

EDF Energy

**Sizewell C New Nuclear Power Station:
Terrestrial and Freshwater Ecology, and
Ornithology**

DRAFT Arable Reversion Areas, Breeding Bird Survey Report 2012

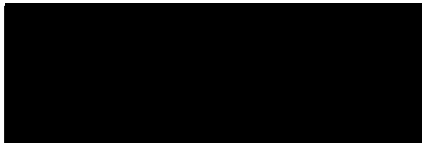
September 2012

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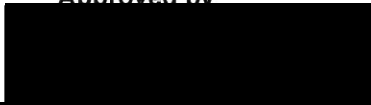
Report for
EDF Energy

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Document Revisions

No.	Details	Date
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1. Introduction

1.1 Purpose of this Report

An area of land directly north of Sizewell B Nuclear Power Station, which is located near Leiston in Suffolk, has been identified as having the potential to accommodate the proposed development of one or more new nuclear reactors. This proposed development is known as Sizewell C. The site of the proposed development has an approximate central National Grid Reference (NGR) of TM473640.

AMEC Environment & Infrastructure UK Ltd (formerly Entec UK Limited) was commissioned by EDF Energy in 2012 to undertake a breeding bird survey of two blocks of land (referred to in this report as the North Site and South Site respectively) that have been identified as having the potential to be converted from agricultural use to heathland (recreation and/or conservation use). The purpose of this report, which outlines the findings of survey work undertaken for breeding bird species in 2012, is to provide baseline information on the value of the two sites to breeding birds to inform the design of Sizewell C and the Environmental Statement for the scheme.

It should be noted that this report contains information relating to the nest locations of species listed on schedule 1 of the Wildlife & Countryside Act 1981 (as amended). As such, the report should be treated as **confidential** and should not enter the public domain.

1.2 Scope

Breeding bird surveys were undertaken in much of the Sizewell Estate in 2007 (the survey area included all but the northern third of the North Site and all of the South Site). In 2007, a desk study was also undertaken to provide contextual information about the bird interest of the area, including details of statutory designated sites of nature conservation interest within 5km of the proposed new build area. Results of the desk study and 2007 breeding bird surveys are provided in the Sizewell First Interim Bird Report (Entec, 2008).

Results from breeding bird surveys are generally considered by consultees (such as Natural England and RSPB) to remain valid for three years. Therefore, in order to provide an update on baseline conditions at the two sites, the breeding bird surveys were repeated in spring 2012.

The survey area and methodologies used in 2012 have been adopted following consultation with statutory and non-statutory consultees and other stakeholders, taking into account best practice guidelines, and site-specific and project-specific characteristics.

The survey area adopted includes all land within the boundaries of the two sites, and that land where access permission was available within 100m of the site. The location of the survey areas are shown on **Figure 1.1**.

1.3 Survey Area Description

1.3.1 North Site

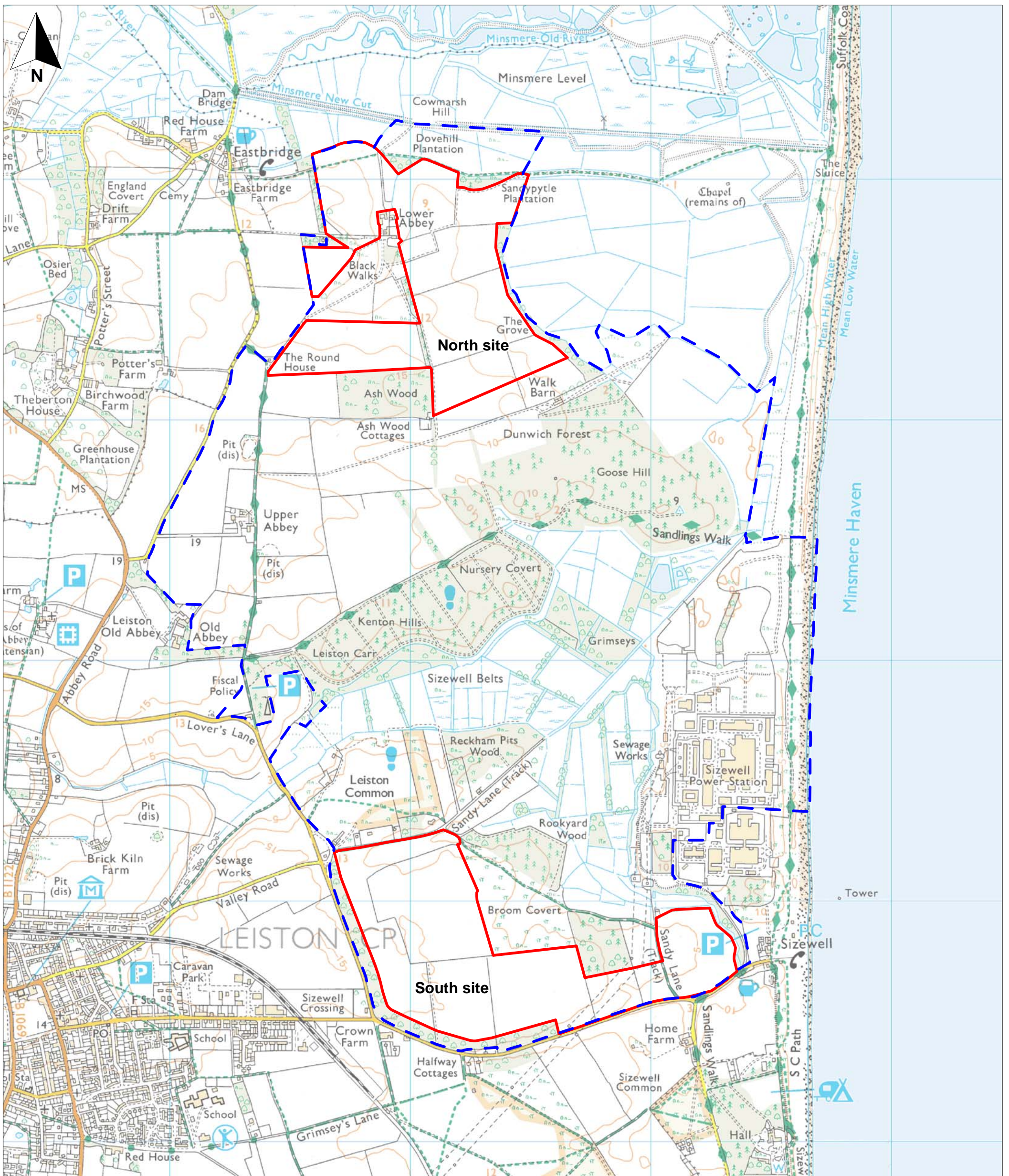
The North Site (which covers approximately 67ha) is located in the northern most part of the Sizewell Estate. Land within the site boundary primarily comprises arable farmland, which at

the time of the survey was given over to the cultivation of winter wheat, onions and potatoes. There are eight fields of varying size within the site whose boundaries were made up of hedgerows and belts of trees and woodland.

The north of the site is bounded by two blocks of deciduous woodland (Doveshill and Sandpyrtle plantations) and a footpath running east-west from the Minsmere sluice to Eastbridge village. North of this is Cowmarsh Hill (an area of wet grassland with water and reed-filled ditches) to the north of which is the main reedbed of the Minsmere RSPB nature reserve (200-300m north of the North Site boundary). The west of the site is bounded by hedgerows, arable farmland and a belt of coniferous plantation and scrub in the north, south of which (also bounding the site) is Lower Abbey Farm (an area of farm buildings, gardens and scrub) and Black Walks (an area of short, rabbit-grazed unimproved grassland and scrub). To the south of the site is more arable farmland, a block of mixed coniferous-deciduous woodland (Ash Wood), and a recently planted (less than 10 years ago) belt of coniferous plantation. The east of the site is bounded by a narrow belt (20-100m wide) of deciduous woodland (The Grove), to the east of which are the Minsmere Levels, an extensive area of seasonally flooded grazing marsh, dissected by reed-lined ditches.

1.3.2 South Site

The South Site (which covers approximately 68ha) is located at the far southern end of the Sizewell Estate. The site itself comprises seven moderate-large fields of arable farmland and grassland. The arable fields are open in character, either with no boundary feature or with gappy hedgerows. At the time of the surveys, the seven fields (from west-east and north-south) contained: onions, fallow land/uncultivated, sugar beet, parsnips, potatoes and two fields of rough, semi-improved grassland respectively. Along the southern and western boundaries of the site (adjacent to Lover's Lane) there is a narrow belt (50-60m wide) of coniferous trees and scrub behind which (on the opposite side of the road) are Crown Farm and Halfway Cottages. The north of the site is bounded by Sandy Lane where in the northwest are a number of residential properties with large gardens. North of this is Leiston Common, an area of short, rabbit and stock grazed unimproved grassland, part of which is the Leiston Common County Wildlife Site. The east of the site is bounded by Broom Covert (an area of short semi-improved grassland and scrub, grazed by cattle in winter) and to the south of this by a block of mature conifer plantation. East of this (50-150m east of the site) is the Sizewell Marshes SSSI, an area of wet unimproved grassland lined by water-filled ditches. The south east of the site is bounded by a belt of wet deciduous woodland, to the east of which is Sizewell village and beach and Sizewell A Power Station.

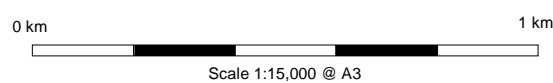


- Key:**
- Site Boundaries
 - Sizewell Estate boundary



Sizewell Arable Reversion Areas
Breeding Bird Survey Report 2012

Figure 1.1
Site Locations



July 2012
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2. Methodology

The key objective of the bird surveys undertaken at the two arable conversion sites at Sizewell in 2012 is to provide a suitable baseline for the evaluation of the effects on birds of turning the arable land to semi-natural habitats that are more typical of the Suffolk Sandlings, which in this case, is likely to include a mixture of heathland, acid grassland and scrub.

Territory mapping surveys based on the BTO's Common Bird Census (CBC) methodology (Marchant, 1983, Gilbert *et al.*, 1998) and as used in the 2007 surveys, were carried out by Mike Raven (AMEC, Senior Ornithologist) across both sites and in all areas within approximately 100m of them (where access permitted). Full access was obtained to all areas within the Sizewell Estate boundary and within most areas within the 100m buffer zone. The methods used were the same as those used in the 2007 survey.

Transects (no further than 50m apart) were walked across all open habitats, while all field boundaries and woodland/shelter belt edges were also walked. Surveys were undertaken from approximately 30-60 minutes after sunrise until midday (at the latest), and in appropriate weather conditions (not during periods of strong wind and/or heavy rain).

While eight to ten visits are the norm for CBC sites being monitored over the long-term, where territory mapping is being used for the purpose of assessing potential environmental impacts it is generally accepted that three to four visits are sufficient to determine the numbers and distribution of breeding bird territories with reasonable accuracy. In the analysis of the survey data collected, the presence of a singing/displaying bird, a pair of birds or an adult male or female bird in potential nesting habitat (on a single survey date) were all treated as a breeding territory being present. The term territory (as used within this report) denotes that a pair of breeding birds was present, or that a male was holding territory in that area; the survey does not aim to confirm breeding at any location. Surveys were completed at the North Site on 26 March, 19 April, 15 May and 20 June, and at the South Site on 29 March, 2 May, 16 May and 25 June.



3. Results

A total of 51 species were recording breeding or holding territory within the combined North and South Site survey areas (46 and 40 species respectively), including:

- one species listed on Schedule 1 of the Wildlife and Countryside Act 1981 as amended (Cetti's warbler);
- 10 UK Biodiversity Action Plan (BAP) Priority Species (all of which are listed in Section 41 of the NERC Act 2006): lapwing, cuckoo, skylark, dunnock, song thrush, marsh tit, house sparrow, linnet, yellowhammer and reed bunting;
- four priority species listed in the Suffolk Local Biodiversity Action Plan: skylark, song thrush, linnet and reed bunting;
- nine species that appear on the Birds of Conservation Concern (BoCC) red list¹ (lapwing, cuckoo, skylark, song thrush, marsh tit, starling, house sparrow, linnet and yellowhammer); and
- and a further 11 species that are on the BoCC amber list² (mallard, oystercatcher, redshank, stock dove, green woodpecker, swallow, dunnock, nightingale, whitethroat, willow warbler and reed bunting).

No species listed on Annex 1 of the Birds Directive³ were recorded. The location of breeding territories in the survey areas for the North and South Sites are shown on **Figures 3.1 and 3.2** respectively. Results from the breeding bird surveys are provided in **Table 3.1**, including estimates of the number of breeding pairs/territories in the survey areas for the North and South Sites.

It should be remembered when considering the figures that the two letter registrations refer to the apparent centre of territorial activity rather than nest sites. It should also be noted that the aim of this survey was to characterise the bird community rather than derive exact densities, something which would require a considerably more involved survey programme. It is inevitable that the densities of some mobile, vocal species have therefore been overestimated

¹ The criteria for assigning species to the red list include: if they are globally threatened; if they have declined by 50% or more over the past 25 years; if they have experienced severe declines historically or if their range in the UK has contracted by over 50% in the past 25 years. Both wintering and breeding species are considered. All red-listed species recorded in the survey area at Sizewell appear on the list due to considerable range contractions or rapid declines in their breeding populations (Eaton *et al.*, 2009).

² Amber-listed species are those which have experienced moderate recent declines or range reductions (between 25 and 49%) over the past 25 years, that are rare breeders (with a population of 1-300 pairs in the UK), that have 50% or more of the breeding population occurring at 10 or fewer sites, or for which 20% or more of the European population breed (or winter in the case of wildfowl) within the UK.

³ Certain endangered, rare, or vulnerable bird species, which warrant special protection, are included on Annex 1 of Directive 2009/147/EC of The European Parliament and of The Council of 30 November 2009 on the conservation of wild birds (codified version).



due to the precautionary approach that has been taken in interpreting the data. Where potential overestimation is considered likely, this is acknowledged in the text.

Table 3.1 Numbers of Breeding Bird Territories Recorded in the Survey Areas in 2012

BTO Code	Species – Common Name	Species - Scientific Name	Number of Territories in South Site Survey Area	Number of Territories in North Site Survey Area	Annex I ⁴	WCA (Sch1) ⁵	UK BAP ⁶	Suffolk BAP	NERC S(41) ⁷	BoCC ⁸
MS	Mute swan	<i>Cygnus olor</i>	P	1						
MA	Mallard	<i>Anas platyrhynchos</i>	P	4						Amber
RL	Red-legged partridge	<i>Alectoris rufa</i>	1	5						
PH	Pheasant	<i>Phasianus colchicus</i>	6	10						
BZ	Buzzard	<i>Buteo buteo</i>	0	1						
MH	Moorhen	<i>Gallinula chloropus</i>	1	2						
OC	Oystercatcher	<i>Haematopus ostralegus</i>	P	1						Amber
L.	Lapwing	<i>Vanellus vanellus</i>	0	1			Yes		Yes	Red
RK	Redshank	<i>Tringa totanus</i>	0	1						Amber

⁴ Species listed on Annex I of the Birds Directive.

⁵ It is an offence to disturb any wild bird listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) while it is nest building, or is at a nest containing eggs or young, or to disturb the dependent young of any such bird.

⁶ UK BAP list published 2007 (Biodiversity Reporting and Information Group, 2007).

⁷ In May 2008, Natural England and Defra published the Section 41 list of habitats and species of principal importance for the conservation of biodiversity in England. The list contains all UK Biodiversity Action Plan (BAP) priority habitats and species known to occur in England in addition to species of particular conservation significance in England. The production of the list is a requirement of the Natural Environment & Rural Communities (NERC) Act 2006 and it will be used to guide and prioritise future conservation action in England.

⁸ Red and Amber List birds: those listed as being of high or medium conservation concern in Eaton *et al.*, (2009)

BTO Code	Species – Common Name	Species - Scientific Name	Number of Territories in South Site Survey Area	Number of Territories in North Site Survey Area	Annex I ⁴	WCA (Sch1) ⁵	UK BAP ⁶	Suffolk BAP	NERC S(41) ⁷	BoCC ⁸
SD	Stock dove	<i>Columba oenas</i>	1	6						Amber
WP	Woodpigeon	<i>Columba palumbus</i>	17	22						
CD	Collared dove	<i>Streptopelia decaocto</i>	2	1						
CK	Cuckoo	<i>Cuculus canorus</i>	1	0			Yes		Yes	Red
G.	Green woodpecker	<i>Picus viridis</i>	1	2						Amber
GS	Great spotted woodpecker	<i>Dendrocopos major</i>	1	4						
S.	Skylark	<i>Alauda arvensis</i>	15	8			Yes	Yes	Yes	Red
SL	Swallow	<i>Hirundo rustica</i>	3	P						Amber
PW	Pied wagtail	<i>Motacilla alba</i>	P	1						
WR	Wren	<i>Troglodytes troglodytes</i>	20	28						
D.	Dunnock	<i>Prunella modularis</i>	20	12			Yes		Yes	Amber
R.	Robin	<i>Erithacus rubecula</i>	22	26						
N.	Nightingale	<i>Luscinia megarhynchos</i>	1	0						Amber
B.	Blackbird	<i>Turdus merula</i>	10	12						
ST	Song thrush	<i>Turdus philomelos</i>	3	1			Yes	Yes	Yes	Red
CW	Cetti's warbler	<i>Cettia cetti</i>	0	6		Yes				
SW	Sedge warbler	<i>Acrocephalus schoenobaenus</i>	0	3						
RW	Reed warbler	<i>Acrocephalus scirpaceus</i>	0	4						
BC	Blackcap	<i>Sylvia atricapilla</i>	15	15						
GW	Garden warbler	<i>Sylvia borin</i>	5	7						

BTO Code	Species – Common Name	Species - Scientific Name	Number of Territories in South Site Survey Area	Number of Territories in North Site Survey Area	Annex I ⁴	WCA (Sch1) ⁵	UK BAP ⁶	Suffolk BAP	NERC S(41) ⁷	BoCC ⁸
LW	Lesser whitethroat	<i>Sylvia curruca</i>	3	0						
WH	Whitethroat	<i>Sylvia communis</i>	6	9						Amber
CC	Chiffchaff	<i>Phylloscopus collybita</i>	9	9						
WW	Willow warbler	<i>Phylloscopus trochilus</i>	1	0						Amber
GC	Goldcrest	<i>Regulus regulus</i>	3	4						
LT	Long-tailed tit	<i>Aegithalos caudatus</i>	5	4						
BT	Blue tit	<i>Cyanistes caeruleus</i>	15	17						
GT	Great tit	<i>Parus major</i>	8	15						
CT	Coal tit	<i>Pariparus ater</i>	5	9						
MT	Marsh tit	<i>Poecile palustris</i>	1	1			Yes		Yes	Red
TC	Treecreeper	<i>Certhia familiaris</i>	4	6						
J.	Jay	<i>Garrulus glandarius</i>	1	5						
MG	Magpie	<i>Pica pica</i>	7	7						
JD	Jackdaw	<i>Corvus monedula</i>	2	3						
C.	Carrion crow	<i>Corvus corone</i>	3	4						
HS	House sparrow	<i>Passer domesticus</i>	4	6			Yes		Yes	Red
CH	Chaffinch	<i>Fringilla coelebs</i>	33	35						
GR	Greenfinch	<i>Carduelis chloris</i>	6	3						
GO	Goldfinch	<i>Carduelis carduelis</i>	6	4						
LI	Linnet	<i>Carduelis cannabina</i>	4	3			Yes	Yes	Yes	Red

BTO Code	Species – Common Name	Species - Scientific Name	Number of Territories in South Site Survey Area	Number of Territories in North Site Survey Area	Annex I ⁴	WCA (Sch1) ⁵	UK BAP ⁶	Suffolk BAP	NERC S(41) ⁷	BoCC ⁸
Y.	Yellowhammer	<i>Emberiza citrinella</i>	5	2			Yes		Yes	Red
RB	Reed bunting	<i>Emberiza schoeniclus</i>	0	1			Yes	Yes	Yes	Amber
Other species recorded, for which no evidence of breeding was obtained										
GJ	Greylag goose	<i>Anser anser</i>		P						Amber
CG	Canada goose	<i>Branta canadensis</i>		P						
SU	Shelduck	<i>Tadorna tadorna</i>		P	Yes					Amber
GA	Gadwall	<i>Anas strepera</i>		P						Amber
T.	Teal	<i>Anas crecca</i>	P	P						Amber
TU	Tufted duck	<i>Aythya fuligula</i>		P						Amber
ET	Little egret	<i>Egretta garzetta</i>		P	Yes					Amber
H.	Grey heron	<i>Ardea cinerea</i>		P						
MR	Marsh harrier	<i>Circus aeruginosus</i>		P	Yes	Yes				Amber
SH	Sparrowhawk	<i>Accipiter nisus</i>		P						
K.	Kestrel	<i>Falco tinnunculus</i>		P						Amber
HY	Hobby	<i>Falco subbuteo</i>	P			Yes				
SN	Snipe	<i>Gallinago gallinago</i>		P						Amber
BH	Black-headed gull	<i>Chroicocephalus ridibundus</i>	P	P						Amber
HG	Herring gull	<i>Larus argentatus</i>	P	P			Yes		Yes	Red
FP	Feral Pigeon	<i>Columba livia</i>	P							
BO	Barn owl	<i>Tyto alba</i>	P	P		Yes				Amber

BTO Code	Species – Common Name	Species - Scientific Name	Number of Territories in South Site Survey Area	Number of Territories in North Site Survey Area	Annex I ⁴	WCA (Sch1) ⁵	UK BAP ⁶	Suffolk BAP	NERC S(41) ⁷	BoCC ⁸
SI	Swift	<i>Apus apus</i>	P	P						Amber
HM	House martin	<i>Delichon urbicum</i>		P						Amber
M.	Mistle thrush	<i>Turdus viscivorus</i>	P	P						Amber
RE	Redwing	<i>Turdus iliacus</i>	P			Yes				Red
RO	Rook	<i>Corvus frugilegus</i>	P							
SK	Siskin	<i>Carduelis spinus</i>		P						
CR	Common crossbill	<i>Loxia curvirostra</i>	P	P		Yes				

A 'P' denotes that the species was recorded in the survey area, but that no evidence for breeding was recorded

The species with the most number of territories recorded in the survey areas (combined) was chaffinch (with 68 territories) followed by other species with wide ranging habitat preferences including: robin (48 territories), wren (48), wood pigeon (39), blue tit (32) and dunnock (32). Other common generalist species were well represented including blackbird, great tit and carrion crow, while the deciduous woodland and woodland edge, hedgerow and scrub habitats within the survey areas supported relatively high numbers of green woodpecker (3 territories), great spotted woodpecker (5), blackcap (30), garden warbler (12), chiffchaff (18), goldcrest (7), long-tailed tit (9), coal tit (14) and treecreeper (10). The highest densities of breeding birds were generally recorded in areas of deciduous scrub and woodland, including red-listed species such as song thrush (4 territories) and marsh tit (2 territories).

Few species were recorded in the arable fields within both sites, the bird community here comprising relatively high numbers of skylark (a total of 23 territories), and smaller numbers of pheasant (16) and red-legged partridge (6). Lapwings were seen in the fields within the North Site on a number of occasions although breeding appeared not to have been attempted as no alarm calls were heard, and a pair of oystercatchers was present in fields throughout the survey period (which were assumed to be breeding nearby). The surrounding hedgerows also held low densities of birds, including yellowhammer (7 territories), linnet (7) and whitethroat (15). Other notable species included a male nightingale singing in thick scrub at the entrance of the Sizewell Power Stations on 2 May and 16 May and three lesser whitethroat territories located in hedgerows within the survey area for the South Site.

Species associated with wetland habitats were recorded in the north of the North Site survey area (this area was not surveyed in 2007), where there are fields of wet grassland lined with water and reed-filled ditches (part of Cowmarsh Hill, located immediately to the south of the Minsmere RSPB nature reserve). Also, part of the survey area (in the north east) is located in the Minsmere Levels (an extensive area of wet grassland). The small area of Cowmarsh Hill and the Minsmere Levels within the North Site survey area held a wide range of wetland species including: four pairs each of mallard and moorhen and a pair of mute swan, plus other birds associated with the wet scrub and reeds, including Cetti's warbler (6 territories), reed warbler (4), sedge warbler (3) and reed bunting (1). A number of other species typically associated with wetlands were recorded for which there was no evidence of breeding, as follows:

- Greylag goose: 2 birds on Cowmarsh Hill on 19 April;
- Shelduck: 2 birds on Cowmarsh Hill on 20 June;
- Gadwall: a pair flew from Lower Abbey on 26 March, and a male was on Cowmarsh Hill on 19 April;
- Teal: 2 birds flushed from Cowmarsh Hill on 26 March;
- Tufted duck: a pair was present on Cowmarsh Hill on 19 April, but birds were not seen on subsequent visits in May and June;
- Grey heron: 1 bird on Cowmarsh Hill on 19 April;
- Little egret: 1 foraging in Cowmarsh Hill on 26 March;
- Marsh harrier: a female hunting over Cowmarsh Hill on 15 May and 20 June, and a female hunting over Ash Wood Cottages on 20 June; and

- Snipe: 2 flushed from Cowmarsh Hill on 26 March, and 3 flushed from there on 19 April.

Marsh harrier, greylag goose, teal, gadwall and tufted duck breed in the reedbeds and marshy pools in the neighbouring RSPB Minsmere nature reserve; grey heron and shelduck also breed in the local area, and the remaining species are either non-breeding visitors (little egret) or lingering winter visitors/passage migrant birds (snipe).

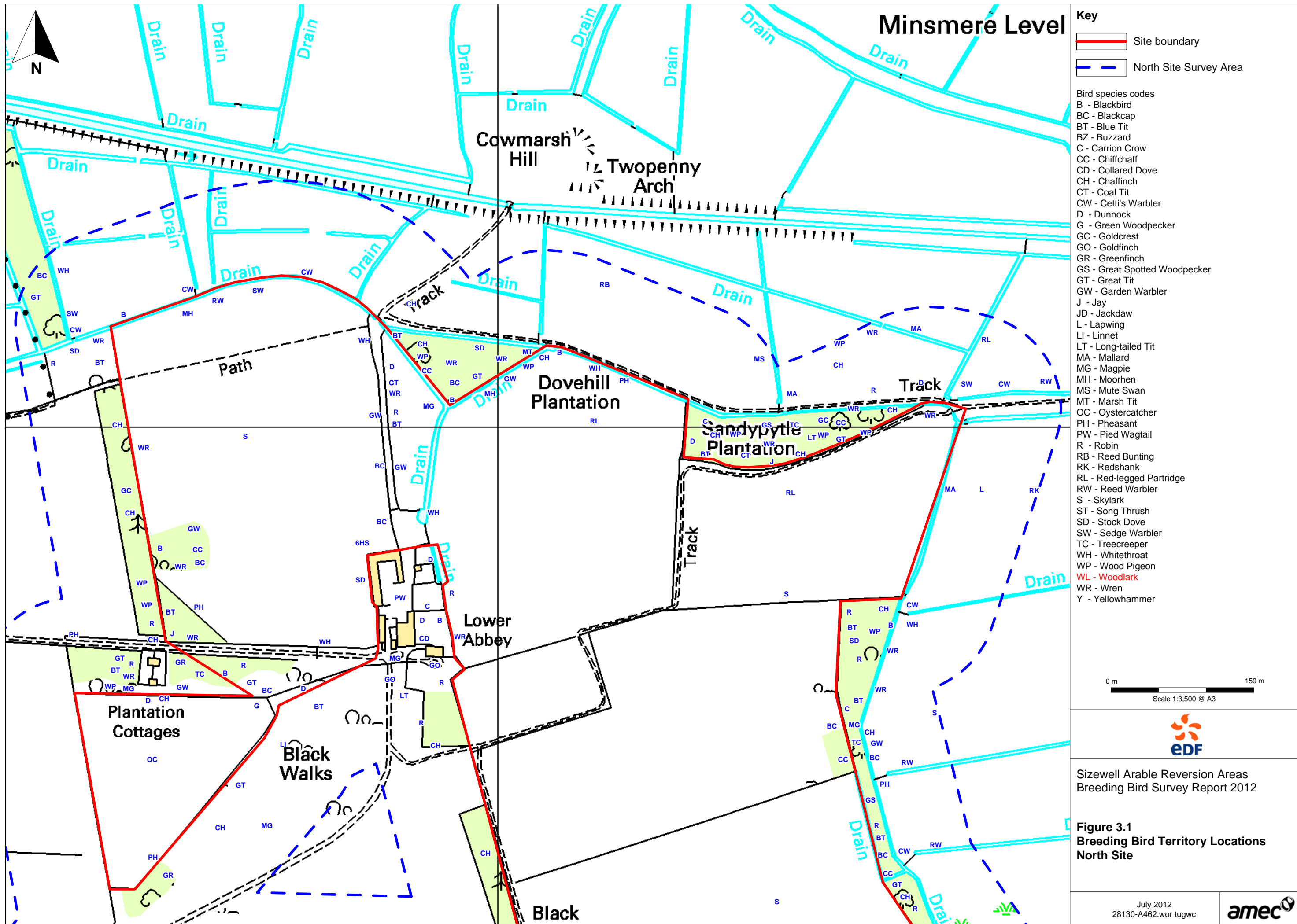
In addition, a barn owl (a Schedule 1 species that breeds in the local area) was seen hunting over Cowmarsh Hill on 20 June and two mistle thrush were feeding on the grassland of Black Walks on 20 June (again, likely to breed nearby). Crossbills were recorded on two dates, with 15 over Lower Abbey on 15 May and a single bird over Black Walks on 20 June. Although no suitable habitat exists for crossbill within the site, the extensive area of coniferous plantation less than 1km to the south between Kenton Hills and Goose Hill provides suitable areas for nesting (this species breeds very early in the year, and therefore may breed before the start of the surveys in March).

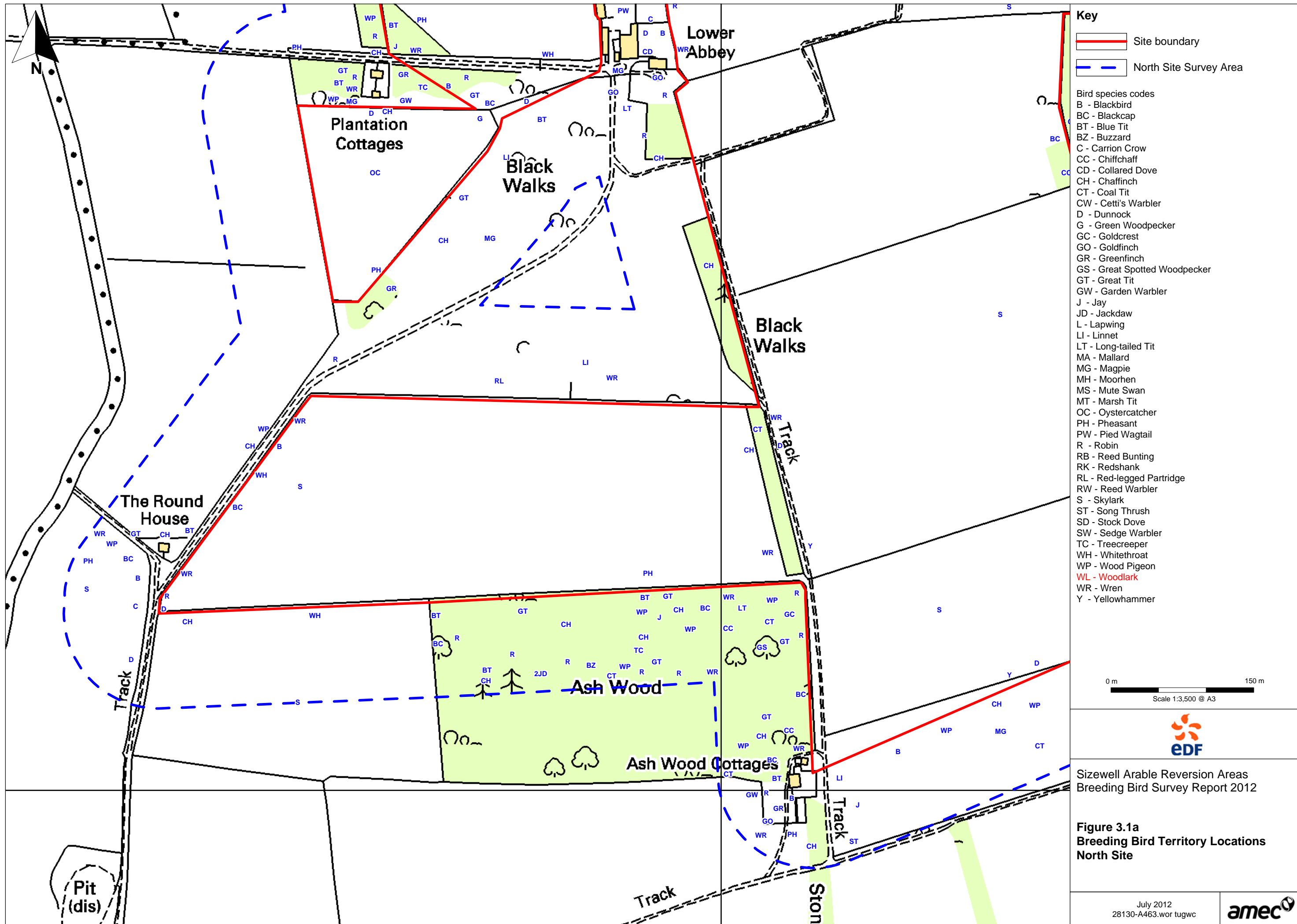
A kestrel was seen hunting over the North Site on 26 March and a sparrowhawk was displaying over Walkbarn on 26 March, with another seen hunting over Lower Abbey on 20 June. Just outside the survey area, a woodlark was singing 100-200m south-west of Walkbarn on 19 April. This bird was not recorded on subsequent survey visits or recorded by SWT wardens working in the area from March to June 2012 (pers. comm. Dane West, SWT warden). Lapwings were noted on several occasions, with birds seen displaying over the marshes immediately to the north of the North Site survey area. Within the North Site survey area, two pairs of lapwing were in a field south of Sandpytle Plantation on 26 March and a bird was in a field west of The Grove on 15 May, although breeding was not recorded at either location. A mixed flock of house martin, swallows and swifts were feeding over Cowmarsh Hill on 15 May, and a swallow was seen flying around Lower Abbey farmstead (a potentially suitable nest site) on the same date. Of these species, there is potentially suitable breeding habitat within the North Site survey area for gadwall and tufted duck (in the wet ditches), mistle thrush and sparrowhawk (in woodland) and swallow, swift and house martin (in buildings, such as at Lower Abbey). The buildings and old trees on site may also provide nest sites for barn owl and kestrel.

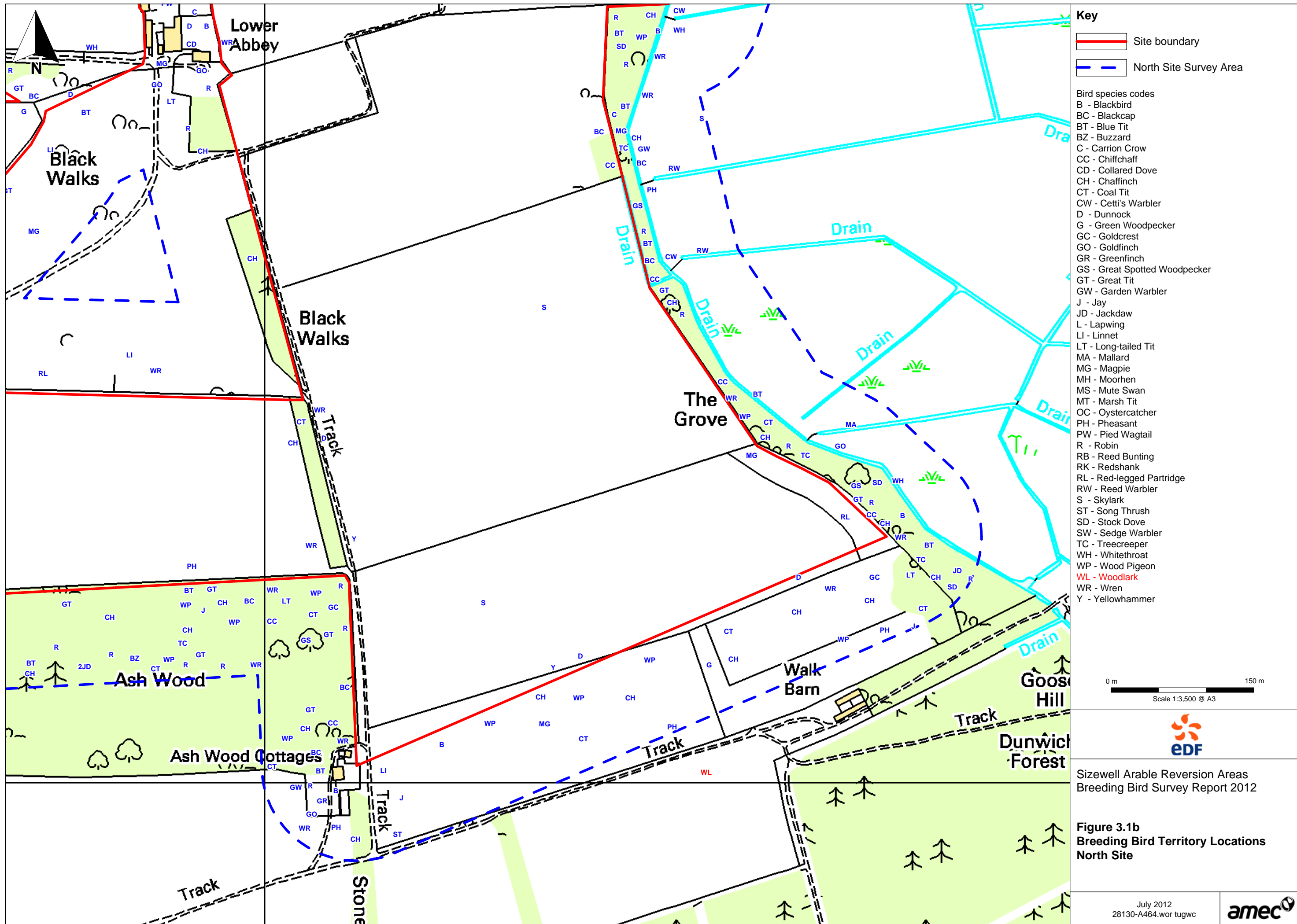
Within the survey area for the South Site, two barn owls were flushed from a tree on the edge of Rookyard Wood on 29 March. Barn owls were not seen in this area on subsequent survey visits, or during the marsh harrier vantage point surveys undertaken close to this area in February and March 2012. Adjacent to the South Site, a flock of up to 30 rooks were feeding on Leiston Common during the survey period, these birds probably being derived from the breeding colony near Leiston Old Abbey, 700-800m north east of the common. Mistle thrush (which likely breeds nearby) were also seen feeding on the common but were not heard singing within the survey area. Mallard (2 males on Sizewell Marshes on 29 March), teal (2 along Sizewell Power Stations entrance road on 29 March) and mute swan (1 on Sizewell Marshes on 2 May) were also recorded, but for which there was no evidence of breeding within the survey area for the South Site. A flock of 14 redwings (lingering winter visitors) were on Broom Covert on 29 March and a flock of 16 linnet were feeding on the adjacent fallow field on 2 May (this flock probably contained at least some local breeding birds). A Crossbill flew over the Sizewell Power Stations entrance road on 16 May, and a male cuckoo was calling from Leiston Common on 16 May (just outside the survey area); a species which has large territories and was therefore assumed to be holding territory within the survey area. A hobby was seen hunting over Broom Covert on 16 May, and during the 2007 surveys, hobby bred in the plantation to the east of Rookyard Wood, and in Ash Wood (Entec, 2008). Around the Sizewell beach village

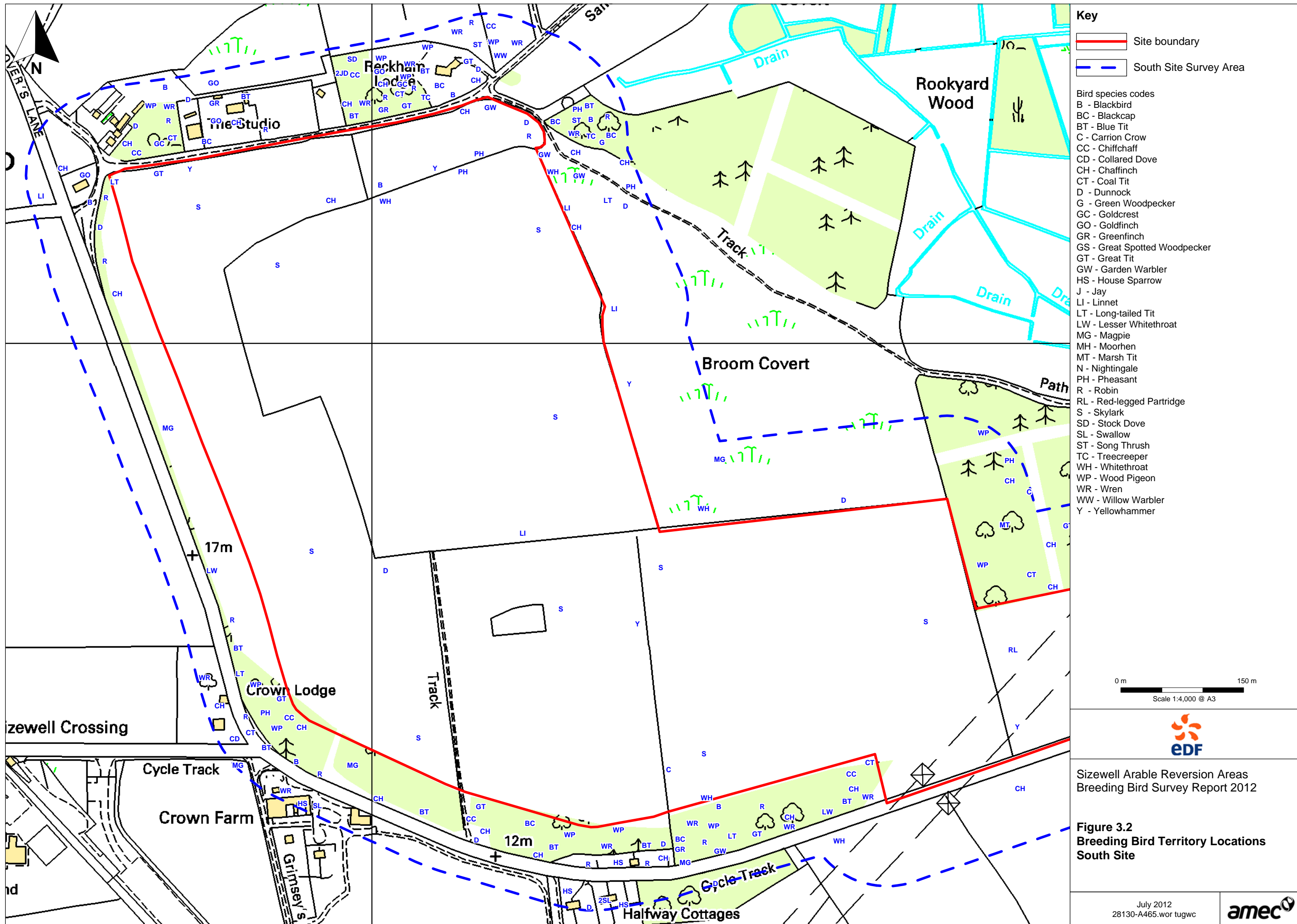


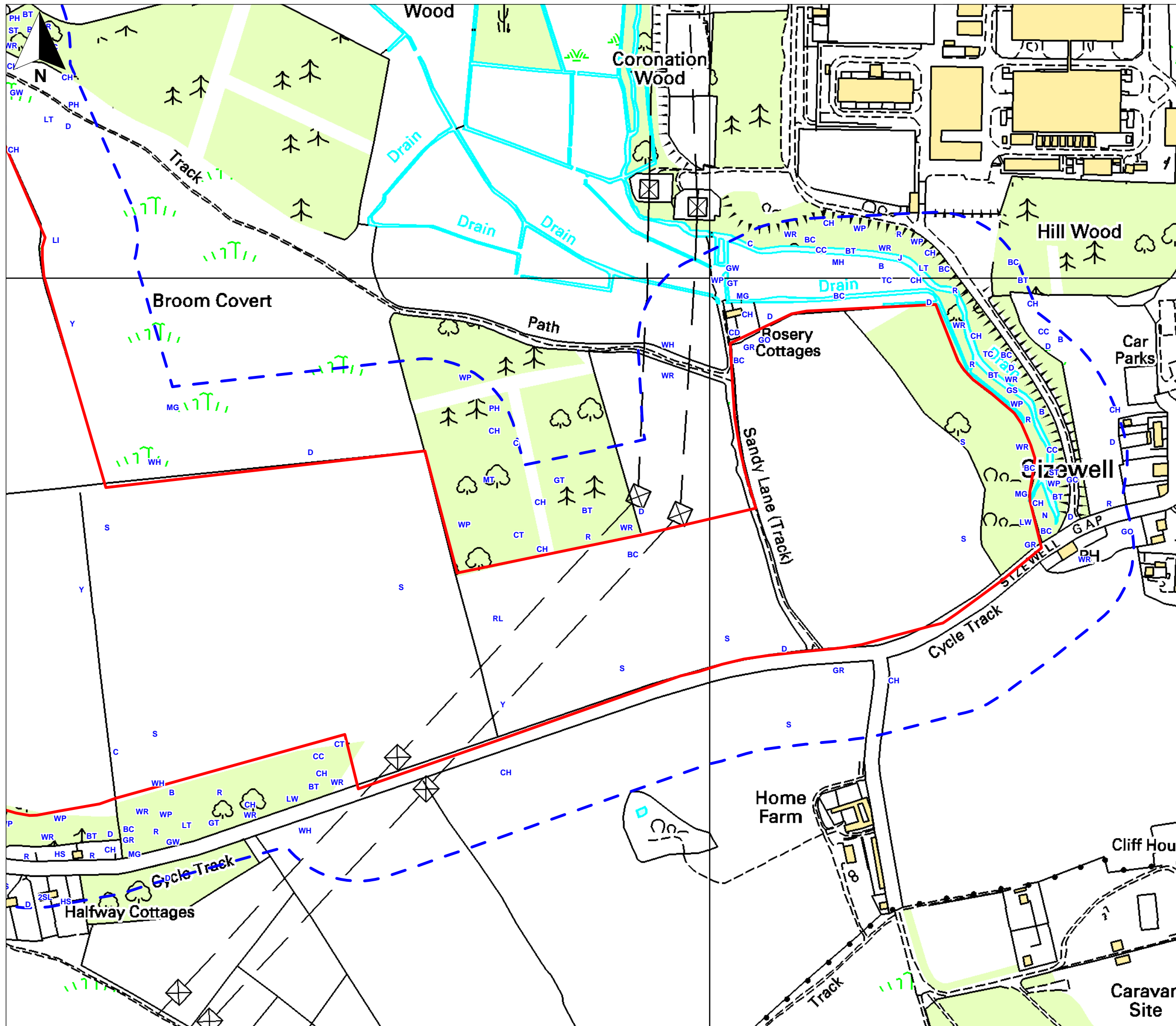
were pied wagtail on 16 May and at least 6 swifts in May and June (these birds were presumed to be breeding in the house roofs). An oystercatcher was in a field of rough grassland adjacent to Sizewell entrance road on 25 June (there was no alarm calling by the bird and no evidence of breeding in the field). At least 3 pairs each of swifts and starlings were seen on and flying around the houses adjacent to Sizewell beach (150m east of the South Site survey area) throughout much of the survey periods, and were probably breeding there (juvenile starlings were seen there in June).











- Key**
- Site boundary
 - South Site Survey Area
- Bird species codes
- B - Blackbird
 - BC - Blackcap
 - BT - Blue Tit
 - C - Carrion Crow
 - CC - Chiffchaff
 - CD - Collared Dove
 - CH - Chaffinch
 - CT - Coal Tit
 - D - Dunnock
 - G - Green Woodpecker
 - GC - Goldcrest
 - GO - Goldfinch
 - GR - Greenfinch
 - GS - Great Spotted Woodpecker
 - GT - Great Tit
 - GW - Garden Warbler
 - HS - House Sparrow
 - J - Jay
 - LI - Linnet
 - LT - Long-tailed Tit
 - LW - Lesser Whitethroat
 - MG - Magpie
 - MH - Moorhen
 - MT - Marsh Tit
 - N - Nightingale
 - PH - Pheasant
 - R - Robin
 - RL - Red-legged Partridge
 - S - Skylark
 - SD - Stock Dove
 - SL - Swallow
 - ST - Song Thrush
 - TC - Treecreeper
 - WH - Whitethroat
 - WP - Wood Pigeon
 - WR - Wren
 - WW - Willow Warbler
 - Y - Yellowhammer

0 m 150 m
Scale 1:4,000 @ A3



Sizewell Arable Reversion Areas
Breeding Bird Survey Report 2012

Figure 3.2a
Breeding Bird Territory Locations
South Site

July 2012
28130-A466.wor tugwc



4. Conclusions

Results from the breeding bird surveys undertaken in 2012 indicate that the areas of arable farmland within the survey areas for the South Site and North Site support relatively low densities of a limited range of common and widespread species. Other than skylark, very few species held territory in the arable fields, with whitethroat, linnets and yellowhammers breeding in the surrounding hedgerows. In 2007, broadly similar numbers of skylark (21 territories), yellowhammer (11), linnets (10) and whitethroat (27) were recorded in the same area (Entec, 2008). The number of territories of each of these species recorded within the survey areas is likely to be very small in relation to the county totals. For example, the skylark population in Norfolk was estimated at 25,000-30,000 pairs in 1997-2007 (Taylor & Marchant, 2011) and the numbers in Suffolk (a county of similar size, and habitats) are likely to be comparable. The 26 pairs of skylark recorded within the survey areas in 2012 will therefore represent a very small proportion (less than 1%) of the total in Suffolk. In addition, all of these species (skylark, linnets, whitethroat and yellowhammers) will also nest and forage in the habitats that the arable farmland is proposed to be converted to, including heathland with associated areas of acidic grassland and scrub.

In contrast, the other habitats present within the survey areas for the North and South Sites supported a varied community of breeding bird species, typical of the mosaic of different habitats present, including deciduous woodland, scrub and wet grassland. The greatest densities of territories and number of species were found in the areas of scrub and woodland (including three territories of lesser whitethroat and a single nightingale territory). In 2007, similar numbers of lesser whitethroat were recorded but a total of four nightingale territories were recorded within 100m of South Site, including three in Rookyard Wood and one in the conifer plantation adjacent to the east of the Greater Gabbard sub-station (Entec, 2008).

A number of species were also present in the wet grassland and ditches to the north and north east of North Site (Cowmarsh Hill and the Minsmere Levels respectively) and to the north east of South site (within the Sizewell Marshes SSSI). Some of these birds will occasionally use the adjacent arable farmland although it is likely that the greatest foraging opportunities will be found within the semi-natural habitats in which they breed (i.e. in areas of woodland, scrub and wet meadows located outside the proposed areas for conversion to heathland).

A number of highly protected species (that appear on Schedule 1 of the Wildlife & Countryside Act 1981) were recorded, of which one (woodlark) was associated with arable farmland. Barn owls were recorded at both sites (and are known to breed nearby), and although this species is likely to hunt over the arable fields, much greater foraging opportunities will be found in the areas of wet grassland and marshes (these habitats will support higher densities of their small mammal prey). Marsh harrier and hobby were also seen hunting over the farmland within the North and South Sites respectively, although again, the wet meadows and marshes are likely to provide the main hunting grounds for these birds. Cetti's warblers were breeding at high densities in the wet scrub to the north and north east of the North Site but these birds are very unlikely to utilise the arable farmland and surrounding hedgerows on a regular basis. Use of the arable fields by waders was confined to a pair of oystercatchers with lapwing being present but no breeding attempts recorded.



To conclude, the arable farmland within the North and South Site survey areas provides limited opportunities for foraging and nesting birds, and supports low numbers of a limited range of species. The numbers of each species recorded in the arable fields is likely to be very small in relation to their county populations.

5. References

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