

Viking CCS pipeline

Preliminary
Environmental
Information
Report Volume IV

Technical Appendices

Applicant: Chrysoar Production (U.K.) Limited, a Harbour Energy Company PINS Reference: EN070008





## Appendix 6.2

# Ornithology Surveys Results



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### 6 Ecology and Biodiversity

#### 6.1 Tables Summarising Results of Ornithology Surveys

- 6.1.1 **Table 6-1**, **Table 6-2** and **Table 6-3** respectively summarise:
  - All birds (regardless of conservation status) recorded during non-breeding point count surveys;
  - All birds (regardless of conservation status) recorded during breeding season point count surveys; and
  - Summary results of all surveys (including point counts and potential functionally linked land surveys), with locations of peak counts and summary narrative on the breeding distribution and/or behaviours of each Priority Species<sup>1</sup>.
- 6.1.2 Species highlighted in green, amber and red in the tables below are, respectively, those species included on the Birds of Conservation Concern (BoCC) Green, Amber and Red Lists of conservation concern (Stanbury *et al.*, 2021: Ref 6-27 of the *PEIR Volume II: Chapter 6*). Those with no colour shown are not classified as BoCC species as they are non-native or were not identified to species level.
- 6.1.3 Further information regarding the legislation and guidance against which each species is listed is provided in section 6.2 of *Chapter 6* of *PEIR Volume II*.

<sup>&</sup>lt;sup>1</sup> These are also referred to as "protected and notable species", a definition of which is provided in paragraph 6.4.16 of the PEIR Ecology and Biodiversity chapter.

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Table 6-1: Summary of All Birds Recorded During Non-Breeding Point Count Surveys<sup>2</sup>

Common name	Taxon name	-	SSSI/SPA species <sup>3</sup>	1																								
		Schedule	SSSI/SPA	NERC S4	Annex 1	1	2 3	4	5	6	7 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Peak count	Location(s) of peak count	Comments
Blackbird	Turdus merula																									10	5	
Black-headed gull	Chroicocephalus ridibundus																									140	6, 20	
Blue tit	Cyanistes caerulaeus																									3	11	
Brambling	Fringilla montifringilla	✓																								1	15	
Bullfinch	Pyrrhula pyrrhula			✓																						1	1, 9, 10	
Buzzard	Buteo buteo																									4	7	
Carrion crow	Corvus corone																									65	15	
Chaffinch	Fringilla coelebs																									6	3	
Coal tit	Periparus ater																									1	2	
Collared dove	Stretopelia decaocto																									6	11	
Common gull	Larus canus		✓		<b>√</b>																					137	4	
Dunnock	Prunella modularis			√																				Г		11	9	
Feral pigeon	Columba livia domestica																									8	5	
Fieldfare	Turdus pilaris	<b>√</b>																								86	17	
Goldcrest	Regulus regulus																									1	16	
Golden Plover	Pluvialis apricaria		<b>√</b>		<b>√</b>																					70	6	
Goldfinch	Carduelis carduelis							ſ																		6	16	
Great spotted woodpecker	Dendrocopos major																									1	1, 11, 12	
Great tit	Parus major																									6	16	
Greenfinch	Chloris chloris																									2	16	

Point count numbers are provided in the header row.
 Qualifying or designated features of the Humber Estuary Ramsar, SPA or SSSI. November 2022

Common name	Taxon name	le 1	SSSI/SPA species <sup>3</sup>	541	1																					
		Schedule	S/ISSS	NERC	Annex	1 2	3 4	4 5	6 7	8	9 1	0	11 1	2 1	13 1	4	15 16	17	18	19	20	21	22	Peak count	Location(s) of peak count	Comments
Grey heron	Ardea cinerea																							1	7, 19, 20	
Grey Partridge	Perdix perdix			✓																				10	6, 8	
Herring Gull	Larus argentatus			✓																				15	12	
House sparrow	Passer domesticus			✓																				10	21	
Jackdaw	Corvus monedula																							132	17	
Jay	Garrulus glandarius																							2	16	
Kestrel	Falco tinnunculus																							3	20	
Lapwing	Vanellus vanellus		✓	✓																				300	14	
Linnet	Linaria cannabina			✓																				13	5	
Little egret	Egretta garzetta				<b>√</b>																			3	18	
Long tailed tit	Aegithalos caudatus																							11	11	
Magpie	Pica pica																							2	4, 15, 17, 20	
Mallard	Anas platyrhynchos		<b>√</b>																					2	8, 11, 12	
Meadow Pipit	Anthus pratensis																							7	14	
Mistle thrush	Turdus viscivorus																							1	17	
Moorhen	Gallinula chloropus																							1	1	
Nuthatch	Sitta europaea																							1	11	
Peregrine	Falco peregrinus	✓			<b>√</b>																			1	12, 17	
Pied wagtail	Motacilla alba																							12	3	
Pink-footed goose	Anser brachyrhynchus																							60	18	Two records of overflying skeins recorded on 10/11/21 and 11/11/21 from PC18 and PC4, respectively
Pheasant	Phasianus colchicus																							8	4	

Common name	Taxon name	e 1	SSSI/SPA species <sup>3</sup>	41																								
		Schedule	SSSI/SP	NERC S	Annex 1	1 2	3	4	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	1 22	Peak count	Location(s) of peak count	Comments
Raven	Corvus corax																									1	12	
Red legged partridge	Alectoris rufa																									8	6	
Redwing	Turdus iliacus	<b>√</b>																								16	8	
Reed bunting	Emberiza schoeniclus			<b>√</b>																						2	1	
Robin	Erithacus rubecula																									4	18	
Rook	Corvus frugilegus																									230	17	
Siskin	Spinus spinus																									20	3	
Skylark	Alauda arvensis			✓																						60	18	
Song thrush	Turdus philomelos			✓																						1	1, 3, 9, 11, 16	
Starling	Sturnus vulgaris			✓																						200	17	
Stock dove	Columba oenas																									20	17	
Teal	Anas crecca		✓																							80	1	
Treecreeper	Certhia familiaris																									1	16	
Tree sparrow	Passer montanus			✓																						23	4	
Unidentified grey goose																										110	19	Two records of overflying skeins recorded on 10/11/21 and 21/01/22 from PC20 and PC19, respectively
Woodcock	Scolopax rusticola																									1	15	
Woodpigeon	Columba palumbus																									1,251	15	
Wren	Troglodytes troglodytes																									8	5	
Yellowhammer	Emberiza citrinella			<b>√</b>																						7	5	

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Table 6-2: Summary of All Birds Recorded During Breeding Point Count Surveys4

Common name	Taxon name		ecies <sup>5</sup>																									
		_	SSSI/SPA sp	NERC S41	Annex 1	2	3	4	5	6	7 12	2 1	3	14	15	17	18	21	22	23	24	25	26	27	28	Peak count	Location(s) of peak count	Breeding Status
Blackbird	Turdus merula																									3	2, 3	Confirmed breeding
Blackcap	Sylvia atricapilla																									1	3, 12, 15	Possible breeding
Blue tit	Cyanistes caerulaeus																									6	28	Confirmed breeding
Buzzard	Buteo buteo																									4	4	Probable breeding
Carrion crow	Corvus corone																									13	18	Probable breeding
Chaffinch	Fringilla coelebs																									4	23, 24	Probable breeding
Chiffchaff	Phylloscopus collybita																									2	3, 12, 15	Probable breeding
Coal tit	Periparus ater																									1	24	Probable breeding
Collared dove	Stretopelia decaocto																									2	21	Probable breeding
Common gull	Larus canus																									15	5	Non-breeding
Corn bunting	Emberiza calandra			✓																						1	14	Probable breeding
Dunnock	Prunella modularis			✓																						2	14, 15, 28	Probable breeding
Feral pigeon	Columba livia domestica																									2	6	Possible breeding
Goldfinch	Carduelis carduelis																									2	3, 23, 28	Probable breeding
Great tit	Parus major																									2	5, 25, 26	Probable breeding
Greenfinch	Chloris chloris																									4	6	Probable breeding
Green woodpecker	Picus viridis																									1	23	Possible breeding
Greylag goose	Anser anser																									2	17	Possible breeding
Grey Partridge	Perdix perdix			<b>√</b>																						2	28	Possible breeding
Herring gull	Larus argentatus			✓																						1	4	Non-breeding
House martin	Delichon urbicum																									10	4	Possible breeding
House sparrow	Passer domesticus			<b>√</b>																						10	6, 21	Possible breeding

Point count numbers are provided in the header row.
 Qualifying or designated features of the Humber Estuary Ramsar, SPA or SSSI. November 2022

Common name	Taxon name	dule 1	SSSI/SPA species <sup>5</sup>	: S41	к 1																					Location(s)	
		Schedule 1	SSSI	NERC	Annex	2	3 4	4 5	6	7	12	13	14	15	17	18	21	22	23	24	25	26	27	28	Peak count	of peak count	Breeding Status
Jackdaw	Corvus monedula																								12	17	Possible breeding
Jay	Garrulus glandarius																								1	15, 24	Possible breeding
Kestrel	Falco tinnunculus																								2	23	Possible breeding
Lapwing	Vanellus vanellus		<b>√</b>	√																					4	17	Confirmed breeding (2 breeding pairs)
Lesser Black- backedgGull	Larus fuscus																								3	5	Non-breeding
Linnet	Linaria cannabina			✓																					17	5	Confirmed breeding
Long tailed tit	Aegithalos caudatus																								5	2	Possible breeding
Magpie	Pica pica																								2	13, 18, 24, 28	Possible breeding
Marsh harrier	Circus aeruginosus	✓	<b>√</b>		<b>√</b>																				1	17	Possible breeding (1 female [09/06/22])
Meadow pipit	Anthus pratensis																								1	5, 13, 23, 25, 27	Possible breeding
Mistle thrush	Turdus viscivorus																								1	24, 26	Possible breeding
Peregrine	Falco peregrinus	<b>√</b>			✓																				4	18	Confirmed breeding
Pied wagtail	Motacilla alba																								2	26	Possible breeding
Pheasant	Phasianus colchicus																								2	4, 15, 26	Possible breeding
Raven	Corvus corax																								2	24	Possible breeding
Red legged partridge	Alectoris rufa																								2	15, 17	Possible breeding
Redwing	Turdus iliacus	✓																							1	3	Non-breeding (registration of a wintering migrant recorded on 18/03/22)
Reed bunting	Emberiza schoeniclus			<b>√</b>																					4	7	Probable breeding
Red kite	Milvus milvus	$\checkmark$			<b>√</b>																				1	18	Possible breeding

Common name	Taxon name		S																									
		Schedule 1	SSSI/SPA species <sup>5</sup>	NERC S41	Annex 1	2	3	4	5 6	5 7	, 1	2	13	14	15	17	18	21	22	23	24	25	26	27	28	Peak count	Location(s) of peak count	Breeding Status
Robin	Erithacus rubecula																									2	2, 15, 23, 24, 25	Probable breeding
Rook	Corvus frugilegus																								П	55	17	Possible breeding
Skylark	Alauda arvensis			<b>√</b>																						14	25	Probable breeding
Song thrush	Turdus philomelos			<b>√</b>								Т														2	2	Probable breeding
Sparrowhawk	Accipiter nisus																				Γ					1	3, 5, 12, 14, 22, 23	Possible breeding
Starling	Sturnus vulgaris			<b>√</b>																						25	23	Possible breeding
Stock dove	Columba oenas							П																		10	7	Possible breeding
Swallow	Hirundo rustica																									3	2, 3	Possible breeding
Swift	Apus apus							П																		2	3, 5	Possible breeding
Treecreeper	Certhia familiaris																									1	24	Possible breeding
Whitethroat	Curruca communis																									2	23	Probable breeding
Woodcock	Scolopax rusticola																									1	5	Possible breeding
Woodpigeon	Columba palumbus																									152	5	Probable breeding
Wren	Troglodytes troglodytes																									3	2	Probable breeding
Yellowhammer	Emberiza citrinella			<b>√</b>																						3	26, 27	Probable breeding
Yellow wagtail	Motacilla flava			<b>√</b>																						2	3	Possible breeding

Table 6-3: Summary Results of all Ornithology Surveys Completed to Date, for Priority Species

Common Name	Taxon Name		species										
		Schedule 1	SSSI/SPA spe	NERC S41	Annex 1	Non- breeding Point Counts	Breeding Point Counts	Non- breeding FLL surveys	Breeding FLL surveys	Other surveys	Peak count	Location(s) of peak count	Comments/status
Avocet	Recurvirostra avosetta	<b>√</b>	✓		<b>√</b>			<b>√</b>	<b>√</b>	✓	8-10 breeding pairs		Breeds at two locations within the Survey Area
Bar-tailed godwit	Limosa lapponica		<b>√</b>		<b>√</b>			<b>√</b>			11	Rosper Road Pools	
Black-tailed godwit	Limosa limosa	✓	<b>√</b>	√				<b>√</b>	<b>√</b>	<b>√</b>	240	Rosper Road Pools	Also feeds on Killingholme Marshes north of Rosper Road Pools
Bullfinch	Pyrrhula pyrrhula			✓		<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	1	PC1, PC9, PC10	Woodland and hedgerows.
Common scoter	Melanitta nigra	✓	<b>√</b>	✓				<b>√</b>	<b>√</b>			Offshore	Recorded offshore at Theddlethorpe
Corn bunting	Emberiza calandra			<b>√</b>			<b>√</b>				1	PC14	
Curlew	Numenius arquata		✓	√				<b>√</b>	<b>√</b>		75	South West of Theddlethorpe Gas Terminal	Also present at Rosper Road Pools and feeds on Killingholme Marshes. Regularly feeds in small numbers in fields adjacent to Immingham Cemetary, adjacent to the Draft Order Limits.
Dunlin	Calidris alpina		<b>√</b>						<b>√</b>		1	Theddlethorpe Wader Mitigation Area	
Dunnock	Prunella modularis			✓		✓	✓	✓	✓		11	PC9	Widespread. Localised probable breeder.
Fieldfare	Turdus pilaris	✓				<b>√</b>		<b>√</b>			180	Between Manby and Theddlethorpe	Widespread feeding on farmland.
Golden plover	Pluvialis apricaria		√		<b>√</b>	√		<b>√</b>			700 flying	Theddlethorpe All Saints.	Widespread feeding on farmland wihtin the southern half of the survey area during winter, especially between Manby and Theddlethorpe All Saints. Occasional scattered singles and twos between

 $<sup>^{\</sup>rm 6}$  Qualifying or designated features of the Humber Estuary Ramsar, SPA or SSSI. November 2022

Common Name	Taxon Name	1	species <sup>6</sup>										
		Schedule '	SSSI/SPA species <sup>6</sup>	NERC S41	Annex 1	Non- breeding Point Counts	Breeding Point Counts	Non- breeding FLL surveys	Breeding FLL surveys	Other surveys	Peak count	Location(s) of peak count	Comments/status
													Stallingborough and Immingham.
Great black- backed gull	Larus marinus							<b>√</b>			1 flying	Two Mile Bank, between Manby and Theddlethorpe	
Green sandpiper	Tringa ochropus	√	✓					<b>√</b>			1	Near Causeway Bridge Farm, between Manby and Theddlethorpe	
Greenfinch	Chloris chloris					<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		4	PC6	Localised non-breeder and probable breeder, predominantly in the northern half of the survey area
Grey partridge	Perdix perdix			✓		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		10	PC6, PC8	Widespread non-breeder and localised probable breeder
Greenshank	Tringa nebularia	✓	✓					√			1 flying	Near Causeway Bridge Farm, between Manby and Theddlethorpe	
Herring gull	Larus argentatus			<b>√</b>		<b>√</b>	✓	<b>√</b>			15	PC12	Widespread non-breeder feeding on open farmland. Localised and infrequent inland during breeding season
Hen harrier	Circus cyaneus	✓	<b>√</b>	√	<b>√</b>			<b>√</b>	<b>√</b>		1	Theddlethorpe and Grimoldby	
Hobby	Buteo subbuteo	<b>√</b>								<b>√</b>	2 (minimum 1 breeding pair)		Hunting and breeding recorded
House sparrow	Passer domesticus			<b>√</b>		<b>√</b>	<b>√</b>	√	<b>√</b>		15	Between Manby and Theddlethorpe	Localised resident and probable breeder. Widespread
Kingfisher	Alcedo atthis	<b>√</b>			<b>√</b>				✓	<b>√</b>	2		Two watercourses within the survey area.
Lapwing	Vanellus vanellus		✓	√		✓	<b>√</b>	<b>√</b>	<b>√</b>		600	Theddlethorpe	Widespread non-breeding feeding flocks. Key locations are Rosper Road Pools, North Killingholme Marshes, farmland in the Manby -

Common Name	Taxon Name	Schedule 1	SSSI/SPA species <sup>6</sup>	NERC S41	Annex 1	Non- breeding Point	Breeding Point	Non- breeding FLL	Breeding FLL	Other	Peak		
		S	SS	Z	Ar	Counts	Counts	surveys	surveys	surveys	count	Location(s) of peak count	Comments/status  Theddlethorpe area areas. Occasional feeding and overflying winter flocks adjacent to the Draft Order Limits at Aylesby and Irby on Humber. Bred near Point Count 17 and probable breeding northern end of North Killingholme Marshes.
Linnet	Linaria cannabina			√		✓	✓	<b>√</b>	<b>√</b>		17	PC5	Widespread non-breeder feeding on farmland. Localised but widespread probable breeder
Little egret	Egretta garzetta				✓	<b>√</b>		<b>√</b>	<b>√</b>		4	Theddlethorpe Wader Mitigation Area	Localised non-breeder, present in small numbers
Little ringed plover	Charadius dubius	✓						✓		✓	Minimum 12 individuals, 3-4 breeding pairs	Two locations	Bred at one location within the survey area
Mallard	Anas platyrhynchos		<b>√</b>			<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		87	Rosper Road pools	Confirmed breeding and non- breeding/roosting
Marsh harrier	Circus aeruginosus	✓	<b>√</b>		<b>√</b>		<b>√</b>		<b>√</b>		1	PC17 & Killingholme Marshes grassland	Possible breeding in the wider area
Mistle thrush	Turdus viscivorus					<b>√</b>	<b>√</b>	<b>√</b>			1	PC17, PC24, PC26	Possible breeding. Widespread
Oystercatcher	Haematopus ostralegus		✓						<b>√</b>		6	Theddlethorpe Wader Mitigation Area	
Peregrine	Falco peregrinus	<b>✓</b>			<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>			4		Confirmed breeding. Present year-round.
Pintail	Anas acuta	<b>√</b>				✓		<b>√</b>			18	Rosper Road Pools	Non-breeding only
Pink-footed goose	Anser brachyrhynchus					<b>√</b>		<b>√</b>			2,100	Manby - Theddlethorpe	Rare on point counts. Occasional skeins over northern parts of survey area but no use of habitats here. Autumn/winter feeding in

Common Name	Taxon Name	Schedule 1	SSSI/SPA species <sup>6</sup>	NERC S41	Annex 1	Non- breeding Point Counts	Breeding Point Counts	Non- breeding FLL surveys	Breeding FLL surveys	Other surveys	Peak count	Location(s) of peak count	Comments/status
													large numbers on farmland between Manby and TGT in November 2021 - February 2022.
Pochard	Aythya ferina		<b>√</b>					✓			3	Rosper Road Pools	
Red kite	Milvus milvus	✓			✓		<b>√</b>				1		Recorded overflying. Possible breeding in the wider area.
Redshank	Tringa totanus		<b>√</b>					✓	✓		12	Theddlethorpe Wader Mitigation Area	
Redwing	Turdus iliacus	✓				<b>√</b>	<b>√</b>	<b>√</b>			16	PC8	Non-breeding. Widespread in small numbers as a wintering bird feeding on open farmland.
Reed bunting	Emberiza schoeniclus			<b>√</b>		✓	<b>√</b>	<b>√</b>	<b>√</b>		4	PC7	Probable breeding and wintering.
Ruff	Calidris pugnax	✓	<b>√</b>		✓				<b>√</b>	✓	4	Near Yarburgh and Theddlethorpe Wader Mitigation Area	Overflying during an autumn scoping visit
Shelduck	Tadorna tadorna		<b>√</b>					✓	✓		5	Rosper Road Pools	
Skylark	Alauda arvensis			<b>√</b>		<b>√</b>	<b>√</b>	✓	<b>√</b>		60	PC18	Widespread as a breeding and wintering farmland species
Snipe	Gallinago gallinago							<b>√</b>			4	Near Little London, West of Stallingborough	Localised feeding in fields.
Song thrush	Turdus philomelos			<b>√</b>		<b>√</b>	<b>√</b>	√	√		2	PC2	Non-breeding and probable breeding. Widespread in small numbers.
Starling	Sturnus vulgaris			<b>√</b>		✓	<b>√</b>	√	<b>√</b>		800	Between Manby and Theddlethorpe	Non-breeding and possible breeding. Widespread feeding on farmland in winter.
Swift	Apus apus						<b>√</b>				2	PC3, PC5	A possible breeder in the southern half of the survey area.

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Common Name	Taxon Name	Schedule 1	SSSI/SPA species <sup>6</sup>	NERC S41	Annex 1	Non- breeding Point Counts	Breeding Point Counts	Non- breeding FLL surveys	Breeding FLL surveys	Other surveys	Peak count	Location(s) of peak count	Comments/status
Teal	Anas crecca		✓			<b>√</b>		✓	<b>√</b>		130	Rosper Road Pools	Predominantly at Rosper Road Pools and the field between TGT and Theddlethorpe Dunes in winter.
Tree sparrow	Passer montanus			✓		✓		✓	<b>√</b>		23	PC4	A very localised breeding and non-breeding resident.
Unidentified grey goose						<b>√</b>					110	PC19	Two registrations of overflying winter skeins at PC19 and PC20. No other habitat use observed.
Wigeon	Anas penelope		✓					<b>√</b>	√		850	Theddlethorpe Wader Mitigation Area	Also present in modest numbers at Rosper Road Pools.
Woodcock	Scolopax rusticola						<b>√</b>				1	PC5	Possible breeding.
Yellowhammer	Emberiza citrinella			✓		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		7	PC5	Widespread in small numbers year-round. Probable breeding.
Yellow wagtail	Motacilla flava			<b>√</b>			<b>√</b>		√		2	PC3	Widespread in small numbers during breeding season only. Probable breeding

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