



# Technical Appendix 6.3: Breeding Bird Report

**Cossans Solar & BESS**

**TRIO POWER Limited**

Prepared by:

**SLR Consulting Limited**

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SLR Project No.: 425.VT3194.00001

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## Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1.0	24 March 2025	Gemma Grossart	Daniel Piec	Alison Hood
2.0	1 May 2025	Gemma Grossart	Bronwyn Fisher	Alison Hood
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## Basis of Report

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## Glossary and Terminology

The Applicant	TRIO POWER Limited
Proposed Development	Cossans Solar & Battery Energy Storage System (BESS)

## Acronyms and Abbreviations

AONs	Apparently Occupied Nests
BESS	Battery Energy Storage System
BoCC5	Birds of Conservation Concern 5
BTO	British Trust for Ornithology
EIA	Environmental Impact Assessment
SBL	Scottish Biodiversity List
SLR	SLR Consulting Limited
PV	Photovoltaic



## 1.0 Introduction

### 1.1 Purpose of this report

SLR was commissioned by TRIO POWER Limited to undertake Breeding Bird Surveys in 2024 for the Cossans Solar PV site in Forfar, Angus. This report provides the results of Breeding Birds Survey undertaken in 2024 covering the Site and 50m buffer. The report provides details of the survey methodology (**Section 2.0**), presents the results of the survey (**Section 3.0**) and discussion (**Section 4.0**).

The assessment of impacts resulting from the Proposed Development and the identification of mitigation measures are beyond the scope of this report and is covered in **Chapter 6: Ecology and Ornithology** of the EIA Report.

### 1.2 Site description

The proposed Solar photovoltaic (PV) and Battery Energy Storage System development (the Proposed Development) is to be located in Cossans, approximately 1.6km west of Forfar in Angus, Aberdeenshire. The Site measures approximately 87 hectares (ha) and has central Ordnance Survey Grid Reference NO 40042 49608.

The Survey Area consists of predominantly arable and pasture fields, grassland, scrub, lines of trees and woodland. A series of drainage ditches are present along field boundaries. Mature trees and a small block of woodland lie along the access track. The wider area consists predominantly of arable and pasture fields, blocks of woodland and small farm steadings. The River Tay is approximately 150m south of the Site.

### 1.3 Evidence of technical competence and experience

The project is managed by Alison Hood who is an Associate Director (in Ecology & Biodiversity) (MCIEEM) with SLR. Alison has over 10 years working in ecological consultancy, with substantial project management experience in solar and other renewables projects in Scotland, England and Wales.

All surveys were undertaken by Tim Drew, an ornithologist (MCIEEM) with extensive experience, based in Scotland. He has over 30 years of professional ecological experience covering all areas of the UK, including undertaking a wide variety of bird surveys for wind farm and other renewable energy developments.

This report was authored by Gemma Grossart, SLR Project Ornithologist (Qualifying member of CIEEM), who joined SLR in September 2024, with seven years of experience in ecological consultancy, including undertaking breeding bird surveys and vantage point surveys for wind farm projects across Scotland. The review was undertaken by Daniel Piec, SLR Senior Ornithologist who has over 20 years' experience in nature conservation and environmental consultancy, with a strong focus on ornithology surveys and reporting.

### 1.4 Nomenclature

The nomenclature throughout this report follows The British List (10th Edition)<sup>1</sup>, updated by the British Ornithologists' Union (BOU) Records Committee. English species names are used throughout the report, however, a full list of the species referred to in this report, including scientific names, is provided in **Appendix D**.

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<sup>1</sup> British Ornithologists' Union. 2022. The British List: A Checklist of Birds of Britain (10th edition), Ibis 164: pp.860 – 910.



## 2.0 Methodology

### 2.1 Desk study

A summary of avian designated sites within 20km from the Site and species of conservation concern found as part of the desk study is presented in **Section 3.1**.

### 2.2 Breeding Bird Walkover Survey

#### 2.2.1 Survey Area

The Survey Area covered the Site (approximately 87ha) plus 50m buffer.

#### 2.2.2 Target Species

All bird species encountered during the surveys were recorded and are listed in **Table A- , Appendix C**. The target species selected for reporting are those listed in Scotland on Annex I (of the EC Birds Directive) and Schedule 1 (of the Wildlife and Countryside Act 1981 as amended), Birds of Conservation Concern (BoCC)<sup>2</sup> Red and Amber as well as Scottish Biodiversity List (SBL)<sup>3</sup> species.

#### 2.2.3 Survey methods

Breeding bird surveys followed the methodology described by the 2024 Bird Survey Guidelines<sup>4</sup>, which involved the surveyor walking a transect at a slow, ambling pace, ensuring all accessible land within 50m of the transect was covered. Adjacent inaccessible land parcels were surveyed from the field boundary. The direction that the survey transect route was walked was varied between visits to ensure different parts of the survey area were accessed at different times.

Surveys started between half an hour before sunrise and half an hour after sunrise, except the third survey visit, which started 48 minutes after sunrise. All surveys were concluded by before 10 am. Surveys were undertaken in suitable weather conditions, avoiding heavy rain, strong winds (Beaufort force >5) and low visibility (e.g. fog). The dates, times and corresponding weather conditions for each survey are provided in **Table A- 1** Summary of survey weather conditions, surveyors and survey duration (May-July 2024)

Survey Date	Surveyors	Survey Duration	Weather Conditions						Sunrise time
			Wind Speed (Beaufort scale)	Wind Direction	Precipitation	Cloud Cover (oktas/eighths)	Visibility	Temperature (°C)	
23 <sup>rd</sup> May	TD	05:10-10:05	3	NE	0	8	2	13-14	04:40
4 <sup>th</sup> June	TD	04:55-09:50	3	W	0	8	2	13-14	04:25

<sup>2</sup> Stanbury A, Eaton MA, Aebischer NJ, Balmer D, Brown A, Douse A, Lindley P, McCulloch N and Win I (2021). The Status of our Bird Populations: the Fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and Second IUCN Red List Assessment of Extinction Risk for Great Britain. British Birds 114, 723–747.

<sup>3</sup> <https://www.nature.scot/doc/scottish-biodiversity-list> [Accessed: February 2025]

<sup>4</sup> Bird Survey and Assessment Steering Group. 2024. Bird Survey Guidelines for assessing ecological impacts, v.1.1.0. <https://birdsurveyguidelines.org/> [Accessed: February 2025]



Survey Date	Surveyors	Survey Duration	Weather Conditions						Sunrise time
			Wind Speed (Beaufort scale)	Wind Direction	Precipitation	Cloud Cover (oktas/eighths)	Visibility	Temperature (°C)	
8 <sup>th</sup> July	TD	05:20-09:50	2	S	0	4	2	9-13	04:32
Precipitation: None = 0, Drizzle = 1, Light rain /snow = 2, Mod. rain /snow = 3, Heavy rain /snow = 4 Visibility: Poor (<1km) = 0, Moderate (1-3km) = 1, Good (>3km) = 2									

## , Appendix B.

Surveys were carried out in the field using paper maps and forms. Following the survey the data were subject to quality assurance, by the surveyor and others in the project team. Survey data were then digitised for analysis and inclusion in this report. All visual and auditory contact with all species was recorded using British Trust for Ornithology (BTO) species codes. Behavioural notation was used to record the bird behaviour for each encounter (e.g., singing, alarm calling or aggressive encounters between adults, etc.).

Bird Survey Guidelines adopt a default position that a minimum of six survey visits should be carried out during the breeding season, unless a robust justification can be made as to why fewer visits are required. In this case, given the small size of the survey area and uniform distribution of mostly arable and grassland habitats, three visits was deemed to be sufficient to recognise the importance of the Site for bird species and therefore adequately assess the impacts of the development. The three visits were completed during a total of 14.5 survey hours (**Table 2-1**).

**Table 2-1: Summary of survey dates and total hours of survey**

Visit	Survey Dates	Total Hours of Survey
1	23 May	5
2	4 June	5
3	8 July	4.5
<b>Total Survey Hours</b>		<b>14.5</b>

### 2.2.4 Data Analysis

The method aims to measure in what way the survey area is important for avian diversity and which species may be breeding. The results are therefore presented as figures showing all registrations of target species, including behavioural notation, recorded across all visits. The breeding status of target species was determined using the BTO criteria<sup>5</sup> as detailed in **Table 2-2**.

The bird records are presented in **Figures 2-5, Appendix 1**.

**Table 2-2: BTO breeding bird status criteria**

Breeding Status	Evidence criteria
Confirmed breeding	<ul style="list-style-type: none"> <li>Distraction display or injury feigning.</li> <li>Used nests or eggshells found (occupied or laid within the survey period).</li> <li>Recently fledged young or downy young.</li> </ul>

<sup>5</sup> <https://www.bto.org/our-science/projects/birdatlas/methods/breeding-evidence> [Accessed: August 2024]



Breeding Status	Evidence criteria
	<ul style="list-style-type: none"> <li>Adults entering or leaving a nest site in circumstances indicating occupation.</li> <li>Nest or an adult sitting on nest.</li> <li>Adults carrying food for young or faecal sacs.</li> <li>Nest containing eggs.</li> <li>Nest with young seen or heard.</li> </ul>
Probable breeding	<ul style="list-style-type: none"> <li>Pairs observed in suitable nesting habitat in the breeding season.</li> <li>Permanent territory presumed through registration or territorial behaviour (song etc.) on at least two different days, a survey apart, at the same place.</li> <li>Display and courtship.</li> <li>Visiting probable nest site.</li> <li>Agitated behaviour or anxiety calls from adults.</li> <li>Building nest or excavating nest hole.</li> </ul>
Possible breeding	<ul style="list-style-type: none"> <li>Species observed in breeding season in possible nesting habitat.</li> <li>Singing male(s) present or breeding calls heard in breeding season.</li> </ul>
Non-breeding	<ul style="list-style-type: none"> <li>Flying over.</li> <li>Species observed but suspected to be still on migration.</li> <li>Species observed but suspected to be summering non-breeder.</li> </ul>

## 2.3 Limitations

Access was not provided to the 50m buffer area beyond the Site boundary due to different land ownerships. The buffer area was therefore scanned from a distance by the surveyor using binoculars.



## 3.0 Results

### 3.1 Desk study

#### 3.1.1 Designated sites

Designated ornithological sites identified within the 20km search area are listed in **Table 3.1** and **Figure 1** in **Appendix 1**.

**Table 3-1: Designated sites, features and associated connectivity within 20km from the survey area**

Site name & Designation	Reason for Designation (population at citation given in brackets where available).	Distance and Orientation from the Site
Loch of Kinordy SPA	Loch of Kinnordy SPA qualifies under Article 4.2 by regularly supporting populations of European importance of the migratory species: greylag goose <i>Anser anser</i> (1986/87 to 1990/91 average winter peak count of 910 individuals, 1% of the Iceland/UK/Ireland biogeographic population) and pink-footed goose <i>Anser brachyrhynchus</i> (1986/87 to 1990/91 average winter peak count of 3,960 individuals, 3% of the Eastern Greenland/Iceland/UK biogeographic population).	Located 5.2km north-west of Proposed Development
Loch of Lintrathen SPA	The site qualifies under Article 4.2 by regularly supporting, in winter, internationally important numbers of the Icelandic population of greylag geese <i>Anser anser</i> . In the five-winter period 1985/86 to 1989/90 an average peak of 2,100 birds was recorded, representing 2% of the total population, all of which winters in Britain.  Loch of Lintrathen is also of importance for its assemblage of wintering birds typical of open water and associated wetlands. These include: whooper swan <i>Cygnus cygnus</i> (an Annex I species), wigeon <i>Anas penelope</i> , teal <i>Anas crecca</i> , mallard <i>Anas platyrhynchos</i> , and goosander <i>Mergus merganser</i> .	Located 11.80km north-west of Proposed Development
Firth of Tay and Eden Estuary SPA	The Firth of Tay and Eden Estuary SPA further qualifies under Article 4.2 by regularly supporting populations of European importance of the migratory species: 1% of the Eastern Atlantic biogeographic population); greylag goose <i>Anser anser</i> (1990/91 to 1994/95 a winter peak mean of 1,200 individuals, 1% of the Iceland/UK/Ireland biogeographic population) and pink-footed goose <i>Anser brachyrhynchus</i> (1990/91 to 1994/95 a winter peak mean of 2,800 individuals, 1% of the Eastern Greenland/Iceland/UK biogeographic population).  The Firth of Tay and Eden Estuary SPA also qualifies under Article 4.2 by regularly supporting in excess of 20,000 individual waterfowl. During the period 1990/91 to 1994/95 a winter peak mean of 48,000 individual waterfowl was recorded, comprising 28,000 wildfowl and 20,000 waders, including nationally important populations of the following species: greylag goose (1,200 individuals, 1% of the GB population).	Located 19.22km south of Proposed Development



### 3.1.2 Protected species

The desk study did not identify any Annex I or Schedule 1 species within 2km from the site in the last 10 years (2015-2024). Records of two red-listed species and three amber-listed species were obtained from within 2km of the site in the last 10 years (see **Table 3-2**).

**Table 3-2: Records of red and amber-listed species within 2km of the site in the last 10 years**

Common name	Annex I/ Schedule 1	SBL			BoCC 5
		Conservation action needed	Avoid negative impacts	Watching brief only	
Black-headed gull		X	X		Amber
Dipper					Amber
Dunnock					Amber
Greenfinch					Red
Herring gull		X	X		Red

## 3.2 Field survey

### 3.2.1 Breeding bird surveys

A total of 527 registrations of 44 species was recorded during the Breeding Bird Survey in 2024. A full list of all species recorded during the three survey visits can be found in **Table A-**, Error! Reference source not found. and survey records are illustrated in **Figure 2-5**, Error! Reference source not found..

### 3.2.2 Target species

A total of 415 records of 28 target species (Annex I, Schedule 1, Red or Amber BoCC and SBL) were recorded within the Survey Area, all of which are listed in Error! Reference source not found., alongside a summary of when the species was recorded and the number of individual registrations (i.e., records of individual birds that were considered by surveyors to be separate birds, not the same individual). In particular:

- One Annex I/ Schedule 1 species (red kite);
- An additional 13 BoCC Red listed species (curlew, grey partridge, herring gull, house sparrow, lapwing, lesser redpoll, linnet, mistle thrush, skylark, starling, tree sparrow, swift and yellowhammer);
- An additional 13 BoCC Amber listed species (black-headed gull, bullfinch, dunnock, greylag goose, oystercatcher, reed bunting, rook, sedge warbler, stock dove, whitethroat, willow warbler, woodpigeon and wren); and
- One additional SBL species (siskin).

**Table 3-3 Target species observed during each visit of the 2024 breeding bird surveys**

Species	BTO Code	Conservation Status	Number of registrations			
			Visit 1	Visit 2	Visit 3	Total
Black-headed gull	BH	Amber, SBL	0	0	10	10



Species	BTO Code	Conservation Status	Number of registrations			
			Visit 1	Visit 2	Visit 3	Total
Bullfinch	BF	Amber	0	0	1	1
Curlew	CU	Red, SBL	2	2	0	4
Dunnock	D.	Amber	0	0	4	4
Greylag goose	GJ	Amber	2	0	0	2
Grey partridge	P.	Red, SBL	2	0	0	2
Herring gull	HG	Red, SBL	0	20	11	31
House sparrow	HS	Red, SBL	0	0	1	1
Lapwing	L.	Red, SBL	16	12	2	30
Lesser redpoll	LR	Red, SBL	0	0	1	1
Linnet	LI	Red, SBL	0	4	8	12
Mistle thrush	M.	Red	1	0	2	3
Oystercatcher	OC	Amber	4	3	2	9
Red kite*	KT	Ann. I, Sch. 1, SBL	1	0	1	2
Reed Bunting	RB	Amber, SBL	1	3	7	11
Rook	RO	Amber	65	22	4	91
Sedge warbler	SW	Amber	4	4	4	12
Siskin	SK	SBL	2	0	1	3
Skylark	S.	Red, SBL	27	28	15	70
Starling	SG	Red, SBL	1	1	7	9
Stock dove	SD	Amber	2	1	0	3
Swift	SI	Red, SBL	0	0	3	3
Tree sparrow	TS	Red, SBL	1	4	5	10
Whitethroat	WH	Amber	5	4	8	17
Willow warbler	WW	Amber	9	9	5	23
Woodpigeon	WP	Amber	0	5	5	10
Wren	WR	Amber	5	3	4	12
Yellowhammer	Y.	Red, SBL	8	10	11	29
<b>Total</b>			<b>158</b>	<b>135</b>	<b>122</b>	<b>415</b>
Annex I: of the EU Birds Directive Schedule 1: Wildlife and Countryside Act 1981 Red, Amber and Green: Birds of Conservation Concern 5 (BOCC5) SBL: Scottish Biodiversity List						

\* Red kite are listed as a Schedule 1A species in Scotland, meaning that they have additional protection so that they may not be intentionally or recklessly harassed at any time.

### 3.2.3 Summary of Breeding Status

Breeding was confirmed for 6 species: dunnock (family), lapwing (adults with chicks), oystercatcher (adult with chick), tree sparrow (family), whitethroat (family) and yellowhammer (family).





**Table 3-4** summarises the observations for each target species, their distribution and abundance within the survey area, and their assigned breeding status. Figures 2-5 in **Appendix A** illustrate all registrations from all visits for each target species. The assigned breeding status for non-priority species is listed in **Table A-**, Error! Reference source not found..

**Table 3-4: Summary of target species observations, conservation status in Scotland and breeding status within Survey Area**

Target species	Conservation status	Summary of observations	Breeding status within Survey Area
Black-headed gull	Amber, SBL	One record of 10 birds foraging within a field in the east of the survey area on 8 July.	Non-breeding
Bullfinch	Amber	A male and female recorded near broadleaved woodland in the west of the survey area on 8 July.	Probable
Curlew	Red, SBL	One record of a singing bird on 23 May and a bird calling from the same location on 4 <sup>th</sup> June, denoting one probable territory.	Probable
Dunnock	Amber	A family was recorded on 8 July, in the west of the survey area.	Confirmed
Greylag goose	Amber	A pair observed in the north-west of the survey area on 23 May, however suitable nesting habitat is not present on site.	Non-breeding
Grey partridge	Red, SBL	One pair recorded in suitable habitat on 23 May.	Probable
Herring gull	Red, SBL	Multiple records of birds foraging on and flying over the survey area. No evidence of breeding recorded.	Non-breeding
House sparrow	Red, SBL	One calling bird observed in suitable habitat on 8 <sup>th</sup> July, in the west of the site.	Possible
Lapwing	Red, SBL	Multiple records of pairs and birds alarming on site through the three survey visits. Four alarm calling adults with chicks were recorded during the 2 <sup>nd</sup> survey visit on 4 <sup>th</sup> June, denoting four probable territories.	Confirmed
Lesser redpoll	Red, SBL	One bird was recorded calling in the north-west of the survey area on 8 July. Hedgerows, young woodland and gardens are present nearby.	Possible
Linnet	Red, SBL	A pair of birds and six additional birds were observed in suitable habitat on the third survey visit on 8 July. Four birds were also observed in suitable habitat on the second survey visit on 4 June.	Probable
Mistle thrush	Red	One observation of two flying birds on 8 July and one foraging bird on 23 May. Woodland suitable for breeding is present on site nearby.	Possible
Oystercatcher	Amber	One confirmed territory was recorded, with an adult observed with young, and one further probable territory was observed, with a pair alarm calling.	Confirmed
Red kite	Ann. I, Sch. 1, SBL	One observation of a flying bird on 8 July and one bird taking off on 23 May near suitable nesting habitat (patch of woodland)	Possible
Reed bunting	Amber, SBL	Record of a singing male at the same location on both the first and second survey visit.	Probable
Rook	Amber	91 observations of foraging and flying birds during the three survey visits. No evidence of breeding recorded.	Non-breeding
Sedge warbler	Amber	12 observations across the survey area with multiple territories.	Probable



Target species	Conservation status	Summary of observations	Breeding status within Survey Area
Siskin	SBL	One observation of a calling bird in an area of mixed woodland.	Possible
Skylark	Red, SBL	70 observations of singing and calling birds during all survey visits, with numerous territories recorded.	Probable
Starling	Red, SBL	Four observations during all survey visits, in the east of the survey area, including 2 birds near farm buildings.	Possible
Stock dove	Amber	Three observations during the first and second survey visit, including one singing bird.	Possible
Swift	Red, SBL	Three observations of flying birds on 8 July.	Non-breeding
Tree sparrow	Red, SBL	Seven registrations across the whole survey area, including one family observed on 8 July.	Confirmed
Whitethroat	Amber	13 registrations across the whole survey area, including a family observed on 8 July.	Confirmed
Willow warbler	Amber	23 registrations across the whole survey area, with clusters of birds, including singing birds.	Probable
Woodpigeon	Amber	Seven registrations within the survey area, including within woodland and lines of trees.	Possible
Wren	Amber	12 registrations across the whole survey area, with clusters of birds, including singing birds.	Probable
Yellowhammer	Red, SBL	29 registrations within the survey area, with clusters of birds, including singing birds and one family, noted on 8 July.	Confirmed
Annex I: of the EU Birds Directive Schedule 1: Wildlife and Countryside Act 1981 Red, Amber and Green: Birds of Conservation Concern 5 (BOCC5) SBL: Scottish Biodiversity List			

## 4.0 Summary

A total of 37 species were identified as confirmed (7), probable (13) or possible (17) breeders within the survey area, with the remaining species (7) classed as non-breeding (**Table A- , Appendix C**).

Breeding was confirmed for six target species. Probable and possible breeding status was allocated to nine and eight target species, respectively. Breeding was not confirmed for black-headed gull, greylag goose, herring gull, rook or swift (**Table 4-1**).

**Table 4-1: Summary of breeding status of target species. Annex I/ Schedule 1 species are marked in blue, BcCC Red listed species in red, Amber listed species in orange and SBL species in green**

Assigned Breeding Status			
Confirmed	Probable	Possible	Non-breeding
Dunnock	Bullfinch	House sparrow	Black-headed gull
Lapwing	Curlew	Lesser redpoll	Greylag goose
Oystercatcher	Grey partridge	Mistle thrush	Herring gull
Tree sparrow	Linnet	Red kite	Rook
Whitethroat	Reed bunting	Siskin	Swift
Yellowhammer	Sedge warbler	Starling	



Assigned Breeding Status			
	Skylark	Stock dove	
	Willow warbler	Woodpigeon	
	Wren		

The most frequently recorded species were skylark (70 registrations), yellowhammer (25), willow warbler (23) and lapwing (21). Yellowhammer and lapwing were confirmed breeders, while skylark and willow warbler were probable breeders. These typical farmland species were followed in abundance by a suite of species associated with linear woody, semi-natural or rural habitats, i.e., bullfinch, dunnoek, grey partridge, linnet, reed bunting, sedge warbler, tree sparrow, whitethroat, willow warbler, wren and yellowhammer – all confirmed or probable breeders. Red listed confirmed breeders include also tree sparrow and yellowhammer.





# Appendix A   Figures

## **Cossans Solar & BESS**

**Breeding Bird Survey 2024**

**TRIO POWER Limited**




SLR Project No.: 425.VT3194.00001

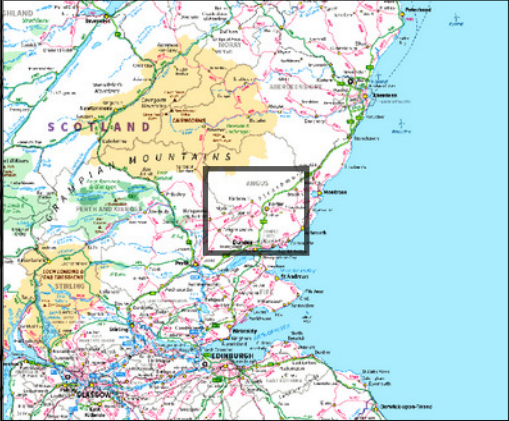
01 May 2025





LEGEND

-  Site Boundary
-  Site Boundary 20 km Buffer
-  Special Protection Area (SPA)

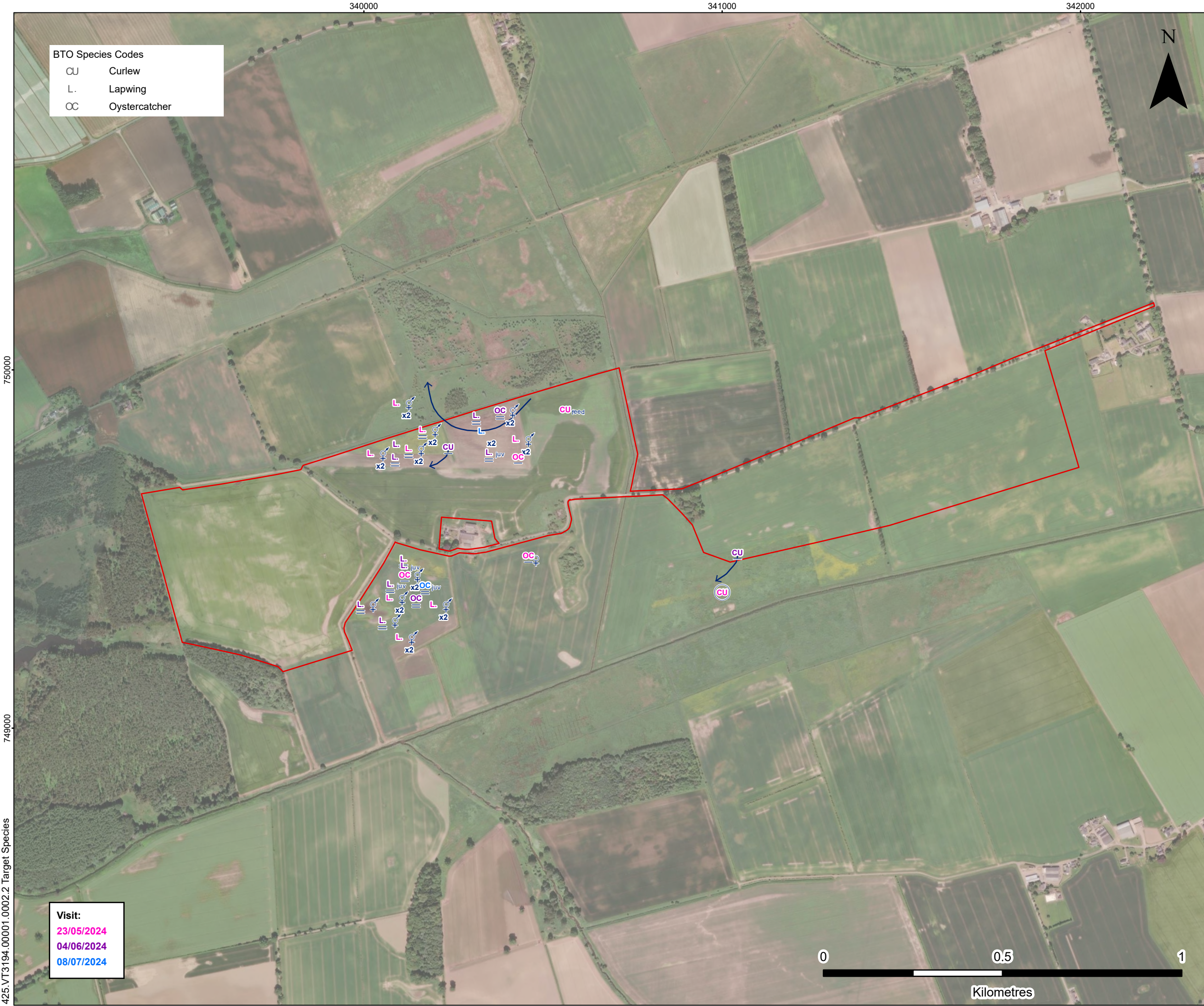


COSANS SOLAR & BESS  
BREEDING BIRD REPORT  
ORNITHOLOGICAL DESIGNATIONS

FIGURE 1

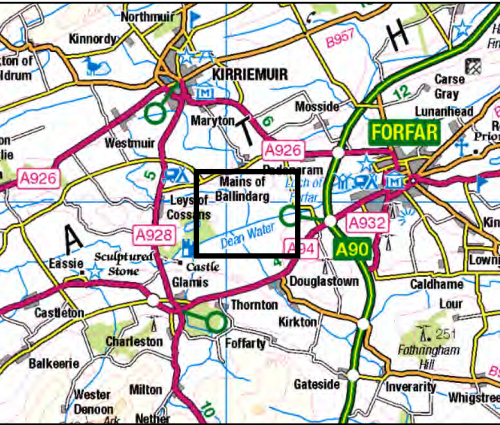
Scale 1:150,000 @A3 Date FEBRUARY 2025





BTO Species Codes	
CU	Curlew
L.	Lapwing
OC	Oystercatcher

LEGEND	
	Site Boundary
Flight Type	
	Flight Line
Behaviour	
	Alarm Call
	Calling
	Feeding
	Female, Calling
	Juvenile
	Male & Female
	Male & Female Calling
	Male & Female, Alarm Call
	Singing



COSSANS SOLAR & BESS

BREEDING BIRD REPORT

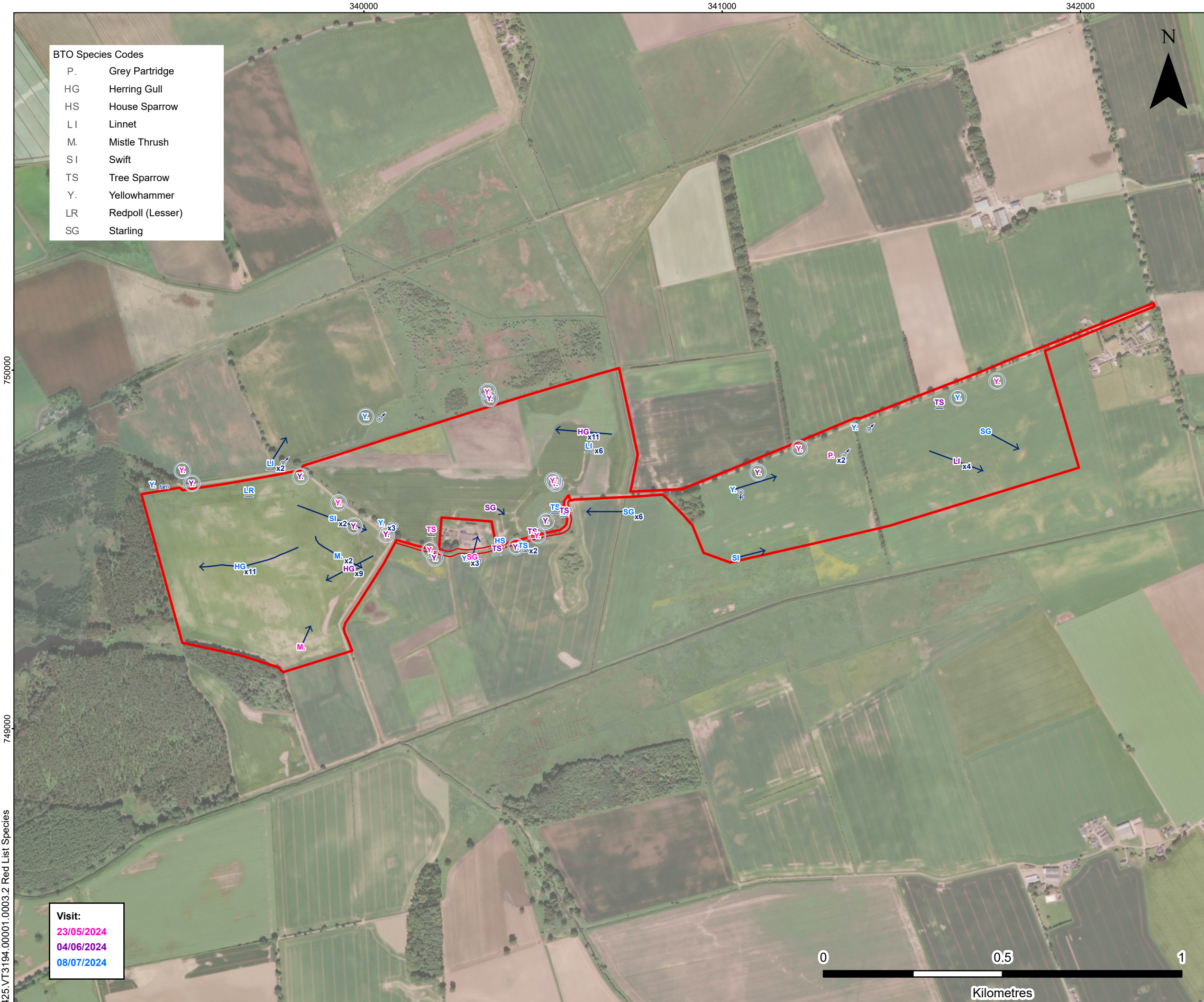
TARGET SPECIES (WADERS)

FIGURE 2

Scale 1:10,000 @ A3

Date MAY 2025





**BTO Species Codes**

P.	Grey Partridge
HG	Herring Gull
HS	House Sparrow
LI	Linnet
M.	Mistle Thrush
SI	Swift
TS	Tree Sparrow
Y.	Yellowhammer
LR	Redpoll (Lesser)
SG	Starling

**LEGEND**

Site Boundary

**Flight Type**

Flight Line

**Behaviour**

Calling

Family

Family, Calling

Female

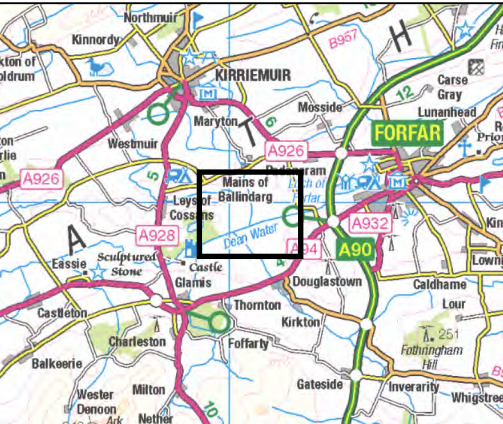
Male

Male & Female

Male & Female Calling

Male Singing

Singing



COSSANS SOLAR & BESS  
BREEDING BIRD REPORT

**BIRDS OF CONSERVATION  
CONCERN (BOCC) RED LIST  
SPECIES EXCLUDING SKYLARK**

**FIGURE 3**

Scale	1:10,000 @ A3	Date	MAY 2025
-------	---------------	------	----------

340000 341000 342000

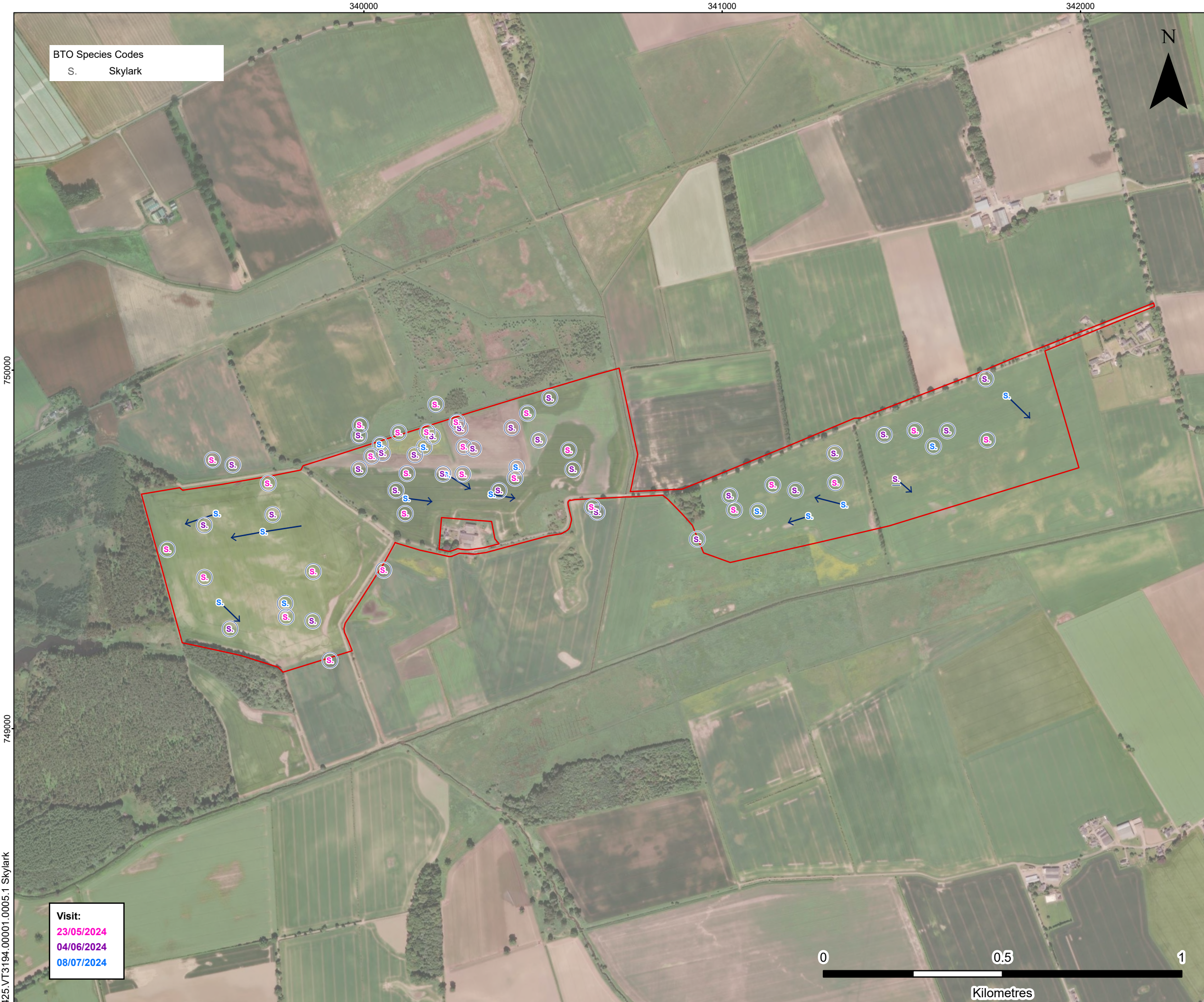
750000 749000

425.VT3194.00001.0003.2 Red List Species

Visit:  
23/05/2024  
04/06/2024  
08/07/2024

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Aerial Imagery (2023) Source Maxar, Microsoft





BTO Species Codes  
S. Skylark

LEGEND

Site Boundary

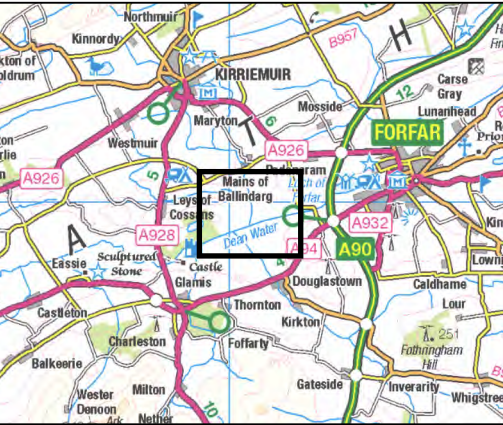
Flight Type

Flight Line

Behaviour

Calling

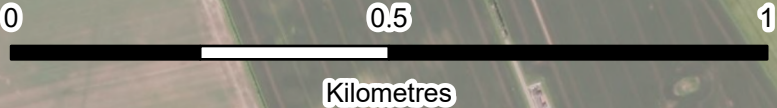
Singing



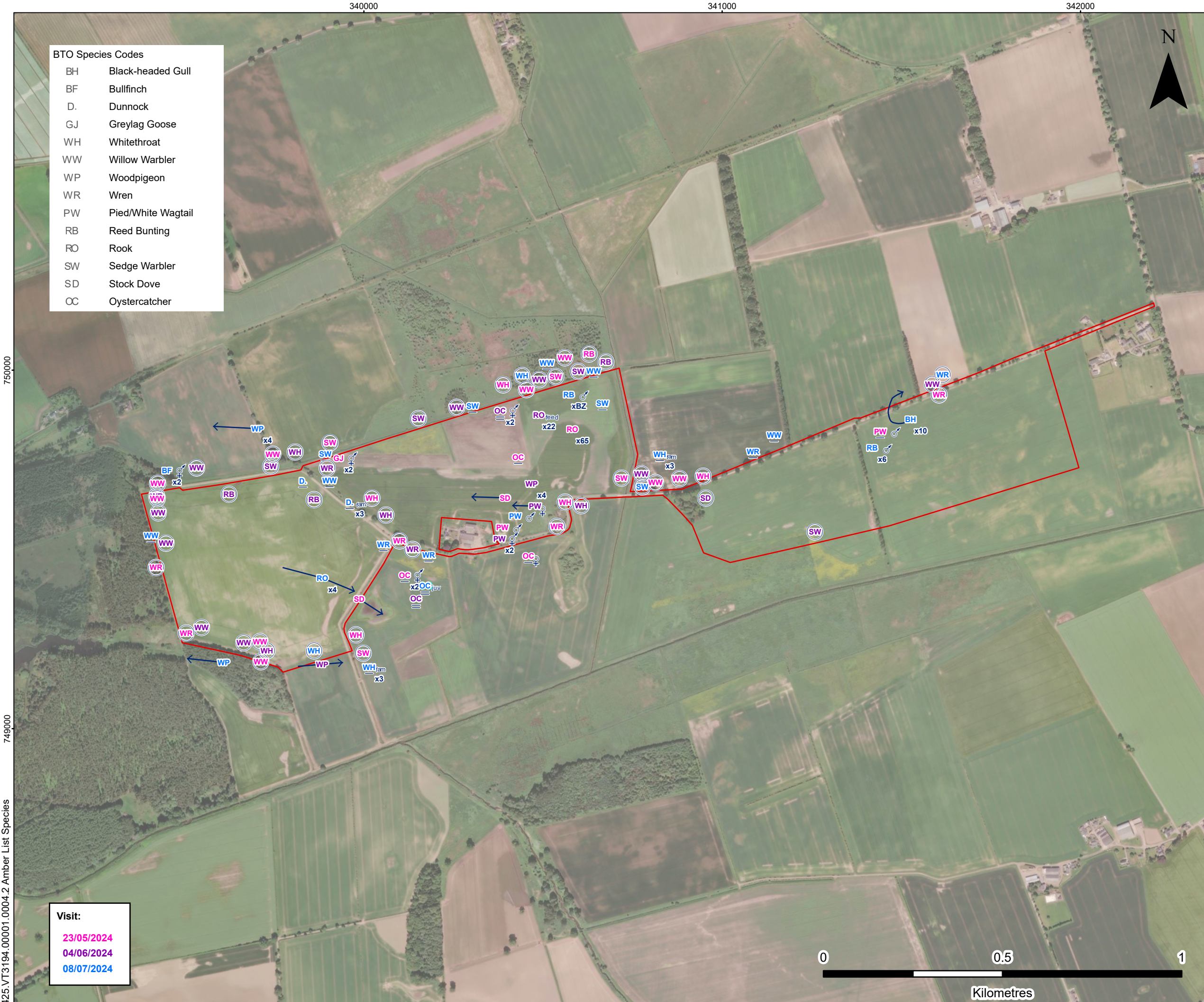
COSSANS SOLAR & BESS  
BREEDING BIRD REPORT  
SKYLARK

FIGURE 4

Scale 1:10,000 @ A3      Date MAY 2025







BTO Species Codes	
BH	Black-headed Gull
BF	Bullfinch
D.	Dunnock
GJ	Greylag Goose
WH	Whitethroat
WW	Willow Warbler
WP	Woodpigeon
WR	Wren
PW	Pied/White Wagtail
RB	Reed Bunting
RO	Rook
SW	Sedge Warbler
SD	Stock Dove
OC	Oystercatcher

LEGEND

Site Boundary

Flight Type

Flight Line

Behaviour

=

Alarm Call

—

Calling

— fam

Family, Calling

feed

Feeding

♀

Female

— ♀

Female, Calling

juv

Juvenile

♂

Male

— ♂

Male & Female

— ♂ ♀

Male & Female Calling

= ♂ ♀

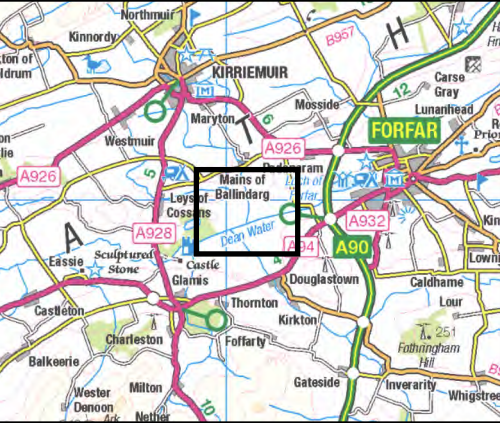
Male & Female, Alarm Call

— ♂

Male, Calling

○

Singing



COSSANS SOLAR & BESS  
BREEDING BIRD REPORT  
BOCC AMBER LIST SPECIES

FIGURE 5

Scale 1:10,000 @ A3 Date MAY 2025

340000 341000 342000

750000 749000

425.VT3194.00001.0004.2 Amber List Species

Visit:  
23/05/2024  
04/06/2024  
08/07/2024

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Aerial Imagery (2023) Source Maxar, Microsoft





# Appendix B    Survey metadata

## **Cossans Solar & BESS**

**Breeding Bird Survey 2024**

**TRIO POWER Limited**

SLR Project No.: 425.VT3194.00001

01 May 2025

**Table A- 1 Summary of survey weather conditions, surveyors and survey duration (May-July 2024)**

Survey Date	Surveyors	Survey Duration	Weather Conditions						Sunrise time
			Wind Speed (Beaufort scale)	Wind Direction	Precipitation	Cloud Cover (oktas/eighths)	Visibility	Temperature (°C)	
23 <sup>rd</sup> May	TD	05:10-10:05	3	NE	0	8	2	13-14	04:40
4 <sup>th</sup> June	TD	04:55-09:50	3	W	0	8	2	13-14	04:25
8 <sup>th</sup> July	TD	05:20-09:50	2	S	0	4	2	9-13	04:32
Precipitation: None = 0, Drizzle = 1, Light rain /snow = 2, Mod. rain /snow = 3, Heavy rain /snow = 4 Visibility: Poor (<1km) = 0, Moderate (1-3km) = 1, Good (>3km) = 2									



# Appendix C    Survey results

## **Cossans Solar & BESS**

**Breeding Bird Survey 2024**

**TRIO POWER Limited**

SLR Project No.: 425.VT3194.00001

01 May 2025

**Table A- 2 Full list of species, number of registrations per survey visit during the Breeding Bird Survey in 2024**

Species	Number of registrations				Breeding Status
	Visit 1	Visit 2	Visit 3	Total	
Blackbird		1		1	Possible
Bullfinch			2	2	Probable
Black-headed gull			10	10	Non-breeding
Blue tit			1	1	Possible
Buzzard	1	1	2	4	Possible
Chaffinch	5	6	5	16	Probable
Curlew	2	2		4	Probable
Duncock			4	4	Confirmed
Garden warbler	1	2		3	Possible
Goldfinch	1	3	12	16	Probable
Great tit	2	1	1	4	Possible
Great spotted woodpecker			1	1	Possible
Grey heron	2	1	2	5	Non-breeding
Greylag goose	2			2	Non-breeding
Grey partridge	2			2	Probable
Herring gull		20	11	31	Non-breeding
House sparrow			1	1	Possible
Jackdaw	16			16	Non-breeding
Jay		3	3	6	Probable
Lapwing	16	14	2	32	Confirmed
Lesser redpoll			1	1	Possible
Linnet		4	8	12	Probable
Magpie		2	1	3	Possible
Mistle thrush	1		2	3	Possible
Oystercatcher	4	3	2	9	Confirmed
Pheasant	2	3	1	6	Possible
Pied wagtail	2	3	1	6	Probable
Red kite	1		1	2	Possible
Reed bunting	1	3	7	11	Probable
Robin	1	2		3	Possible
Rook	65	22	4	91	Non-breeding

Species	Number of registrations				Breeding Status
	Visit 1	Visit 2	Visit 3	Total	
Sedge warbler	4	4	4	12	Probable
Siskin	2		1	3	Possible
Skylark	30	28	15	73	Probable
Starling	1	1	7	9	Possible
Swallow	5	7	13	25	Confirmed
Swift			3	3	Non-breeding
Treecreeper	1			1	Possible
Tree sparrow	1	4	5	10	Confirmed
Whitethroat	5	4	8	17	Confirmed
Willow warbler	9	9	5	23	Probable
Woodpigeon		5	5	10	Possible
Wren	5	5	4	14	Probable
Yellowhammer	8	10	11	19	Confirmed
<b>Grand total</b>	<b>198</b>	<b>173</b>	<b>166</b>	<b>527</b>	



# Appendix D    Bird species names

## **Cossans Solar & BESS**

**Breeding Bird Survey 2024**

**TRIO POWER Limited**

SLR Project No.: 425.VT3194.00001

01 May 2025

**Table A- 3: English and scientific names of the species referred to in the report**

English name	Scientific name
Blackbird	<i>Turdus merula</i>
Bullfinch	<i>Pyrrhula pyrrhula</i>
Black-headed gull	<i>Chroicocephalus ridibundus</i>
Blue tit	<i>Cyanistes caeruleus</i>
Buzzard	<i>Buteo buteo</i>
Chaffinch	<i>Fringilla coelebs</i>
Curlew	<i>Numenius arquata</i>
Dunnock	<i>Prunella modularis</i>
Garden warbler	<i>Sylvia borin</i>
Goldfinch	<i>Carduelis carduelis</i>
Great tit	<i>Parus major</i>
Great spotted woodpecker	<i>Dendrocopos major</i>
Grey heron	<i>Ardea cinerea</i>
Greylag goose	<i>Anser anser</i>
Grey partridge	<i>Perdix perdix</i>
Herring gull	<i>Larus argentatus</i>
House sparrow	<i>Passer domesticus</i>
Jackdaw	<i>Coloeus monedula</i>
Jay	<i>Garrulus glandarius</i>
Lapwing	<i>Vanellus vanellus</i>
Lesser redpoll	<i>Acanthis cabaret</i>
Linnet	<i>Linaria cannabina</i>
Magpie	<i>Pica pica</i>
Mistle thrush	<i>Turdus viscivorus</i>
Oystercatcher	<i>Haematopus ostralegus</i>
Pheasant	<i>Phasianus colchicus</i>
Pied wagtail	<i>Motacilla alba</i>
Red kite	<i>Milvus milvus</i>
Reed bunting	<i>Emberiza schoeniclus</i>
Robin	<i>Erithacus rubecula</i>
Rook	<i>Corvus frugilegus</i>
Sedge warbler	<i>Acrocephalus schoenobaenus</i>
Siskin	<i>Spinus spinus</i>
Skylark	<i>Alauda arvensis</i>
Starling	<i>Sturnus vulgaris</i>
Swallow	<i>Hirundo rustica</i>
Swift	<i>Apus apus</i>
Treecreeper	<i>Certhia familiaris</i>
Tree sparrow	<i>Passer montanus</i>
Whitethroat	<i>Curruca communis</i>
Willow warbler	<i>Phylloscopus trochilus</i>
Woodpigeon	<i>Columba palumbus</i>



English name	Scientific name
Wren	<i>Troglodytes troglodytes</i>
Yellowhammer	<i>Emberiza citrinella</i>



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