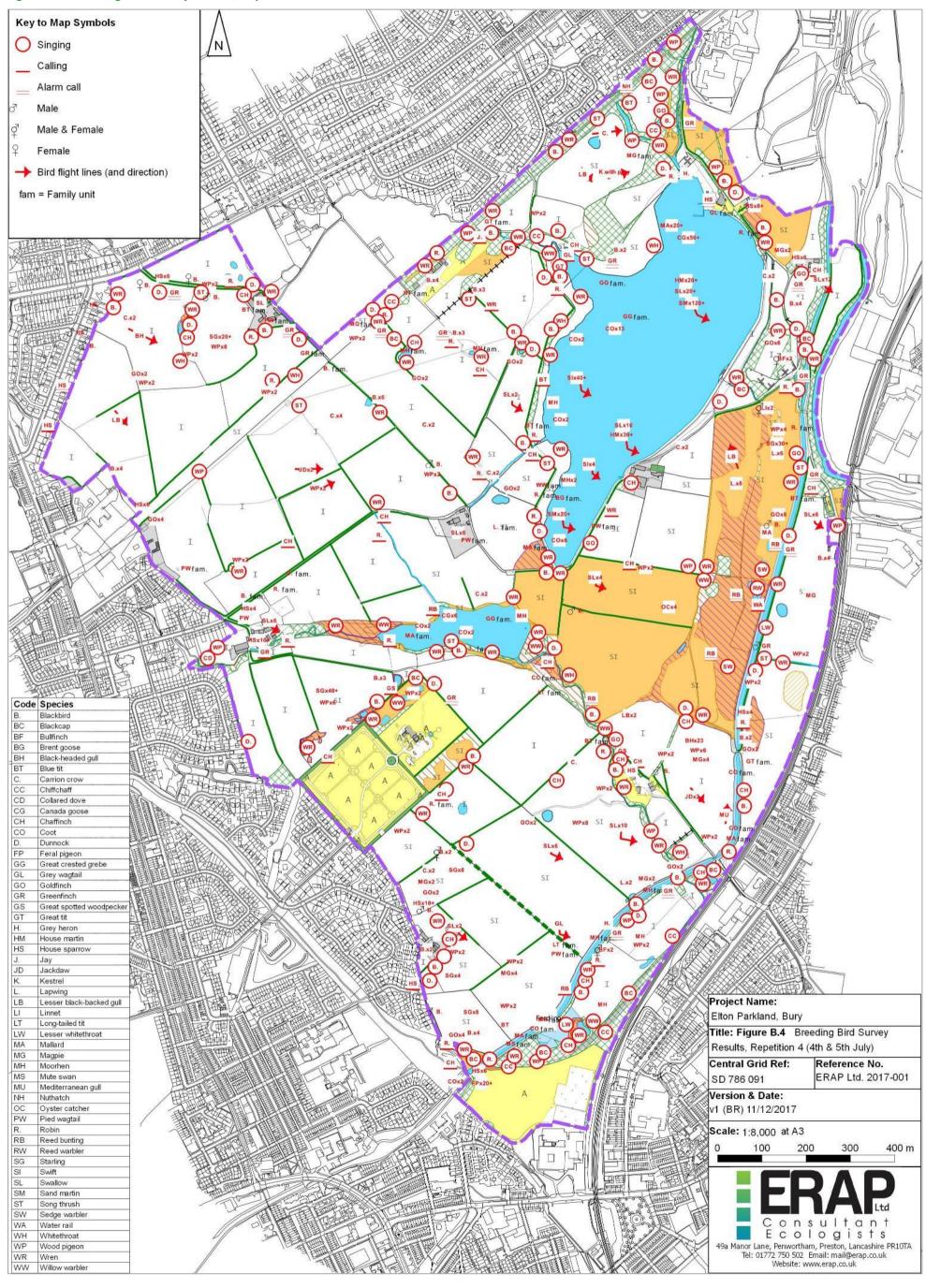




Figure B.5: Breeding Bird Survey Results, Repetition 5

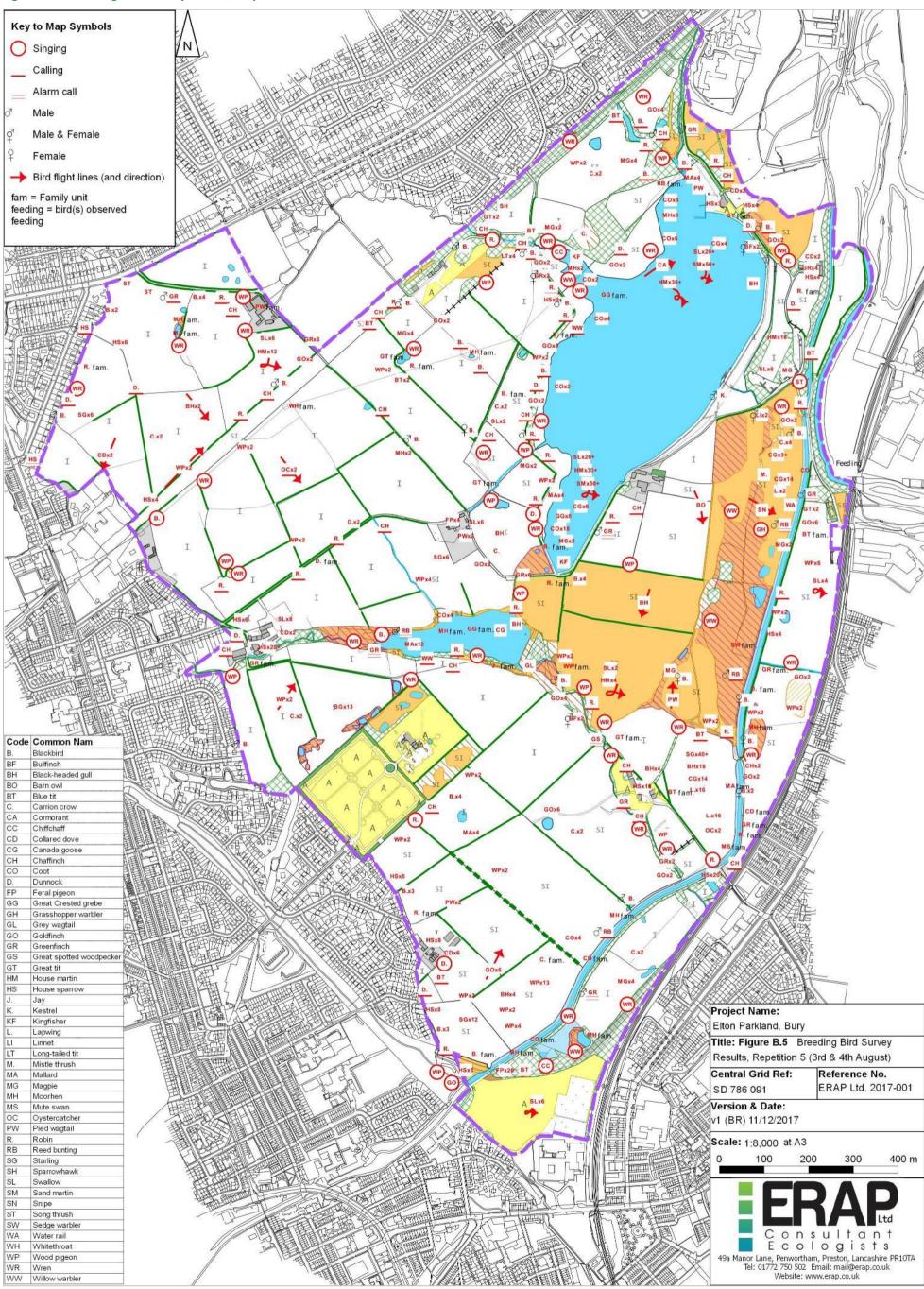




Figure C.1: Showing Locations of all Priority Species Detected within the Site (and Sand Martin)

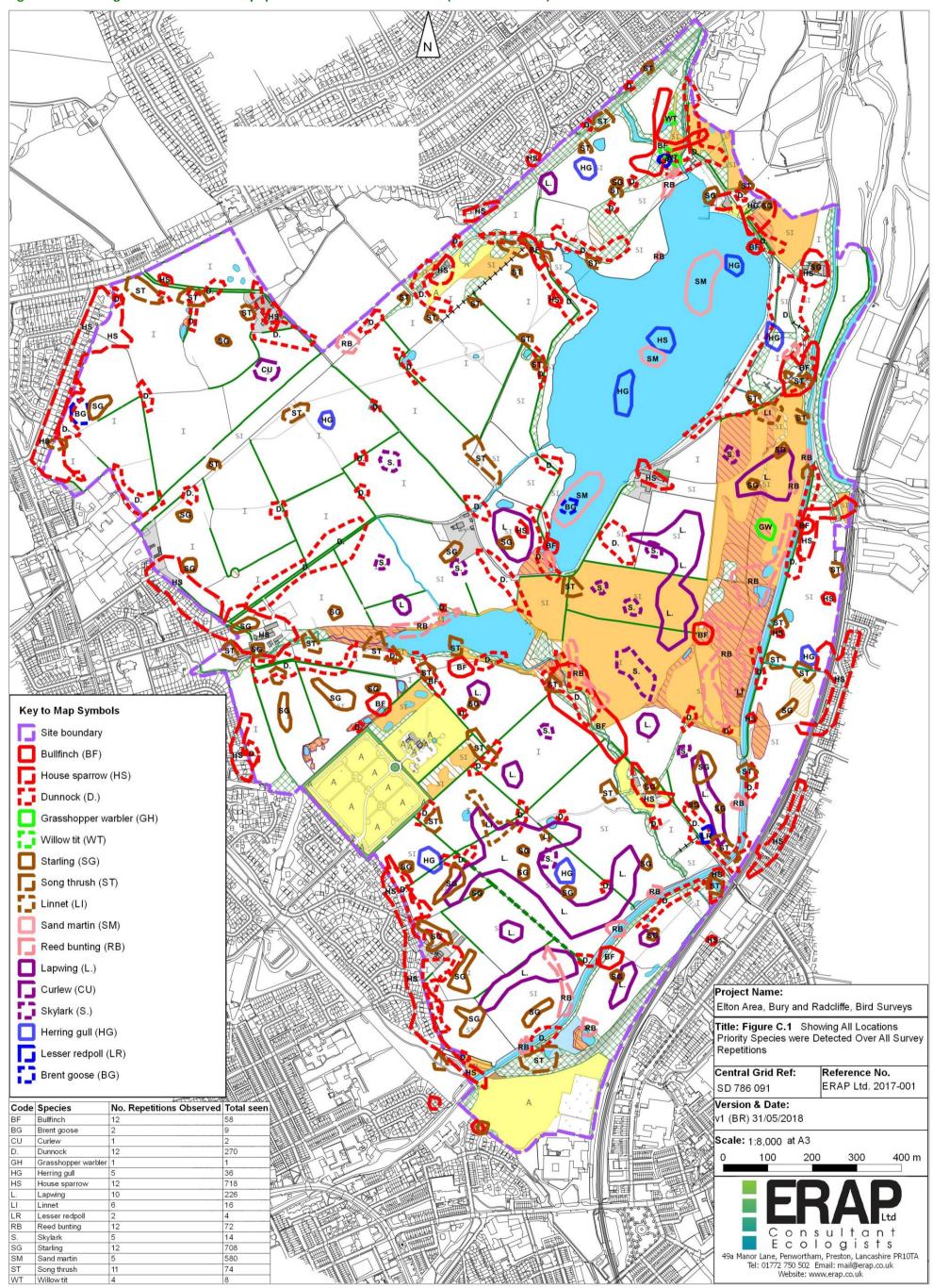




Figure C.2: Showing Locations where Species Listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) (Part 1) were Detected FFx40+ SI Project Name: Elton Parkland, Bury Title: Figure C2 Showing All Locations Where Species Listed under the WCA1981 Schedule 1 (Part 1) Were Detected Central Grid Ref: Reference No. ERAP Ltd. 2017-001 SD 786 091 Version & Date: Code Species Number Notes Location Survey Barn owl In flight Field near Withins Reservoir v1 (BR) 31/05/2018 Field to south-east of Elton Reservoir B5 ВО Barn owl In flight Field Edge Fieldfare 40 None Scale: 1:8,000 at A3 In flight Field at nothern end of the site Fieldfare 40 A7 A7 A1 Fieldfare None Field to south of reservoirs 100 300 400 m KF Kingfisher None Elton Reservoir A4 A5 KF Kingfisher None Elton Reservoir KF Kingfisher Elton Reservoir In flight A5 A6 Kingfisher Elton Reservoir None Kingfisher In flight Elton Reservoir Elton Reservoir Kingfisher None Kingfisher Elton Reservoir B5 LU Little gull Alarm call Field to north of Withins Reservoir B2 cologists Redwing 6 Redwing 2 Field Edge Field to south of reservoirs None 49a Manor Lane, Penwortham, Preston, Lancashire PR10TA Tel: 01772 750 502 Email: mail@erap.co.uk Website: www.erap.co.uk RE A1 A7 RE None RU Ruff None Elton Resevoir В1



Figure 1: Phase 1 Habitat Survey Map

