

Portland
energy recovery
facility

Environmental statement
Technical appendix K:
Natural heritage
(part 2 of 3)



LINDSAY CARRINGTON
ECOLOGICAL SERVICES

WINTER BIRD RESULTS
PROPOSED ENERGY RECOVERY FACILITY
PORTLAND PORT
CASTLETOWN
PORTLAND
DORSET
DT5 1PP

APRIL 2020

ON BEHALF OF POWERFUEL PORTLAND LTD



LINDSAY CARRINGTON ECOLOGICAL SERVICES

The Old Squash Court,
Rempstone Hall,
Rempstone,
Corfe Castle,
Wareham,
Dorset,
BH20 5JQ
www.ecological-services.co.uk

Telephone: [REDACTED]

E-mail: [REDACTED]

Authorisation

	Name	Date
Report prepared by:	Adam Day	22.04.2020
Report checked and authorised by:	Jenny Sutch	23.04.2020

The contents of this report were correct at the time of the last survey visit. The report is provided for the sole use of the named client and is confidential.

All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of the addressee in dealing with this. It may not be sold, lent, hired out or divulged to any third party not directly involved in this situation without our written consent. It is company policy to share species records collected during our surveys with local biological records centres unless instructed otherwise by the client

CONTENTS

SUMMARY	1
1.0 INTRODUCTION	2
2.0 LEGISLATION AND POLICY	3
2.1 Legislation.....	3
2.2 Policy	3
3.0 METHODOLOGY	5
3.1 Desk study.....	5
3.2 Field study.....	5
3.2.1 Winter Bird Surveys	5
4.0 RESULTS	5
4.1 Desk study.....	5
4.2 Field surveys	6
5.0 CONCLUSIONS AND RECOMMENDATIONS	12
5.1 Ecological enhancement	13
6.0 REFERENCES	14
APPENDIX I: Proposals.....	15

SUMMARY

1. Lindsay Carrington Ecological Services Limited were commissioned by CGO Ecology Ltd on behalf of Powerfuel Portland Ltd to undertake Winter Bird Surveys at Portland Port, Castletown, Portland, Dorset, DT5 1PP (Ordnance Survey Grid Reference SY 6967 7422). The surveys are required to support a planning application for the construction of a Energy Recovery Facility on a vacant plot to the north east of Incline Road.
2. The site comprises buildings, roads and tracks, wasteground, docks and beaches, some vegetated areas and areas of Portland Harbour. The development itself is on an area of wasteground, created by the demolition of buildings. This has been colonised by areas of short perennial and ephemeral vegetation and small areas of semi-improved grassland. This variety of habitats provides wintering habitat for a wide variety of bird species.
3. The proposed development is within 2.5 kilometres of the Chesil Beach and the Fleet Special Protection Area and Ramsar site, which are designated for internationally important wintering populations and assemblages of birds. Winter Bird Surveys were proposed to assess potential impacts on these statutory protected sites.
4. During autumn surveys at the site, up to twelve black redstart were recorded within and adjacent to the site boundary. This species was also targeted during the Winter Bird Surveys.
5. Surveys were carried out once a month between October and March in suitable conditions. The species that the Special Protection Area and Ramsar sites are designated for were not recorded, however other species of note, including black redstart were. Black redstart were recorded within the site boundary and development footprint on every survey occasion.
6. The site has been identified as supporting at least three black redstart throughout the winter period and potential breeding evidence in the form of a male singing was recorded during the March survey. No breeding habitat will be lost under the proposals, but a significant amount of foraging habitat will.
7. Replacement habitat in the form of brown roofs, or planted gabion basket walls should be installed as part of the proposals.
8. As an enhancement, black redstart boxes and a variety of other bird boxes should be installed throughout the site.

1.0 INTRODUCTION

Lindsay Carrington Ecological Services Limited were commissioned by CGO Ecology Ltd on behalf of Powerfuel Portland Ltd to undertake Winter Bird Surveys (WBS) at Portland Port, Castletown, Portland, Dorset, DT5 1PP (Ordnance Survey Grid Reference SY 6967 7422). The surveys are required to support a planning application for the construction of a Energy Recovery Facility on a vacant plot to the north east of Incline Road.

Winter Bird Surveys are carried out to assess the importance of a site for wintering bird populations either on the site itself, in adjacent habitats or on sites nearby that are specially protected for their importance to birds. Sites may act as supporting habitat for protected sites and therefore, can be of importance in conserving bird populations.

The site comprises buildings, roads and tracks, wasteground, docks and beaches, some vegetated areas and areas of Portland Harbour. The development itself is on an area of wasteground, created by the demolition of buildings. This has been colonised by areas of short perennial and ephemeral vegetation and small areas of semi-improved grassland. This variety of habitats provides wintering habitat for a wide variety of bird species.

Section 2 of the report provides background information on relevant legislation and policy. Section 3 details the methodologies adopted for the surveys that were conducted and section 4 provides an account of the survey results. Section 5 provides information on the relevance of the results to the development proposal and recommends measures to avoid, mitigate or compensate for the effects on a particular habitat or species.

2.0 LEGISLATION AND POLICY

2.1 Legislation

Bird species are protected under the Wildlife and Countryside Act 1981 (plus amendments) which makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built). In addition, it is an offence to disturb any nesting bird listed on Schedule 1 or their young. In addition to this species which are considered to be in danger of extinction, vulnerable to changes in habitat, considered rare because of small populations or requiring particular attention are listed as Annex I under the Birds Directive. The Birds Directive's aims to maintain biodiversity by requiring member states to maintain or restore wild species listed on the annexes and is used to establish Special Protection Areas (SPAs) which are occupied by significant populations of Annex I species.

2.2 Policy

The following policy is of relevance to the proposed works:

- **National Planning Policy Framework (NPPF):** This sets out the Government's vision for biodiversity in England with the broad aim that planning, construction, development and regeneration should maintain and enhance, restore or add to biodiversity and geological conservation interests. NPPF (2019) includes sections on legally protected species and sites in section 15(2) (see section 2.1).
- **Natural England Protected Species Standing Advice:** The standing advice is used by local authorities as a fall back position when in pre-application consultation or during the determination period to define habitat and species survey efforts and mitigation proposals.
- **Natural Environment and Rural Communities Act (2006) Section 41 (NERC S41):** Section 41 of NERC Act 2006, places a legal obligation on public bodies in England to have regard to particular priority species and habitats, which are of the greatest conservation importance whilst carrying out their functions, whilst also having a general regard for protecting all biodiversity. Section 41 of that same Act of Parliament requires the Secretary of State to maintain and publish statutory lists of these features- a function carried out on his/her behalf by Defra and Natural England. This makes these priority species and habitats a key consideration of any planning application that may negatively impact on them.

3.0 METHODOLOGY

3.1 Desk study

The Multi Agency Geographic Information Centre (MAGIC) website was used to view protected site boundaries and view Impact Risk Zones (IRZ's) for these sites.

3.2 Field study

3.2.1 Winter Bird Surveys

The standard Common Bird Census methodology as developed by Marchant (1983) for the British Trust for Ornithology (BTO) was adopted. A set route was followed on five occasions between October and March. Visits to the site were made by experienced ornithologist Adam Day. Surveys were carried out in dry and calm conditions and lasted for up to four hours. Any birds encountered were identified either visually or from their vocalisations. Binoculars and a spotting scope were used to improve visibility of birds. Table 1 shows the dates, weather conditions and timing of the winter bird surveys.

Table 1 – Weather conditions during the winter bird surveys

Date	Start time	Temperature (°C)	Weather conditions
20.11.2019	09:30	11	Overcast, breezy, mild
19.12.2019	09:45	8	Sunny, calm, cool
17.01.2020	09:50	10	Overcast, calm, mild
25.02.2020	08:30	7	Intermittent sun, cool, calm
17.03.2020	08:00	14	Sunny, warm, slight breeze

4.0 RESULTS

4.1 Desk study

Statutory sites

Table 2 below lists statutory sites within 5 kilometres of the site. For context and relevance, only sites in relation to birds are included.

Table 2: Statutory designated sites within a five kilometre radius of Portland Port.

Site name	Conservation status	Distance from site (km)	Size (Ha)	Habitat description
Chesil Beach and the Fleet	RAMSAR ¹	2.1 km north west	747.37	The area is internationally important for wintering water birds notably dark-bellied brent goose (<i>Branta bernicla bernicla</i>) (2,251). Several other <i>Anatidae</i> winter in nationally important numbers e.g. mute swan (<i>Cygnus olor</i>) (982), wigeon (<i>Anas penelope</i>), and red-breasted merganser (<i>Mergus serrator</i>) (236). The site is also nationally important for breeding birds, including little tern (<i>Sterna albifrons</i>) (37 pairs in 1990).
	SPA ²	2.1 km north west	747.37	Birds rely on several intertidal, subtidal and terrestrial habitat types for nesting, loafing, resting and foraging. The shingle bank provides nesting for internationally important populations of breeding little tern , and although not features of the site, it also supports increasing numbers of breeding common tern (<i>Sterna hirundo</i>) and a small number of breeding ringed plover (<i>Charadrius hiaticula</i>). The Fleet provides important foraging for internationally important populations of wigeon via extensive seagrass communities.

The proposed development is located sufficiently remote from the statutory designated sites and therefore no impacts on these are anticipated as a result of the development. The proposals are unlikely to impact on supporting habitat, such as foraging resources for the species listed above during the winter months. This is because the water adjacent to the development area is not suitable foraging habitat for the designated species during the winter period.

4.2 Field surveys

A total of 34 species were recorded across the five surveys. None of the species for which the nearby protected sites are designated were recorded. Black redstart (*Phoenicurus ochruros*) were recorded on all five surveys, with a peak count of nine birds. One other

¹ RAMSAR: Designated as an internationally important wetland

² SPA: Special Protection Area designated as an internationally important area for birds

notable record was a great northern diver (*Gavia immer*) just off shore from the north-eastern site boundary. The results of the surveys are provided in table 3 below.

Table 3: Species recorded within the Portland Port site boundary and immediately adjacent to the proposed development area

Species	Latin name	National Status	County Status (Dorset Bird report 2017)	Number of visits species was recorded	Maximum count on one visit
common sandpiper	<i>Actitis hypoleucos</i>	BoCC4 Amber	Fairly common passage migrant and scarce winter visitor	1	1
long-tailed tit	<i>Aegithalos caudatus</i>	BoCC4 Green	Very common breeding resident	3	4
razorbill	<i>Alca torda</i>	BoCC4 Amber	Local breeding resident, common winter visitor and passage migrant	1	1
rock pipit	<i>Anthus pectorosus</i>	BoCC4 Green	Locally common breeding resident, winter visitor and passage migrant	3	6
grey heron	<i>Ardea cinerea</i>	BoCC4 Green	Fairly common breeding resident, winter visitor and passage migrant	5	3
turnstone	<i>Arenaria interpres</i>	BoCC4 Amber	Locally common winter visitor and passage migrant- a few non-breeders over-summer	1	1
buzzard	<i>Buteo buteo</i>	BoCC4 Green	Common breeding resident	5	3
purple sandpiper	<i>Calidris maritima</i>	BoCC4 Amber	Uncommon winter visitor and passage migrant	1	1
black-headed gull	<i>Chroicocephalus ridibundus</i>	BoCC4 Amber	Locally abundant breeding resident, winter visitor and passage migrant	5	12
stock dove	<i>Columba oenas</i>	BoCC4 Amber	Common but declining breeding resident, winter visitor and passage migrant	2	3

Powerfuels Portland Ltd
 Winter Bird Surveys, Portland Port, Castledown

Species	Latin name	National Status	County Status (Dorset Bird report 2017)	Number of visits species was recorded	Maximum count on one visit
wood pigeon	<i>Columba palambus</i>	BoCC4 Green	Very common breeding resident, winter visitor and passage migrant	4	4
carrion crow	<i>Corvus corone</i>	BoCC4 Green	Very common breeding resident, winter visitor and passage migrant	5	6
blue tit	<i>Cyanistes caeruleus</i>	BoCC4 Green	Very common breeding resident	5	4
little egret	<i>Egretta garzetta</i>	BoCC4 Green	Locally common breeding resident	2	1
robin	<i>Erithacus rubecula</i>	BoCC4 Green	Very common breeding resident, winter visitor and passage migrant	5	3
peregrine	<i>Falco peregrinus</i>	Schedule 1, BoCC4 Green	Locally common breeding resident, winter visitor and passage migrant	1	2
kestrel	<i>Falco tinnunculus</i>	BoCC4 Amber	Fairly common breeding resident and passage migrant	1	1
chaffinch	<i>Fringilla coelebs</i>	BoCC4 Green	Very common breeding resident, winter visitor and passage migrant	1	3
great northern diver	<i>Gavia immer</i>	Schedule 1, BoCC4 Amber	Uncommon winter visitor and passage migrant	1	1
Mediterranean gull	<i>Ichthyaeus melanocephalus</i>	Schedule 1, BoCC4 Amber	Locally common breeding resident, winter visitor and passage migrant	2	5
herring gull	<i>Larus argentatus</i>	BoCC4 Red, NERC S41	Locally abundant breeding resident, very common winter visitor and passage migrant	5	16

Powerfuels Portland Ltd
 Winter Bird Surveys, Portland Port, Castledown

Species	Latin name	National Status	County Status (Dorset Bird report 2017)	Number of visits species was recorded	Maximum count on one visit
greater black-backed gull	<i>Larus marinus</i>	BoCC4 Amber	Uncommon breeding resident, fairly common winter visitor and passage migrant	5	4
pie wagtail	<i>Motacilla alba</i>	BoCC4 Green	Very common breeding resident, winter visitor and passage migrant	5	2
grey wagtail	<i>Motacilla cinerea</i>	BoCC4 Red	Locally common breeding resident, winter visitor and passage migrant	3	1
wheatear	<i>Oenanthe oenanthe</i>	BoCC4 Green	A rare breeding species and common passage migrant	1	1
great tit	<i>Parus major</i>	BoCC4 Green	Very common breeding resident	2	7
shag	<i>Phalacrocorax aristotelis</i>	BoCC4 Red	Locally common breeding resident, winter visitor and passage migrant	1	2
cormorant	<i>Phalacrocorax carbo</i>	BoCC4 Green	Locally common breeding resident, winter visitor and passage migrant	5	16
black redstart	<i>Phoenicurus ochruros</i>	Schedule 1 ³ , BoCC4 Red	Locally common passage migrant and winter visitor, occasionally breeds	5	9
dunnock	<i>Prunella modularis</i>	BoCC4 Amber, NERC S41	Very common breeding resident	5	4
goldcrest	<i>Regulus regulus</i>	BoCC4 Green	Common but declining breeding resident, winter visitor and passage migrant	1	9

³ Wildlife and Countryside Act 1981 (plus amendments) Schedule : Birds and their young, for which it is an offence to intentionally or recklessly disturb at, on or near an 'active' nest

Powerfuels Portland Ltd
 Winter Bird Surveys, Portland Port, Castledown

Species	Latin name	National Status	County Status (Dorset Bird report 2017)	Number of visits species was recorded	Maximum count on one visit
stonechat	<i>Saxicola rubicola</i>	BoCC4 Green	Fairly common breeding resident and passage migrant	1	1
wren	<i>Troglodytes troglodytes</i>	BoCC4 Green	Very common breeding resident	5	4
blackbird	<i>Turdus merula</i>	BoCC4 ⁴ Green	Very common breeding resident, winter visitor and passage migrant	2	2

⁴ Birds of Conservation Concern 4

5.0 CONCLUSIONS AND RECOMMENDATIONS

During the WBS surveys at the Portland Port site, a total of 34 species were recorded, including four Schedule 1 species, two NERC S41 species, four species on the BoCC4 Red list and eight species on the BoCC4 Amber list. Of these species, only five were recorded within the developable area and include black-headed gull (*Chroicocephalus ridibundus*), black redstart, dunnoek (*Prunella modularis*), greater black-backed gull (*Larus marinus*) and herring gull (*Larus argentatus*). With the exception of black redstart, none were recorded in notable numbers. The only other notable record, was a single great northern diver recorded immediately adjacent to the beach on the north-eastern boundary of the site. This was recorded in March and was likely to be a passage migrant on its way north to its breeding grounds.

Black redstart were recorded on all six of the WBS, with a peak count of ten in October 2019 and nine in March 2020. Both of these high counts relate to peak migration periods for the species, with high numbers of records for both dates from across the Isle of Portland reported. From November to February up to three birds were recorded on each survey occasion. A high proportion of records during the surveys relate to the manmade rocky foreshore, which protects the harbour wall heading north eastwards away from the site, however, at least one black redstart was seen foraging within the proposed development area on each of the surveys. The rocky foreshore is immediately adjacent to the north eastern boundary of the development area. Birds were also recorded foraging on buildings and on the ground in western and central areas of the port facility. Overall the port provides highly suitable habitat for foraging black redstart, particularly the waste ground areas and rocky foreshore.

During the March 2020 survey, a single male black redstart was recorded singing on the fence that runs along the north eastern boundary of the site, adjacent to the beach. Males are likely to sing on occasion whilst migrating and whilst this does not confirm breeding black redstart on the site, suitable nesting sites are present throughout the port. This male was observed to fly off out of site to the north towards Weymouth and was lost over Portland Harbour.

The WBS surveys have shown that the port provides suitable habitat for wintering black redstart and acts as an important stop off site for migrating individuals of the species. With at least three individuals present throughout the winter, which represents just under 1% of the UK wintering population (RSPB, 2020) the site is likely to be of regional importance for wintering populations of this species.

The rocky foreshore area was also observed to be important for a number of other resident and migrant species, including common (*Actitis hypoleucos*) and purple sandpiper (*Calidris maritima*), turnstone (*Arenaria interpres*), wheatear (*Oenanthe Oenanthe*), grey heron (*Ardea cinereal*) and little egret (*Egretta garzetta*). Increased disturbance to this feature would likely have a negative impact on its value to these species.

Suitable mitigation should be provided as part of the proposals to account for the loss of suitable foraging habitat and to prevent increased disturbance to the rocky foreshore area. Although the area was observed to be regularly disturbed by normal port activities, the development is likely to increase the amount of disturbance that this area is subjected to. This will impact on all species that utilise the beach area and not just black redstart. Creating a man made buffer zone is considered to provide the best opportunity to prevent increased disturbance. This could be provided by installing any non-permeable structure along this boundary.

Replacement and additional foraging habitat for the species should be installed and created as part of the proposals. There are a number of options for doing this, including the installation of brown roofs on buildings and the creation of gabion walls and bunds, which can be top planted with short perennial and coastal type vegetation and can also be used as attractive boundary features. The specifications for black redstart mitigation at the site should be approved by Dorset Natural Environment Team (DNET) as part of the Biodiversity Plan (BP) for the site.

5.1 Ecological enhancement

Enhancements for birds at the site should aim to provide new nesting opportunities for a range of species, as well as those targeted during winter bird surveys. The scheme should integrate or install at least 30 nest boxes throughout the scheme. These should be suitable for a variety of species recorded on site, including grey and pied wagtails, common and widespread passerines such as blue tits and important action plan species, including swifts (*Apus apus*). Black redstart specific nest boxes should also be included in the proposals. The exact specifications for these boxes should be proposed as part of the BP to be submitted to DNET for approval.

In addition to the nest boxes, suitable foraging habitat for a variety of species should be provided as part of the landscaping scheme for the site. Any proposed planting should include nectar and berry rich native shrubs that provide food for birds in the form of insects and berries.

6.0 REFERENCES

Blackredstarts.org.uk (2020). <https://www.blackredstarts.org.uk/pages/mitigideas.html>

Dorset Bird Club (2017) Dorset Bird Report 2017.

Eaton MA, Brown AF, Noble DG, Musgrove AJ, Hearn R, Aebischer NJ, Gibbons DW, Evans A and Gregory RD (2009). *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man*. British Birds 102, pp296-341.

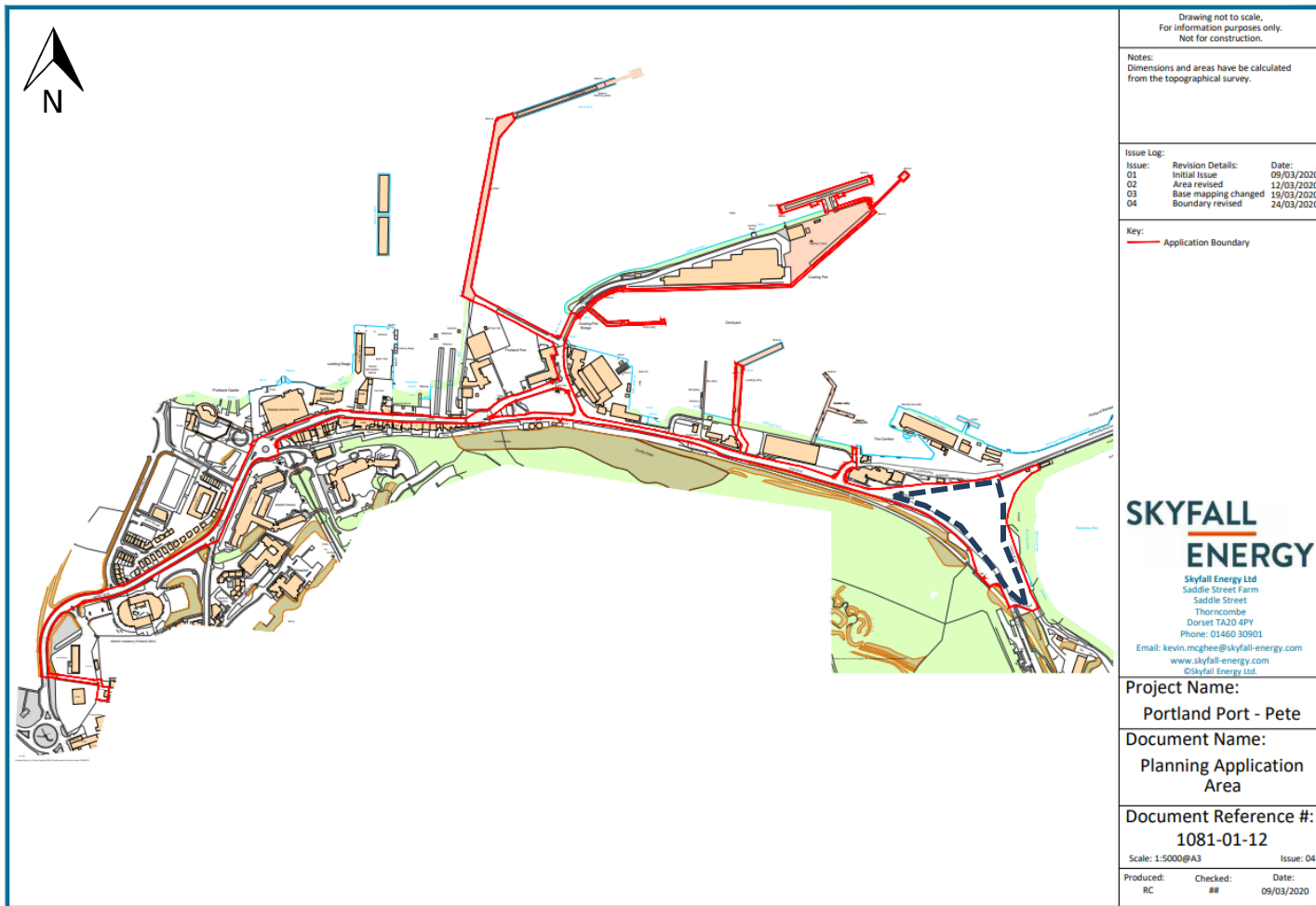
Gilbert, G; Gibbons, D & Evans, J (1998b) *Bird Monitoring Methods – Appendix 1* RSPB, Bedfordshire.

Marchant, J.H. (1983). *Common bird census instructions*. BTO, Tring.

Musgrove *et al* (2013) Population estimates of birds in Great Britain and the United Kingdom, British Birds, 106, 64 –100

RSPB (2020). <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/black-redstart/>

APPENDIX I: Proposals



Key:

- Site boundary
- - - Proposed development area