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Volume 3, Appendix 22.1: Ornithology Desk Study

Outer Dowsing Offshore Wind Environmental Statement

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Basis of Report

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Acronyms and Terminology

Acronyms

| AL | Amber Listed Species | | |
|-------|---|--|--|
| BAP | Biodiversity Action Plan | | |
| BOCC | Birds of Conservation Concern | | |
| вто | British Trust for Ornithology | | |
| CBC | Common Bird Census | | |
| DCO | Development Consent Order | | |
| ECC | Export Cable Corridor | | |
| EIA | Environmental Impact Assessment | | |
| ES | Environmental Statement | | |
| GB | Great Britain | | |
| GLNP | Greater Lincolnshire Nature Partnership | | |
| IRZ | Impact Risk Zone | | |
| LCC | Lincolnshire County Council | | |
| LERC | Local Ecological Record Centre | | |
| LNR | Local Nature Reserve | | |
| LWS | Local Wildlife Site | | |
| LWT | Lincolnshire Wildlife Trust | | |
| MAGIC | Multi-agency Geographic Information Centre | | |
| NERC | Natural Environment and Rural Communities | | |
| NNR | National Nature Reserve | | |
| NSIP | Nationally Significant Infrastructure Project | | |
| ODOW | Outer Dowsing Offshore Wind | | |
| OnSS | Onshore Substation | | |
| PEIR | Preliminary Environmental Information Report | | |
| RL | Red Listed Species | | |
| RSPB | Royal Society for the Protection of Birds | | |
| SAC | Special Areas of Conservation | | |
| SLR | SLR Consulting Limited | | |
| SNCI | Site of Nature Conservation Interest | | |
| SPA | Special Protection Area | | |
| SSSI | Sites of Special Scientific Interest | | |
| WeBS | Wetland Bird Survey | | |
| WCPL | Wildlife Conservation Projects Limited | | |
| Zol | Zone of Influence | | |
| L | <u> </u> | | |



Terminology

| 400kV cables | High-voltage cables linking the OnSS to the NGSS. | | |
|--|--|--|--|
| 400kV cable corridor | The 400kV cable corridor is the area within which the 400kV cables connecting the onshore substation to the NGSS will be situated. | | |
| Baseline | The status of the environment at the time of assessment without the development in place. | | |
| Connection Area | An indicative search area for the NGSS. | | |
| Development Consent Order | An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP). | | |
| Environmental Impact Assessment (EIA) | A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an Environmental Statement (ES). | | |
| Environmental Statement (ES) | The suite of documents that detail the processes and results of the EIA. | | |
| Export Cables | High voltage cables which transmit power from the Offshore Substations (OSS) to the Onshore Substation (OnSS) via an Offshore Reactive Compensation Platform (ORCP) if required, which may include one or more auxiliary cables (normally fibre optic cables). | | |
| Impact | An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial. | | |
| Intertidal | The area between Mean High Water Springs (MHWS) and Mean Low Wat Springs (MLWS) | | |
| Landfall | The location at the land-sea interface where the offshore export cables an fibre optic cables will come ashore. | | |
| National Grid Onshore Substation (NGSS) | The National Grid substation and associated enabling works to be developed by the National Grid Electricity Transmission (NGET) into which the Project's 400kV Cables would connect. | | |
| Onshore Export Cable Corridor (ECC) | The Onshore Export Cable Corridor (Onshore ECC) is the area within which, the export cables running from the landfall to the onshore substation will be situated. | | |
| Onshore Infrastructure | The combined name for all onshore infrastructure associated with the Project from landfall to grid connection. | | |
| Onshore substation (OnSS) | The Project's onshore HVAC substation, containing electrical equipment, control buildings, lightning protection masts, communications masts, access, fencing and other associated equipment, structures or buildings; to enable connection to the National Grid | | |
| Outer Dowsing Offshore Wind (ODOW) | The Project. | | |
| Order Limits | The area subject to the application for development consent, the limits shown on the works plans within which the Project may be carried out. | | |
| Preliminary Environmental Information Report (PEIR) | The PEIR was written in the style of a draft Environmental Statement (ES) and provided information to support and inform the statutory consultation process during the pre-application phase. | | |



| The Project | Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure. |
|-------------|--|
| Receptor | A distinct part of the environment on which effects could occur and can be the subject of specific assessments. Examples of receptors include species (or groups) of animals or plants, people (often categorised further such as 'residential' or those using areas for amenity or recreation), watercourses etc. |
| Study Area | Area(s) within which environmental impact may occur – to be defined on a receptor-by-receptor basis by the relevant technical specialist. |



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22.0 Ornithology Desk Study

22.1 Introduction

- Outer Dowsing Offshore Wind (ODOW) is a Nationally Significant Infrastructure Project (NSIP). An Environmental Impact Assessment (EIA) has been undertaken, the findings of which are presented within an Environmental Statement (ES), which accompanies the Development Consent Order (DCO) application under the Planning Act, 2008.
- SLR Consulting was commissioned by GoBe Consultants Ltd, whom has been instructed by GT R4 Limited (trading as Outer Dowsing Offshore Wind), to undertake a suite of ornithological surveys of those relevant parts of the Project site that may be affected by the onshore aspects of the Project (see Volume 1, Chapter 22: Onshore Ornithology (document reference 6.1.22).
- 3. This report presents the scope and results of the onshore ornithological desk study undertaken to inform the EIA and supports Volume 1, Chapter 22: Onshore Ornithology (document reference 6.1.22).

22.2 The Project

- 4. The Project will include both offshore and onshore infrastructure including an offshore generating station (windfarm) located approximately 54km from the Lincolnshire coastline, export cables to landfall, onshore cables, an onshore substation, connection to the electricity transmission network, and ancillary and associated development (see Volume 1, Chapter 3: Project Description 6.1.3 (document reference 6.1.3) for full details).
- 5. The ES references the Project's 'Order Limits' which comprises the extent of the land for which the DCO application has been made. Onshore it reflects the landfall, the Onshore Export Cable Corridor (a typically80m wide corridor around a centre line totalling approximately 70km in length) the Onshore substation (OnSS), a 400kV cable corridor connecting the OnSS to the Connection Area (an indicative search zone for the National Grid substation (NGSS) into which the project will ultimately connect.
- 6. Due to the linear footprint of the Project, the Survey Area for some receptors is relatively large-scale, therefore, to assist with the interpretation and explanation of associated data, the Order Limits have been split into segments. The extent of these segments has



been aligned with key geographical features such as roads or rivers which cross the Order Limits.

- 7. The segments for the Order Limits are:
 - ECC 1: Landfall to A52 Hogsthorpe
 - ECC 2: A52 Hogsthorpe to Marsh Lane
 - ECC 3: Marsh Lane to A158 Skegness Road
 - ECC 4: A158 Skegness Road to Low Road
 - ECC 5: Low Road to Steeping River
 - ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
 - ECC 7: Fodder Dike Bank/Fen Bank to Broadgate
 - ECC 8: Broadgate to Ings Drove
 - ECC 9: Ings Drove to Church End Lane
 - ECC 10: Church End Lane to The Haven
 - ECC 11: The Haven to Marsh Road
 - ECC 12: Marsh Road to Fosdyke Bridge
 - ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove
 - ECC 14: Surfleet Marsh OnSS/Marsh Drove to the Connection Area

22.3 Purpose of this Report

- 8. This report presents the scope and results of the onshore ornithological desk study undertaken to inform the EIA. The report is an updated version of the ornithology desk study report¹ presented in the Project's Preliminary Environmental Information Report (PEIR).
- 9. The aim of the desk study was to identify important ornithological features such as designated sites and species populations within the Zone of Influence (ZoI) of the Project, and to gather information on such features, contributing to an understanding of the ornithological baseline.

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¹ Outer Dowsing Offshore Wind. Preliminary Environmental Information Report. Volume 2, Appendix 22.1: Ornithology Desk Study. Report by SLR.

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22.4 Methodology

22.4.1 Study Area

10. The Study Area selected for each ornithological feature is listed below:

- Internationally designated ornithological sites (Special Protection Areas (SPA) and Ramsar Sites), Sites of Special Scientific Interest (SSSI) with notified ornithological features and National Nature Reserves (NNR) within 15km of the Order Limits. The Study Area has been extended where there is evidence of connectivity, for example to include the North Norfolk SPA in relation to non-breeding pink-footed goose. Designated ecological sites (such as Special Areas of Conservation) have been considered within the Volume 1, Chapter 21: Onshore Ecology (document reference 6.1.21).
- Onshore elements of RSPB Reserves, Local Nature Reserves (LNR), Local Wildlife Sites (LWS) and Lincolnshire Wildlife Trust (LWT) Reserves within 2km from the Order Limits; and
- Annex I, Schedule 1, Section 41 Priority Species of the Natural Environment and Rural Communities (NERC) Act and other protected or notable bird species within 2km from the Order Limits.

22.4.2 Data Sources

11. The ornithological data to inform this desk study originated from various sources (Table 22.1), including but not limited to the Greater Lincolnshire Nature Partnership (GLNP), the Royal Society for the Protection of Birds (RSPB) and British Trust for Ornithology (BTO). The data provided by the RSPB contained some duplicate records to those previously provided by GLNP, and where that was the case, they have been presented within the GLNP data only.

22.4.3 Limitations

12. A very large dataset was obtained from the GLNP. Due to the low resolution of many of the records, for example those that were provided for 1km² blocks, where such records overlapped the Study Area it was not possible to determine if they originated from within or outside of the Study Area. In such instances, the record has been used to provide context only. For example, there is a record of kingfisher from a grid square which partially overlaps with the Order Limits (fields only). However, the grid reference given only has a 1km² accuracy which includes the River Steeping and so the record more likely originated from the river and therefore outside of the Order Limits. Where this was the case, records that overlapped the Order Limits have been included in the data presented below.



- 13. The BTO have advised that WeBS counts in 2020 and 2021 were significantly impacted by the Covid 19 pandemic and that counts from this period, particularly winter counts, may under-represent species abundance.
- 14. Desk study data are unlikely to be exhaustive, especially in respect of species, and are intended partly to set a context for, as well as to supplement, the field surveys. It is therefore possible that protected and priority species not identified during the data search do in fact occur within the Study Area.



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Table 22.1: Summary of data sources relating to ornithology

| Source | Summary | Spatial coverage of Study Area |
|--|--|-----------------------------------|
| Multi-agency Geographic | SPAs and potential SPAs, spatial extent and citation. | Order Limits plus 15km buffer. |
| Information Centre (MAGIC) website and | Ramsar Sites and proposed Ramsar Sites, spatial extent and citation. | _ |
| Natural England's | SSSIs and NNR and Impact Risk Zones (IRZs), spatial extent, and citation. | |
| datasets at data.gov.uk | LNR and spatial extent. | Order Limits plus 2km buffer. |
| Gov.uk: Natural England | Designated site and LNR details, including qualifying interest features. | Order Limits plus 15km buffer. |
| Greater Lincolnshire Nature Partnership (GLNP) | Protected and notable species records location and date, and locally designated sites, location and citation. | Order Limits plus 2km buffer. |
| Lincolnshire Wildlife Trust (LWT) | LWT reserve details, including protected and notable species records. | Order Limits plus 15km buffer. |
| The Royal Society for the Protection of Birds (RSPB) | RSPB reserve details and protected or notable species records. | Order Limits plus 2km buffer. |
| Wetland Bird Survey (WeBS) data held by the British Trust for Ornithology (BTO) | data held by the ust for | |
| Lindsey Marsh Internal Drainage Board | Local BAP ornithological strategies/conservation efforts within drainage board catchment areas. | |
| Witham Fourth District Internal Drainage Board | | |
| Black Sluice Internal Drainage Board | Local BAP habitats and species ornithological strategies/conservation efforts within drainage board catchment areas. | |



| Source | Summary | Spatial coverage of Study Area |
|---|---|-----------------------------------|
| Welland & Deepings Internal Drainage Board | Local BAP habitats and species ornithological strategies/conservation efforts within drainage board catchment areas. | |
| South Holland Internal Drainage Board | Local BAP habitats and species ornithological strategies/conservation efforts within drainage board catchment areas. Data not received. | |
| Wildlife Conservation Project Limited (WCPL) | Barn owl breeding and roosting site records. Data not yet available. | |



22.5 Results

22.5.1 Designated Sites

22.5.1.1 Statutory Designations

15. There are four SPAs (three onshore, one offshore), three Ramsar sites, four SSSIs and three NNRs within the Study Area. Table 22.2 provides an overview of both the international and national designations within the Study Area. Figure 22.1.1 illustrates the locations of the statutory designations.



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Table 22.2: Details of statutory designations with ornithological features within the Study Area

| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation |
|--|---|---|--------------------------------|--|
| The Wash, SPA, Ramsar, SSSI and NNR | 0.18 | SE | 62,044 | SPA: The area of the SPA includes a range of marine habitats, including intertidal mudflats and sandflats, subtidal sandbanks and biogenic reef, including Sabellaria reefs and mussel beds. Much of the area is less than 30m water depth, with a deep channel of 90m depth at the Wash approaches and covers an area of <i>c</i> . 3,536 km² and supports important populations of Annex I species. Assemblages of 214,000 waterfowl in winter including the following species during non-breeding season: Bewick's swan – 3% of GB population Pink-footed goose – 10.7% of GB population Dark-bellied brent goose – 10.4% of GB population Shelduck – 3.2% of GB population Wigeon – 2% of GB population Gadwall – 3% of GB population Pintail – no population estimate available Goldeneye – 1% of GB population Oystercatcher – 1.1% of GB population Grey plover – 5.2% of GB population Knot – 15.3% of GB population Sanderling – 3% of GB population Black-tailed godwit – 6% of GB population Black-tailed godwit – 6% of GB population Curlew (<i>Numenius arquata arquata Europe</i>) – 2.5% of GB population Redshank – 5% of GB population |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation |
|---------------------------------|---|------------------------------------|--------------------------------|--|
| | | | | Turnstone – 2% of GB population Red-throated diver – 8.3% of GB population Little gull – no population estimate available Common scoter – 0.6% of GB population Breeding populations of: Sandwich tern – 35% of GB population Little tern – 42% of GB population Common tern – 5.1% of GB population |
| | 0.18 | SE | 62,044 | Ramsar site: Covers the same area and footprint as the SPA. Qualifying features are the extensive saltmarshes, intertidal banks of sand and mud, shallow water, and deep channels. The interrelationship between these components provides a primary source of organic material and other organic matter, which together forms the basis for the high productivity of the estuary. Assemblages of 292,541 waterfowl in winter including the following species with peak counts: Black-headed gull – 1.57% of GB population Eider – 1.5% of GB population Bar-tailed godwit – 13.7% of GB population Shelduck – 3.2% of GB population Dark-bellied brent goose – 10.4% of GB population Pink-footed goose – 10.7% of GB population Species with peak counts in spring/ autumn: Curlew – 2.5% of GB population Oystercatcher – 1.1% of population |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation |
|---------------------------------|---|------------------------------------|--------------------------------|---|
| | | | | Grey plover – 5.2% of GB population Knot – 15.3% of GB population Sanderling – 2.9% of GB population Additional species that are not currently a qualifying feature but are to be considered in the future include: Black-tailed godwit – 2.3% of GB population Ringed plover – 2% of GB population Golden plover – 2.3% of GB population Lapwing – 2.3% of GB population |
| | 0.18 | SE | 62,044 | SSSI: The SSSI covers the same area and footprint as the SPA and Ramsar. The intertidal mudflats and saltmarshes represent one of Britain's most important winterfeeding areas for waders and wildfowl outside of the breeding season. The site is designated for assemblages of >20,000 waterfowl (non-breeding) and wintering bird species, including aggregations of avocet, bar-tailed godwit, Bewick's swan, blacktailed godwit, Brent goose, common scoter, curlew, dunlin, gadwall, golden plover, goldeneye, grey plover, knot, oystercatcher, pink-footed goose, pintail, redshank, ringed plover, sanderling, shelduck, turnstone, whooper swan and wigeon. Additional qualifying features are breeding populations of common tern, little tern and redshank. |
| | 0.18 | SE | 8780 | NNR: This site forms part of The Wash SPA, Ramsar Site and SSSI and is managed by Natural England. The reserve is designated for its extensive coastal saltmarsh and intertidal mudflats which support large numbers of winter migrants such as pink-footed geese, brent geese and shelduck. In summer, the site also provides valuable habitat for breeding waders and seabirds (see above). |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation |
|---------------------------------|---|------------------------------------|--------------------------------|---|
| Greater Wash SPA | 0 | E | 353,578 | SPA: Intertidal habitats include mudflats and sandflats. The marine geology includes a mix of coarse sediments, sand, mud, muddy sand and mixed sediment. |
| | | | | Qualifies under Article 4.1 of the Directive 2009/147/EC for the supporting the following Annex I species: |
| | | | | Non-breeding wintering species: Red-throated diver – 8.3% of GB population Common scoter – 0.6% of GB population Little gull – no current GB population estimate available |
| | | | | Breeding species: ■ Sandwich tern – 35% of GB population ■ Common tern – 5.1% of GB population ■ Little tern – 42% of GB population |
| | | | | Qualifies under Article 4.2 by regularly supporting migrating common scoter – (0.6% of GB population). |
| Gibraltar Point SPA, Ramsar, | 4.15 | SE | 422 | <u>SPA:</u> The site consists of a sand dunes system, freshwater and saltmarsh, extensive intertidal flats, and open water. |
| SSSI and NNR | | | | Qualifies under Article 4.1 of the Directive 2009/147/EC for the supporting the following breeding Annex I species: |
| | | | | ■ Little tern – 1.7% of GB population |
| | | | | Qualifies under Article 4.2 for the following wintering populations: |
| | | | | Bar-tailed godwit – 14% of GB population Sanderling – 8% of GB population |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation |
|---------------------------------|---|---|--------------------------------|--|
| | | | | ■ Grey plover – 10% of GB population |
| | 4.15 | SE | 414 | Ramsar site: The site regularly supports over 20,000 waterfowl including 10,000 bar tailed godwit and 3,000 grey plover. |
| | | | | Furthermore, the site regularly supports: ■ Sanderling – 8.2% of the Western European population ■ Bar-tailed godwit – 8.1% of the total for the Atlantic coast of Europe ■ Brent goose (<i>Branta bernicla</i>) – 1.7% of the Western European population The site also supports 40 breeding pairs (1991 figures) of little tern. |
| | 4.15 | SE | 414 | SSSI: Designated for its actively accreting sand-dune system, saltmarsh and extensive intertidal flats as well as small areas of freshwater marsh and open water, which support at least 20,000 waterfowl. Qualifying populations of European importance include breeding little tern, overwintering bar-tailed godwit, and oystercatcher. The site also supports populations of overwintering migratory species: grey plover and knot, in addition to non-breeding populations of Brent goose, dunlin, ringed plover, sanderling and wigeon. The SSSI is managed by the Lincolnshire and South Humberside Trust for Nature Conservation. The site is also designated as Gibraltar Point NNR. |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation | |
|----------------------------------|---|---|--------------------------------|--|--|
| | 4.15 | SE | 429 | NNR: This site forms a small part of Saltfleetby-Theddlethorpe Dunes and Gibraltar Point Special Area of Conservation (SAC) and SSSI. The majority of the NNR is also included within the Gibraltar Point Ramsar and SPA. Habitats include sand dunes, saltmarsh, marshes and meadows. It is an important site for birds (as above). | |
| Humber Estuary SPA, Ramsar | 12.5 | N | 37,630 | SPA: Qualifies under Article 4.1 of the Directive 2009/147/EC for the supporting the following wintering Annex I species: Avocet – 1.7% of GB population Bittern – 4.0% of GB population Hen harrier – 1.1% of GB population Golden plover – 12.3% of GB population Bar-tailed godwit – 4.4% of GB population Passage: Ruff – 1.4% of GB population Breeding Bittern – 10.5% of GB population Marsh harrier – 6.3% of GB population Avocet – 8.6% of GB population Little tern – 2.1% of GB population Qualifies under Article 4.2 for wintering: Shelduck – 1.5% of NW Europe population (breeding) Knot – 6.3% of islandica race Dunlin – 1.7%, Western Europe population (non-breeding) | |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation |
|---------------------------------|---|---|--------------------------------|---|
| | | | | Black-tailed godwit – 3.2% of Iceland population Redshank – 3.6% of Eastern Atlantic population Qualifies under Article 4.2 for passage: |
| | | | | Knot – 4.1% of North-eastern Canada/Greenland/Iceland/North-western Europe population Dunlin – 1.5% of Western Europe population Black-tailed godwit – 2.6% of Iceland population Redshank – 5.7% of Eastern Atlantic population |
| | | | | It also qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season. In the non-breeding season, the area regularly supports 153,934 individual waterbirds, including dark-bellied brent goose, shelduck, wigeon, teal, mallard, pochard (<i>Aythya farina</i>), scaup, goldeneye, bittern, oystercatcher, avocet, ringed plover, golden plover, grey plover, lapwing, knot, sanderling, dunlin, ruff, black-tailed godwit, bar-tailed godwit, whimbrel, curlew, redshank, greenshank and turnstone. |
| | 12.5 | N | 37,630 | Ramsar site: The designation is a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes and coastal brackish/ saline lagoons. It supports a breeding colony of grey seal and natterjack toad (<i>Epidalea calamita</i>) and an assemblage of non-breeding waterfowl (153,934) of international importance. The following species also occur at levels of international importance: shelduck, golden plover, knot, dunlin, blacktailed godwit, bar-tailed godwit, redshank (% populations provided in SPA designation above). Finally, it acts as an important migration route for river lamprey (<i>Lampetra fluviatilis</i>) and sea lamprey (<i>Petromyzon marinus</i>). |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation | |
|---|---|------------------------------------|--------------------------------|--|--|
| Saltfleetby- Theddlethorp e Dunes SSSI and NNR | 12.5 | N | 951 | SSSI: This nationally important site includes mudflats, dunes, salt and freshwater marsh which together support over 20,000 waterfowl (non-breeding). Qualifying features include aggregations of wildfowl and waders, such as: Brent goose, dunlin, knot, redshank, sanderling and wigeon. The site is also designated for its breeding little tern colony. | |
| | 12.7 | N | 618.93 | NNR: This site is an 8km stretch of coastline covering 618.93ha. This NNR forms part of the Saltfleetby-Theddlethorpe Dunes SSSI, as well as part of the Humber Estuary SPA, SAC and Ramsar. It is an important reserve containing tidal sand and mudflats, salt and freshwater marshes and sand dunes. On the foreshore, accreting mud and silt flats and saltmarsh in the north give way to a narrower sandy beach at the southern end. | |
| Surfleet Lows SSSI | 3.1 | SW | 0.52 | SSSI: A wet alluvial meadow, one of the few remaining in Lincolnshire which has not undergone agricultural modification. The site supports breeding reed warblers and attracts various waterfowl and waders throughout winter, including snipe, wigeon, teal and mallard. | |
| North Norfolk Coast SPA | 23.9 | E | 7887.79 | SPA: Qualifies under Article 4.1 of the Directive 2009/147/EC for the following breeding species: ■ Bittern – 5% of the GB breeding population ■ Marsh harrier – 6.4% of the GB breeding population ■ Avocet – 30% of the GB breeding population ■ Little tern – 13.8% of the GB breeding population ■ Common tern – 3.7% of the GB breeding population ■ Sandwich tern – 26.4% of the GB breeding population Qualified under Article 4.2 of the Directive 2009/147/EC for the following wintering species: | |



| Site Name and Designation | Distance from ECC segment (km) | Compass Direction from ECC segment | Area of Designation (ha) | Reason for Notification/Designation |
|---------------------------------|---|------------------------------------|--------------------------------|---|
| | | | | Wigeon – 1.1% of Western Siberia/North-western/North-eastern Europe population Pink-footed goose – 10.6% of the Eastern Greenland/Iceland/UK population Brent goose (dark-bellied) – 3.8% of the Western Siberia/Western Europe population Knot – 3.1% of the North-eastern Canada/Greenland/Iceland/North-western Europe population |
| | | | | It also qualifies under Article 4.2 of the Directive (79/409/EEC) for its Internationally Important Assemblage of Birds as in winter it is regularly used by over 91,536 waterfowl including pink-footed geese, Brent geese (dark-bellied), wigeon, avocet and knot. |



22.5.1.2 Non-statutory Designations

- 16. There are two RSPB reserves, twenty-three LWS and seven LWT reserves within the Study Area. Some sites are designated as both a LWS and a LWT reserve, for example Chapel Six Marshes, although it should be noted that the surface area of each site does vary slightly between the two types of designation.
- 17. Table 22.3 provides an overview of non-statutory designations in the Study Area, along with their distance from the nearest segment of the Order Limits. Figure 22.1.2 illustrates the locations of the non-statutory designations.



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Table 22.3: Overview of non-statutory designations within the Study Area

| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|---|---|---|----------------------------|--|
| Local Wildlife Sites (with some reference | to bird specie | | 1 | |
| Middlemarsh Farm | 0.44 | E | 73.5ha | Main habitat comprises of grazing marsh and standing water. |
| | | | | Around seven fields surrounded by ditches and some hedges. In the mid-2000s, the area was transformed from arable land into a wetland which now supports breeding, passage and wintering birds. |
| | | | | The list of breeding birds since 2008 includes lapwing, redshank, snipe, avocet, yellow wagtail, reed and sedge warbler, reed bunting, skylark, shoveler, mallard and mute swan. Wigeon, lapwing, curlew and other birds use the area in winter. |
| Anderby Creek Sand Dunes | 0 | N/A | 11.9ha | Main habitat comprises of coarse_or rank grassland, sand dune, scrub and ditch. |
| | | | | A 1.1km long stretch of coast on the seaward side of Anderby Marsh and Wolla Bank Reedbed nature reserves. Due to lack of management, most places support coarse and weedy vegetation, with substantial cover of scrub and trees. Good, open dune is very limited in extent. |
| | | | | Birds: Reed bunting, reed warbler and migrating swallow. |
| Anderby Gravity Outfall | 0.2 | NNE | 0.6ha | Main habitat comprises of drain, semi-improved neutral and coarse grassland. |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|---------------------------|---|---|----------------------------|--|
| | | | | The canalised downstream end of Main Drain and its steep banks on the southern edge of Anderby Creek. Adjacent to both Anderby Creek Sand Dunes and Anderby Marsh LWT nature reserve. The drain is maintained, limiting the brackish floral community present. Birds: Reed warbler, sedge warbler, whitethroat, wren, swallow, swift, and house martin. |
| Chapel Pit Nature Reserve | 0.5 | NNE | 0.3ha | Main habitat comprised of scrub, rough grassland, ditch and hedgerow. This site comprises two small unmanaged parts of Chapel Pit nature reserve, all the rest of which is part of Sea Bank Clay Pits Site of Special Scientific Interest. This LWS includes two small areas of the larger Chapel Pit LWT Reserve designation. The smaller element is a very small spur of land in the south-eastern corner of the reserve, supporting much scrub and a little remnant grassland. The remainder of the site lies on the northern edge of the reserve, immediately adjacent to an east-west orientated track within the SSSI. In the west there is a triangular area of rough grassland and scrub. East of this is a ditch and overgrown hedgerow. |
| | | | | Birds: 15 species of duck have been recorded at the site, mainly winter visitors. Bittern and bearded tit are recorded occasionally on the site. Breeding species have included reed warbler, sedge warbler, lesser whitethroat and little grebe. |



| Site Name | Distance from ECC segment (km) to site | _ | Area/ Length of Site | Description |
|---------------------------|---|-----|----------------------------|---|
| Chapel Point Dunes, South | 1.6 | NNE | 7.7ha | Main habitat comprises of sand dunes. |
| | | | | A north-south aligned strip of coastal land, 1.6km long and varying in width between 25m and 75m. The site comprises developing low sand dunes on the upper beach, between unvegetated sand to the east and the concrete promenade in the west. The generally sparse sward includes a diverse sand dune flora. |
| | | | | Birds: Swallow, house martin, dunnock and goldfinch. |
| Chapel Six Marshes | 0.01 | NNE | 12.9ha | Designated as both a LWS and LWT. Main habitat comprises of coarse or rank grassland, lake, reedbed, scrub - scattered/dense (also ditch, marsh/ fen, non-native plantation - on ancient/new habitat, pond). A 750m stretch of coast, with 2.2ha area managed as Chapel Six Marshes LWT Reserve. Wetland plants typical of brackish water. |
| | | | | The remainder of the site is managed by Lincolnshire County Council (LCC) and is publicly accessible. Major works have been carried out in 2014/ 2015 to enhance the value of the site for wetland flora and fauna, involving creation of winding water channels on land to north and south of the entrance road. Habitats present over the site as a whole are bare sand and short vegetation in car parking areas, coarse grassland, a little open water, much reedbed, and varying cover of trees and scrub. |
| | | | | Birds: Moorhen, migrating whimbrel and woodpigeon. |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|----------------|---|---|----------------------------|---|
| Frampton Hall | 0 | N/A | 21.3ha | Main habitat comprises of parkland (including a mosaic of semi-natural woodland, scrub, semi-improved neutral grassland, semi-improved calcareous grassland, improved grassland, coarse or rank grassland, ditch, pond) veteran trees are abundant. The site also has significant nature conservation value for local bird populations. |
| Havenside | 0 | N/A | 18.9ha | Designated as both a LWS and LNR. Main habitat comprises of coarse or rank grassland (also new-native plantation, scrub, semi-improved neutral grassland, improved grassland, ditch, pond, coastal grazing marsh, marsh, reedbed). |
| | | | | The mosaic of woodland, grassland and wetland is very valuable in the local context and of significant value to local bird, mammal and invertebrate populations. The linear nature of the site provides a good wildlife corridor through Boston. |
| Hobhole Bank | 0 | N/A | 3.7ha | Main habitat comprises of scrub, semi-improved neutral grassland, semi-improved calcareous grassland (also coarse or rank grassland). The site is no longer a LWT Reserve and is instead managed by the Internal Drainage Board. Scrub invasion from the bank slopes is a threat to the floristic diversity of this site. |
| | | | | It supports a good bird assemblage and is known locally for the long-eared owls which over winter on site. |
| Hogsthorpe Pit | 0 | N/A | 1.4ha | Main habitat comprises of standing water, willow carr, grassland. |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|--|---|---|----------------------------|--|
| | | | | Around the pond is diverse wetland vegetation and some drier grassland and scrub. Lesser bulrush (<i>Typha angustifolia</i>) and common reed are abundant at the water's edge. Botanically rich grassland is restricted to small areas of dry bank on the southern and northern margins of the pond. |
| | | | | Birds: Coot and moorhen. |
| Huttoft Carr Terrace to Marsh Yard Dunes | 1.9 | NNE | 10.4ha | Main habitat comprises of coarse or rank grassland, sand dune, scrub – scattered/dense (also native plantation). A 1.2km stretch of coast comprising bare sand on the upper beach with some botanically-poor foredunes; a concrete pathway and linear car parking area at the top of the beach; a line of low, fixed dunes and flatter ground inland, supporting much unmanaged vegetation, dominated by dense scrub and trees in central and northern parts, with larger amounts of grassland further south; and a gravel car parking area inland of the dunes at the southern end of the site, characterised by a short, open sward. |
| | | | | The most interesting flora is typical of neutral soils. It is largely restricted to the vicinity of the southern car park and along a track that extends northwards. |
| | | | | Birds: Whitethroat, reed bunting, swallow and Sandwich tern. |
| Marsh Yard to Anderby Creek Dunes | 0.2 | NNE | 16.8ha | Main habitat comprises of coarse or rank grassland, scrub – scattered/ dense (also semi-improved, neutral grassland, non-native plantation, reedbed). |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|---------------------|---|---|----------------------------|--|
| | | | | A 1.75km stretch of coast comprising bare sand on the upper beach with some young dunes; a line of low, fixed dunes supporting much coarse grassland, which widens in the south and supports plentiful woody vegetation, including garden escapes; and a range of habitats inland of the dunes, particularly planted and naturally occurring trees and scrub on both dry and damp land, grassland, sparsely vegetated car parking areas, a track and a little bare sand. |
| | | | | To the north is a huge population of scarce strawberry clover (<i>Trifolium fragiferum</i>) along the car park and species rich neutral grassland. Many parts of the dune ridge are dominated by coarse vegetation. |
| | | | | Birds: Whimbrel, reed bunting and house martin. |
| Middlemarsh Meadows | 0.44 | E | 4.7ha | Main habitat comprises of unimproved neutral grassland, coarse grassland (also semi-improved neutral grassland, hedgerows, drain). |
| | | | | Four contiguous hay meadows, each one adjacent to the north-eastern edge of Middlemarsh Farm LWS. The two eastern fields are very rich in plants typical of high-quality neutral grassland, whereas the sward in the two western fields is less rich. |
| | | | | Birds: Sedge warbler and reed warbler, chaffinch, wren, blue tit, starling and woodpigeon. |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|--------------------------|---|---|----------------------------|--|
| Pinchbeck Marsh | 1.5 | SSW | 2.3km | Main habitat comprises of calcareous grassland (also river, reedbed). |
| | | | | The original Site of Nature Conservation Interest (SNCI) here is now a large area of arable land between the Vernatt's Drain and the River Welland. Two crops were being grown there at the time of survey, wheat and potatoes. The potato crop had recently been sprayed with acid. |
| | | | | The southern end of this site is formed by the bank of the A16 Spalding Bypass and was also once the bank on the old Spalding to Boston Railway. When the road was completed in the early 1990s the verge was landscaped, and some planting took place on this bank. |
| | | | | The Welland bank is more open and true grassland. On the river side of the bank there are patches of rank vegetation, but most is grassland, cut once a year by the Environment Agency. Some areas on the field side have been closed off and used to graze cattle. |
| | | | | This stretch of the Welland is tidal. Incidental bird sightings included 35 mallards, a grey heron and a shag on or by the water. |
| Moggs Eye Sea Bank Ponds | 1.5 | NNE | 2.9ha | Main habitat comprises of standing water, reedbed. |
| | | | | A long, thin area of standing water, possibly formed by excavation of the earth sea wall. To the north, the site is almost 100% common reed with the road embankment |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|--------------------|---|---|----------------------------|--|
| | | | | supporting wooded patches of crack willow, alder and sycamore. |
| | | | | Birds: Bittern and garganey have been recorded on site. |
| Moulton River | 1.0 | S | 5.4km | Main habitat comprises of coarse or rank grassland, drain, reedbed. |
| | | | | A 0.5m to 3m wide stretch of canalised drain with very little flow of water. Although there is plentiful algal growth in places, water quality appears to be good and supports an interesting wetland flora. |
| | | | | Birds: Mallard, reed bunting, sedge warbler, snipe, little egret, swallow, skylark, linnet and the declining corn bunting. |
| Risegate Eau | 0 | N/A | 9km | Main habitat comprises of coarse or rank grassland, drain, linear reedbed, scrub. |
| | | | | A central 9km of a 15km long watercourse extending from South Forty Foot Drain in the west to River Welland in the east. Channel size varies from one to about six metres wide. |
| | | | | Birds: Reed warbler, kingfisher, snipe, grey heron, moorhen and green sandpiper. |
| Sloothyby Low Lane | 0.8 | NNE | 4.6km | Main habitat comprises of neutral grassland (also damp grassland, standing water, seasonally wet areas, undulating ground, deep ditches, species-poor hedgerows). |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|-----------------------------|---|---|----------------------------|--|
| | | | | This wide green lane is an area of neutral grassland occasionally grazed by cattle. Good flora occurs in small patches, particularly at the edges of the site. |
| | | | | Birds: Redwing, moorhen, mute swan, woodpigeon, grey heron, magpie, pheasant, long-tailed tit, blackbird, skylark, carrion crow and linnet. |
| Surfleet Seas End Saltmarsh | 0.7 | SSW | 1.7km | Main habitat comprises of river, marsh, calcareous grassland (also saltmarsh, mudflat, anthills, steep slopes, seasonally wet/ damp areas). |
| | | | | This site is adjacent to the tidal River Welland and forms the part of the flood plain for this river. Some of the flat is inundated daily but most is only flooded at spring tide. There are three main habitats: patches of tidal mud flat, tidal salt marsh and calcareous grassland higher up the bank and on the bank top. The Vernatt's Drain runs the length of the site on the other side of the bank. |
| | | | | It is one of very few accessible salt marshes in this area with a public footpath through part of the site and the entire length on the adjacent bank. This stretch of river is known to be attractive to waders, birds of prey, sand martins and many others. |
| Wolla Bank South | 0 | N/A | 5ha | Main habitat comprises of coarse or rank grassland, semi- improved, neutral grassland, reedbed (also drain and pond). |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description | | |
|---|---|---|----------------------------|--|--|--|
| | | | | Coastline comprising bare sand on the upper beach; a line of low fixed dunes grading into wetland; and an old embankment beside the road. As a result of recent landscaping works, much of the site is now far wetter than previously, with substantial areas of open water and reedbed, as well as coarse grassland in the central island and on the embankment. The wetland and dunes support a rich flora and fauna. Birds: coot, sedge and reed warbler, swift and whitethroat. | | |
| Vernatt's Drain | 0.7 | SW | 10.7km | Main habitat comprises of drain, calcareous grassland, neutral grassland, reedbed, coarse grassland (also scattered non-planted trees, tussocky vegetation, steep slopes, southfacing slopes, earthworks/ hummocky ground). | | |
| | | | | Vernatt's Drain is a large man-made watercourse resulting from the amalgamation of Counter Drain, North Drove Drain and South Drove Drain at Pode Hole. Substantial stretches with a rich grassland flora and plants typical of calcareous soils are also present. | | |
| | | | | Birds: The site supports a good range of fauna, including breeding populations of reed and sedge warblers, reed bunting and sand martin. | | |
| LWT Reserves (cited for ornithological feat | LWT Reserves (cited for ornithological features) | | | | | |
| Anderby Marsh | 0 | N/A | 24ha | Main habitat comprises of traditional coastal grazing marsh. | | |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|----------------|---|---|----------------------------|--|
| | | | | The LWT webpage (LWT, 2023) states "It is hoped in the future that this nature reserve will help support a range of conservation priority birds including lapwing, curlew, redshank, snipe, barn owl, starling and reed buntingThe adjacent reedbed fringes attract numerous reed, sedge and Cetti's warblers. Marsh harrier is a regular sight in the summer as is cuckoo". |
| | | | | The southern section of the Reserve is also designated as Anderby Creek Sand Dunes LWS. |
| Chapel Pit | 1.05 | S | 3ha | The LWT webpage (LWT, 2023) states "Excavated for clay for the repair of the sea banks following the floods of 1953, the flooded pit has marginal reedbeds and aquatic plants, such as water-crowfoot and great reedmace. Fifteen species of duck have been recorded, mainly winter visitors. Bearded tit and bittern are recorded occasionally. In summer breeding species include reed and sedge warblers, lesser whitethroat and little grebes can also be seen. In August and September thousands of migrating swallows and house martins roost in the reedbeds. Screens of willows round the banks of the pits have been planted to reduce disturbance to birds". |
| | | | | A 0.3ha area of this LWT is also designated as Chapel Pit LWS. |
| Frampton Marsh | 0.7 | SE | 172ha | The reserve is part of the most mature saltmarsh in The Wash and is exceptionally rich in plants, birds and invertebrates. The LWT webpage (LWT, 2023) states: "The area supports regular breeders such as redshank, oystercatcher, reed |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|----------------|---|---|----------------------------|---|
| | | | | bunting, meadow pipit and skylark. In winter the saltings attract wigeon, mallard, shelduck, teal and brent geese, with large flocks of finches and buntings, notably linnet and twite and birds of prey such as hen harrier and merlin. The tidal mudflats form part of the wader feeding grounds, which give the Wash its international status. Large flocks of dunlin occur, as well as considerable numbers of grey plover, whimbrel, curlew, bartailed godwit and greenshank". |
| | | | | The Trust's reserve is grazed together with the RSPB's reserve to the south. |
| Moulton Marsh | 0.3 | S | 36ha | Designated as both a LWS and LWT. Main habitat comprises of broad-leaved woodland, scrub, saline lagoons, shallow tidal scrapes, grassland, saltmarsh. |
| | | | | The LWT webpage (LWT, 2023) states "The maturing woodland now holds a good population of tits and finches, while the scrub areas are habitat for whitethroats and buntings. The lagoons are an important wintering area for little grebe and water rail in winter. Redshank and little egret are regularly seen on the scrapes". |
| | | | | This reserve also includes the 26.3ha Moulton Marsh LWS. |
| Wolla Bank Pit | 0.27 | S | 4ha | Main habitat comprises of flooded clay pits, reed bed, chalk grassland. |
| | | | | The LWT webpage (LWT, 2023) states Flooded clay pits with extensive beds of reed and sea club-rush, with great |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|-----------------------------|---|---|----------------------------|--|
| | | | | reedmace, fennel pondweed, wild celery, sea arrowgrass and water-crowfoot". "Snipe are frequent visitors in winter, when bittern and bearded tit are occasional visitors. In the breeding season, reed and sedge warblers, reed bunting and little grebe all nest. Many rare migrants have also been seen. Fieldfare, redwing and song thrush can be abundant in the winter". |
| Wolla Bank Reedbed | 0.01 | S | 3ha | Main habitat comprises of small pools, grassland with sea club-rush and sea couch. |
| | | | | The LWT webpage (LWT, 2023) states "Water rail, reed warbler, sedge warbler, Cetti's warbler, grasshopper warbler, reed bunting and whitethroat are all present and breeding. Marsh harrier and hobby occur regularly in the summer and short-eared owls can be present in winter. Bearded tit is a regular visitor in the winter. Starling murmurations can sometimes be present in the winter months". |
| RSPB Reserves | | | | |
| Frampton Marsh RSPB Reserve | 0.01 | S | 172ha | A coastal reserve, primarily comprising wetlands, reedbeds, large freshwater scrapes and wet grassland. The eastern two thirds of the Reserve form part of The Wash SPA. The reserve is grazed together with the Frampton Marsh LWT reserve to the north. In summer the reserve supports breeding populations of avocet, common tern and little ringed plover. Large numbers of black-tailed godwits (up to 5,700 individuals) are recorded on passage each autumn and in winter the site draws in large populations of wintering waders |



| Site Name | Distance from ECC segment (km) to site | Compass Direction to ECC segment | Area/ Length of Site | Description |
|-----------------------------|---|---|----------------------------|--|
| | | | | and waterfowl such as golden plover (up to 15,000 individuals) and whooper swans (up to 500 individuals). Marsh harriers breed on the reserve in summer and peregrines, merlins, hen harriers and short-eared owls are regularly seen hunting on site in winter. |
| Freiston Shore RSPB Reserve | 1.75 | SE | 683ha | This reserve protects 683ha of tidal saltmarsh and mudflats and approximately four fifths of the reserve is also designated for its importance to bird populations forming part of The Wash SPA (RSPB Website). It includes 15ha of saline lagoons and 66ha of managed realignment and supports large populations of black-tailed godwit (up to 5,000 individuals), brent goose (up to 3,000), hen harrier, knot (up to 16,000 birds) and oystercatcher. |



22.5.2 Species Records

- 18. The desk study draws on data for a wide range of legally protected or otherwise notable bird species within the Study Area. A total of 44,991 records of protected or notable bird species were returned from GLNP for the entire Study Area. Only records from the last ten years (2012-2022) have been presented below. The BTO provided WeBS records for the period of 2017- 2021 for all sectors, with the exception of Frampton North 60 (2014-2018), Frampton North 23 (2015-2019) and Burgh Marsh Zone 1 (2020- 2021) as this was the full extent of data available for these sectors within the requested time frame.
- 19. The non-breeding bird species records provided by the RSPB for the period 2011- 2020 were duplicate to those provided by the GLNP and, as such, these results have been presented as part of the GLNP data summarised in Table 22.4. Non-breeding bird species records provided by the RSPB for 2021-2023 are outlined in Table 22.14 and RSPB breeding records for the period 2011-2023 have been presented separately within Volume 3, Appendix 22.1A: CONFIDENTIAL Ornithological Desk Study (document reference 6.3.22.1A).
- 20. Records provided by the GLNP distinguished between 'breeding' and 'non-breeding' with confidential records of breeding protected species being highlighted. It appears that 'breeding' records are not necessarily confirmed nest sites but is unclear whether breeding behaviour was observed, or they were simply observations during the breeding season. In cases when the breeding status of Annex I/ Schedule 1 species could be clearly ascertained and the breeding location was indicated, these records are presented separately within Volume 3, Appendix 22.1A: CONFIDENTIAL Ornithological Desk Study (document reference 6.3.22.1A). The remaining species, even where the records were made during the breeding season but related to birds on passage and/or non-breeding birds, are presented in the following section.
- 21. Table 22.4 presents GLNP records of birds listed on Annex I, Schedule 1, NERC and BoCC Red and Amber within the Study Area.
- 22. **Table 22.5** presents an overview of BTO WeBS sector locations within the Study Area. Tables 23-5 23-18 present WeBS average monthly peak counts for records of bird species listed on Annex I, Schedule 1, NERC and BoCC Red species for survey sectors within the Study Area.



- 23. Table 22.20 presents LWT records of Annex I, Schedule 1, NERC and BOCC Red and Amber species within the Study Area.
- 24. Table 22.21 presents Internal Drainage Board records of birds listed on Annex I, Schedule 1, NERC and BoCC Red and Amber species within the Study Area.
- 25. Table 22.22 presents RSPB records of birds listed on Annex I, Schedule 1, NERC and BoCC Red and Amber species within the Study Area 2021-2023.



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Table 22.4: GLNP non-breeding bird species records within the Study Area

| Species | Conservation & Protection Status ¹ | Number of records | Nearest ECC segment intersected by record location ^{2,3} | Sites where recorded ⁴ | Species summary⁵ |
|-----------------------------|---|-------------------------|---|---|--|
| Bewick's swan | S1, A1, S41 | 121 | 1, 5, 9, 11, 14 | Anderby, Butterwick, Chapel Point, Coastal Country Park, Croft, Frampton Marsh, Kirton Marsh | Small flocks (<5) present annually during the non- breeding season at Frampton Marsh, with occasional peaks of up to 18. Occasionally present across all other sites. |
| Black- throated diver | S1, A1, AL | 28 | 1, 9 | Anderby, Anderby Marsh, Chapel Point, Chapel Six Marshes, Coastal Country Park, Freiston | Occasionally recorded at all sites throughout the non-breeding season. Due to the typical marine habitat of this species during winter, records from inland sites are considered anomalous. |
| Brambling | S1 | 120 | 1, 9, 11, 14 | Anderby, Anderby Creek, Butterwick, Chapel Pit, Chapel Six Marshes, Coastal Country Park, Frampton Marsh, Wolla Bank Pit | Small flocks (<10) present during the non-breeding season at Frampton Marsh and Anderby. A single large flock of 200 birds recorded at Butterwick. |
| Common scoter | S1, RL, S41 | 372 | 1, 5, 6, 8, 9, 14 | Anderby, Anderby Creek, Anderby Marsh, Benington, Butterwick, Chapel Point, Chapel Six Marshes, Chapel St | Present throughout the year at Chapel Point, Chapel Six Marshes and Wolla Bank, with larger flocks of up to 500 found at Anderby, Coastal Country Park and Marsh Yard. Occasionally present throughout the year at Frampton Marsh, Moggs Eye and Wrangle. Few records at all other |



| Species | Conservation & Protection Status ¹ | Number of records | segment | Sites where recorded⁴ | Species summary⁵ |
|-----------|---|-------------------------|---|--|--|
| | | | | Leonards, Coastal Country Park, Frampton Marsh, Freiston, Havenhouse Station, Ingoldmells, Marsh Yard, Moggs Eye, Wainfleet All Saints, Wolla Bank, Wrangle | Sites. Due to the typical marine habitat of this species, records from inland sites are considered anomalous. |
| Fieldfare | S1, RL | 431 | 1, 2, 4, 5, 6, 8, 9, 10, 11, 13, 14 | Anderby, Anderby Creek, Boston, Chapel Pit, Chapel Point, Chapel Six Marshes, Coastal Country Park, Croft, Fosdyke, Frampton Marsh, Freiston Shore, Hobhole Bank, Kirton, Kirton Marsh, Middlemarsh Farm, Moulton Marsh, Mumby, Thorpe St Peter, Wolla Bank Pit, Wolla Bank Reedbed, Wrangle | Large flocks of up to 2,000 recorded over winter at Frampton Marsh. Populations of 100-300 also seen periodically at Middlemarsh Farm and Wrangle. |
| Goldeneye | S1, RL | 950 | 1, 4, 5, 8, 9, 10, 11, 14 | Anderby, Benington, Butterwick, Chapel Pit, Chapel Point, Coastal Country Park, Frampton Marsh, Freiston Shore, Kirton, Marsh Yard, | Present across all sites throughout winter as individuals or small groups of <10. Occasional larger flocks of 20-30. |



| Species | Conservation & Protection Status ¹ | Number of records | Nearest ECC segment intersected by record location ^{2,3} | Sites where recorded⁴ | Species summary⁵ |
|----------------------------|---|-------------------------|---|--|--|
| | | | | Middlemarsh Farm, Wrangle | |
| Great northern diver | S1, A1, AL | 38 | 1, 5, 8, 9, 10, 14 | Anderby, Anderby Marsh, Chapel Point, Chapel Six Marsh, Coastal Country Park, Frampton Marsh, Freiston, Freiston Shore, Friskney, Ingoldmells, Marsh Yard, Wrangle | 14 records of one or two individuals present throughout the non-breeding season in 2021 at Coastal Country Park and a peak count of 17 individuals at Freiston in December 2020. Infrequently recorded at all other sites. Due to the typical marine habitat of this species, records from inland sites are considered anomalous. |
| Hen harrier | S1, A1, RL, S41 | 935 | 1, 4, 5, 8, 9, 10, 11, 13, 14 | Anderby, Benington, Butterwick, Chapel Point, Croft, Fosdyke, Frampton Marsh , Freiston Shore, Kirton, Kirton Marsh, Middlemarsh Farm, Wolla Bank Reedbed, Wrangle | Frampton Marsh alone accounts for 897 records of this species, which are present throughout the non-breeding season, with up to four individuals present throughout 2020. |
| Lapland bunting | S1, AL | 46 | 1, 4, 11, 14 | Anderby, Coastal Country Park, Frampton Marsh, Wolla Bank Middlemarsh Farm, | Individuals and occasional small flocks (peak count of eight) recorded each year at Frampton Marsh. |
| Leach's petrel | S1, A1, AL | 3 | 1, 14 | Frampton Marsh, Huttoft Bank Pit, Chapel Point | Few records, individuals occasionally present Aug-Oct. |



| Species | Conservation & Protection Status ¹ | Number of records | Nearest ECC segment intersected by record location ^{2,3} | Sites where recorded⁴ | Species summary⁵ |
|----------------------|---|-------------------------|---|--|--|
| Little gull | S1 | 540 | 1, 4, 9, 11, 14 | Anderby, Benington, Chapel Point, Chapel Six Marshes, Country Coastal Park, Frampton Marsh, Middlemarsh Farm | Up to five individuals recorded annually at Frampton Marsh, with records typically made during the breeding season. Occasionally seen at all other sites throughout the year. |
| Long- tailed duck | RL | 37 | 1, 9, 10, 14 | Anderby, Anderby Marsh, Butterwick, Chapel Point, Country Coastal Park, Frampton Marsh, Freiston, Freiston Shore | Occasionally present throughout the winter at Frampton Marsh, which accounted for 23 records of this species (although no records exceeded more than a single bird). Infrequently recorded at all other sites. Rarely recorded at Anderby, Anderby Marsh, Chapel Point and Butterwick, with only a single record for the latter. Due to the typical marine habitat of this species, records from inland sites are considered anomalous. |
| Merlin | S1, A1, RL | 937 | 1, 4, 5, 8, 9, 10, 11, 14 | Anderby, Anderby Marsh, Benington, Butterwick, Chapel Pit, Chapel Point, Chapel Six Marshes, Country Coastal Park, Frampton Marsh, Freiston, Freiston Shore, Friskney, Marsh Yard, Middlemarsh Farm, Welland Mouth, Wolla Bank Pit, Wrangle | Recorded across all sites throughout the non-breeding season. |



| Species | Conservation & Protection Status ¹ | Number of records | Nearest ECC segment intersected by record location ^{2,3} | Sites where recorded ⁴ | Species summary⁵ |
|-----------------------------|---|-------------------------|---|---|---|
| Pintail | S1 | 956 | 1, 4, 5, 8, 9, 10, 11, 14 | Anderby, Anderby Creek, Anderby Marsh, Benington, Butterwick, Chapel Pit, Chapel Point, Chapel Six Marshes, Coastal Country Park, Frampton, Frampton Marsh, Freiston, Freiston Shore, Friskney, Kirton, Kirton Marsh, Marsh Yard, Middlemarsh Farm, Wolla Band Reedbed, Wrangle | Present across all sites throughout the non-breeding season, with flocks of up to 300 recorded at Frampton Marsh and Freiston Shore. |
| Purple sandpiper | S1 | 33 | 1, 8, 11, 14 | Anderby, Anderby Creek, Chapel Point, Coastal Country Park, Frampton Marsh, Welland Mouth, Wrangle | Individuals occasionally seen throughout the non-breeding season, with most records typically made in August-December. |
| Red- necked phalarope | S1, A1, RL | 50 | 1, 4, 11, 14 | Coastal Country Park, Frampton Marsh, Middlemarsh Farm | Individuals occasionally seen throughout the breeding season, particularly at Frampton Marsh. |
| Red- throated diver | S1, A1, AL | 200 | 1, 8, 9, 10, 11, 14 | Anderby, Anderby Creek, Anderby Marsh, Benington, Butterwick, Chapel Point, Chapel Six Marshes, Chapel St Leonards, Coastal | Large flocks of 300-500 found at Anderby, Anderby Marsh, Chapel Point and Coastal Country Park during the non-breeding season. A group of up to 183 individuals reported at Anderby Creek in March 2020 and a group of up to 97 individuals reported at Chapel Six Marshes in January 2021. |



| Species | Conservation & Protection Status ¹ | Number of records | Nearest ECC segment intersected by record location ^{2,3} | Sites where recorded⁴ | Species summary⁵ |
|-----------------|---|-------------------------|---|--|--|
| | | | | Country Park, Frampton Marsh, Freiston Shore, Friskney, Marsh Yard, Wolla Bank | Rarely recorded at all other sites, with only one-two records at Benington, Butterwick and Friskney. Due to the typical marine habitat of this species during winter, records from inland sites are considered anomalous. |
| Redwing | S1, RL | 335 | 1, 2, 4, 5, 6, 8, 9, 10, 11, 14 | Anderby, Anderby Creek, Boston, Chapel Pit, Chapel Point, Chapel Six Marshes, Coastal Country Park, Croft, Frampton Marsh, Freiston Shore, Havenhouse Station, Hobhole Bank, Ingoldmells, Kirton Marsh, Marsh Yard, Middlemarsh Farm, Mumby, Wolla Bank, Wolla Bank Pit, Wolla Bank Reedbed, Wrangle | Present across all sites throughout the non-breeding season. Large flocks of up to 7000 recorded at Anderby. |
| Roseate tern | S1, A1, RL, S41 | 6 | 1, 10, 14 | Frampton Marsh, Chapel Point, Chapel Six Marshes, Freiston Shore | Few records. Individuals occasionally seen across sites during breeding season. |
| Scaup | S1, RL, S41 | 443 | 1, 4, 9, 10, 11, 14 | Anderby, Butterwick , Chapel Pit, Chapel Point, Coastal Country Park, | Frampton Marsh alone accounted for 399 records, with small flocks (<10) recorded each year. Small flocks often |



| Species | Conservation & Protection Status ¹ | | Nearest ECC segment intersected by record location ^{2,3} | Sites where recorded ⁴ | Species summary⁵ |
|--------------------|---|-----|---|---|--|
| | | | | Frampton Marsh, Freiston Shore, Marsh Yard, Middlemarsh Farm | present at Butterwick. Infrequently seen across all other sites. |
| Slavonian grebe | S1, RL | 19 | 1, 4, 9, 10, 14 | Anderby Marsh, Chapel Point, Coastal Country Park, Frampton Marsh, Freiston Shore, Middlemarsh Farm, Welland Mouth | Few records. Individuals occasionally recorded across sites during the non-breeding season. |
| Snow bunting | S1, AL | 141 | 1, 5, 6, 11, 14 | Anderby, Anderby Creek, Anderby Marsh, Chapel Point, Chapel Six Marshes, Coastal Country Park, Frampton Marsh, Freiston Shore, Huttoft Bank Pit, Marsh Yard, Middlemarsh Farm, Wainfleet All Saints, Wolla Bank, Wolla Bank Reedbed | Individuals or small flocks (<10) recorded across all sites during the non-breeding season, with occasional larger flocks of up to 70 recorded at Anderby Marsh and Chapel Point. |
| Velvet scoter | S1, RL | 16 | 1, 9 | Anderby, Benington, Coastal Country Park, Huttoft Bank Pit, Chapel Point | Few records. Individuals or small groups of up to five occasionally recorded at Anderby and Coastal Country Park during the non-breeding season. A single record each at Benington, Chapel Point and Huttoft Basin. |



| Species | Conservation & Protection Status ¹ | | Nearest ECC segment intersected by record location ^{2,3} | Sites where recorded ⁴ | Species summary⁵ |
|-----------------|---|------|---|---|---|
| | | | | | Due to the typical marine habitat of this species, records from inland sites are considered anomalous. |
| Whimbrel | S1, RL | 891 | 1, 4, 5, 8, 9, 11, 13, 14 | Anderby, Anderby Creek, Anderby Marsh, Benington, Butterwick, Chapel Point, Chapel Six Marshes, Coastal Country Park, Croft, Croft Marsh, Fosdyke, Frampton Marsh, Freiston Shore, Kirton, Kirton Marsh, Middlemarsh Farm, Welland Mouth, Wolla Bank, Wolla Bank Reedbed, Wrangle | Individuals and small flocks (<10) present across all sites. Large flocks of 100-300 recorded at Anderby, Frampton Marsh and Wrangle. |
| Whooper swan | S1, A1, AL | 1760 | 1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14 | Anderby, Ashington End, Benington, Boston, Butterwick, Chapel Point, Chapel Six Marshes, Country Coastal Walk, Croft, Fishtoft, Frampton Marsh, Freiston Shore, Friskney, Haltoft End, Ingoldmells, Kirton, Kirton Marsh, Marsh Yard, Middlemarsh Farm, Orby | Extensive records at Frampton Marsh, with flocks of 50-70 recorded each year and occasional larger flocks of up to 500. Groups of 50-100 recorded regularly throughout 2021 non-breeding season at Country Coastal Walk. Regular winter records at Kirton Marsh, with approximately 30-100 each non-breeding season, and also reported regularly in lower numbers (peak count 30) at Wrangle each year. |



| Species | Conservation & Protection Status ¹ | | segment | Sites where recorded⁴ | Species summary⁵ |
|-------------------|---|-----|---------------------------|---|---|
| | | | | Marsh, Skeldyke, Sutterton Dowdyke, Wolla Bank, Wolla Bank Pit, Wrangle | Typically only one- two records reported at all other sites. |
| Wood sandpiper | S1, A1, AL | 923 | 1, 4, 5, 8, 10, 11, 14 | Anderby, Anderby Creek, Coastal Country Park, Croft, Frampton Marsh , Freiston Shore, Middlemarsh Farm , Welland Mouth, Wolla Bank Reedbed, Wrangle | Regularly recorded during the breeding season at Frampton Marsh and Middlemarsh Farm (together accounting for 893 records). Typically seen in groups of <5, but with peaks of up to 19 at Middlemarsh Farm. Seen infrequently at all other sites. |

¹ Listed on Annex I of the EC Birds Directive (A1); Schedule 1 of the Wildlife and Countryside Act, as amended (S1); UK BoCC Red-listed species (RL); UK BoCC Amber-listed species (AL); listed under Section 41 of the 2006 Natural Environment and Rural Communities Act (NERC) (S41).



² All grid references were converted into easting and northing to create a series of grid squares. A selection was run to determine those that intersected the Order Limits, which were then converted into points at the bottom left of the square in order to avoid duplication where squares overlapped multiple segments. The presented ECC segments are based upon where these points intersected the Order Limits. This information is presented in order to provide an approximation of record location and, where grid reference data overlapped multiple segments, some records may fall outside the stated segment.

³ Of the 44,991 records provided by the GLNP, 31,602 records (primarily associated with Frampton Marsh) were provided at low resolution (10km²) and spanned multiple ECC segments. These records have been included in the presented data and have been allocated ECC 14 as their nearest segment, however, note that the segment could not be accurately established given the resolution and the location of individual records may fall outside this segment. ⁴ Locations where species were recorded in the highest concentrations are highlighted in bold.

⁵ Due to the low resolution of data, records at some inland sites overlap with marine habitat and will likely relate to records of birds from the marine environment, or in some instances over-flying birds, however this level of detail is not provided.

Table 22.5: Overview of BTO WeBS sectors within the Study Area

| WeBS Region | Site name | Habitat type | Sector name | ECC segment | Distance from Order Limits (km) ¹ | Compass direction from Order Limits |
|-------------------------------|--|----------------------------|----------------------|----------------|--|---|
| Lincolnshire – North (inland) | Anderby | Goose and swan 'fields' | Anderby | ECC1 | 0.28 | ENE |
| (mana) | Lincolnshire Coastal Grazing Marshes | Riverine or marshy wetland | Burgh Marsh – Zone 1 | ECC 4 | 1.80 | ESE |
| The Wash | The Wash | Estuarine | Frampton North 23 | ECC 11 | 0.65 | ENE |
| (Norfolk/Lincolnshire) | | | Frampton North 41 | ECC 11 | 0.60 | ENE |
| | | | Frampton North 60 | ECC 10 | 1.20 | S |
| | | | Frampton South 01 | ECC 11 | 0.79 | ESE |
| | | | Frampton South 41 | ECC 11 | 0.92 | SSE |
| | | | Frampton South 42 | ECC 11 | 0.63 | E |
| | | | Frampton South 43 | ECC 11 | 0.54 | ENE |
| | | | Frampton South 44 | ECC 11 | 1.10 | ESE |
| | | | Kirkton 40 | ECC 11 | 0.83 | S |
| | | | Kirkton 41 | ECC 12 | 0.44 | NE |
| | | | Kirkton 42 | ECC 12 | 0.50 | ENE |
| | | | Kirkton 43 | ECC 12 | 0.54 | E |

^{1.}Distances and compass directions were calculated from the centroid of each survey sector. This data is presented in order to provide context only and distances and directions of sector boundaries from Order Limits may vary from those stated.



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Table 22.6: BTO WeBS average monthly peak counts within Anderby survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 18 | 5 | 1 | 1 | 94 | 31 | 12 | 35 | 94 | 62 | 77 | 10 |
| Black-tailed godwit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 |
| Curlew | 17 | 61 | 25 | 2 | 0 | 1 | 0 | 0 | 1 | 6 | 5 | 22 |
| Gadwall | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Golden plover | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Herring gull | 13 | 12 | 8 | 3 | 3 | 9 | 4 | 7 | 9 | 13 | 6 | 6 |
| Lapwing | 130 | 25 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 30 |
| Oystercatcher | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| Pochard | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sanderling | 1 | 5 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 1 |
| Sandwich tern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 3 | 0 | 0 | 0 |
| Shelduck | 0 | 0 | 2 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teal | 6 | 93 | 19 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| Wigeon | 56 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 45 |



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Table 22.7: BTO WeBS average monthly peak counts within Burgh Marsh Zone 1 survey sector, 2020-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 150 | 103 | 165 | 135 | 20 | 5 | 150 | 250 | 200 | 100 | 50 | 100 |
| Common tern | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Curlew | 32 | 5 | 67 | 8 | 0 | 0 | 0 | 1 | 0 | 19 | 19 | 5 |
| Dunlin | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Gadwall | 16 | 12 | 21 | 27 | 14 | 14 | 8 | 0 | 5 | 10 | 7 | 11 |
| Garganey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Golden plover | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 |
| Goldeneye | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Herring gull | 500 | 153 | 130 | 240 | 150 | 560 | 100 | 200 | 100 | 30 | 300 | 100 |
| Lapwing | 300 | 150 | 50 | 37 | 27 | 41 | 60 | 40 | 5 | 1 | 57 | 40 |
| Little ringed plover | 0 | 0 | 0 | 4 | 4 | 4 | 6 | 1 | 4 | 0 | 0 | 0 |
| Oystercatcher | 0 | 3 | 12 | 11 | 12 | 13 | 2 | 0 | 0 | 0 | 0 | 0 |
| Pink-footed goose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 250 | 0 |
| Pintail | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 0 |



| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pochard | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Redshank | 1 | 11 | 15 | 7 | 3 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| Ringed plover | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 6 | 0 | 0 | 0 |
| Ruff | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 8 | 19 | 5 | 0 | 0 |
| Shelduck | 3 | 2 | 20 | 20 | 24 | 20 | 2 | 0 | 0 | 0 | 3 | 2 |
| Teal | 120 | 125 | 35 | 22 | 0 | 0 | 6 | 54 | 120 | 130 | 70 | 80 |
| Whimbrel | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Whooper swan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 17 | 0 |
| Wigeon | 350 | 525 | 350 | 5 | 0 | 0 | 0 | 1 | 0 | 30 | 200 | 400 |



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Table 22.8: BTO WeBS average monthly peak counts within Frampton North 23 survey sector, 2015-2019

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arctic tern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Avocet | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Black-headed gull | 0 | 7 | 12 | 22 | 15 | 8 | 13 | 48 | 6 | 15 | 7 | 13 |
| Brent goose (dark-bellied) | 103 | 35 | 37 | 4 | 2 | 0 | 0 | 1 | 0 | 0 | 31 | 36 |
| Common tern | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | n/a | 0 | 0 |
| Curlew | 10 | 9 | 3 | 4 | 4 | 1 | 15 | 23 | 28 | 7 | 5 | 11 |
| Dunlin | 134 | 123 | 165 | 59 | 95 | 0 | 12 | 3 | 2 | 11 | 39 | 212 |
| Golden plover | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grey plover | 12 | 9 | 9 | 20 | 38 | 0 | 2 | 9 | 6 | 2 | 80 | 11 |
| Herring gull | 23 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 |
| Knot | 0 | 2 | 2 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lapwing | 13 | 103 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 3 | 94 | 536 |
| Oystercatcher | 0 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| Pintail | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Redshank | 45 | 22 | 25 | 6 | 14 | 2 | 10 | 21 | 18 | 9 | 23 | 26 |
| Ringed plover | 0 | 0 | 0 | 18 | 74 | 0 | 0 | 0 | 0 | 4 | 0 | 5 |
| Ruff | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Sandwich tern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | n/a | 0 | 0 |
| Shelduck | 15 | 49 | 36 | 11 | 3 | 2 | 1 | 0 | 1 | 0 | 49 | 16 |
| Teal | 2 | 1 | 7 | 0 | 0 | 0 | 1 | 0 | 5 | 1 | 1 | 4 |
| Turnstone | 4 | 2 | 0 | 1 | 2 | 0 | 17 | 1 | 1 | 0 | 0 | 0 |
| Whimbrel | 0 | 0 | 0 | 4 | 0 | 0 | 9 | 1 | 0 | 0 | 0 | 0 |
| Wigeon | 2 | 10 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |



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Table 22.9: BTO WeBS average monthly peak counts within Frampton North 41 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|
| Avocet | 0 | 0 | 2 | 3 | 12 | 16 | 16 | 12 | 3 | 1 | 0 | 2 |
| Barnacle goose | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Bar-tailed godwit | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 3 | 0 | 0 | 0 |
| Bewick's swan | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black-headed gull | 1 | 0 | 46 | 49 | 263 | 75 | 38 | 4 | 26 | 0 | 0 | 0 |
| Black-tailed godwit | 0 | 0 | 1 | 15 | 80 | 4 | 472 | 1436 | 1350 | 983 | 8 | 29 |
| Brent goose (dark-bellied) | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Common tern | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 |
| Curlew | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunlin | 0.5 | 0 | 40 | 1 | 0 | 0 | 227 | 334 | 315 | 2 | 56 | 5 |
| Gadwall | 22 | 12 | 3 | 4 | 6 | 17 | 0 | 0 | 2 | 2 | 1 | 12 |
| Goldeneye | 5 | 5 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| Golden plover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 150 | 1 |
| Grey plover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |



| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Greylag goose | 84 | 7 | 9 | 19 | 0 | 15 | 35 | 163 | 29 | 104 | 94 | 106 |
| Herring gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Knot | 0 | 0 | 0 | 0 | 0 | 0 | 615 | 11 | 51 | 25 | 0 | 0 |
| Lapwing | 56 | 65 | 0 | 5 | 2 | 1 | 15 | 53 | 62 | 32 | 167 | 169 |
| Little ringed plover | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Little stint | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Oystercatcher | 0 | 0 | 2 | 3 | 12 | 16 | 16 | 12 | 3 | 1 | 0 | 2 |
| Pintail | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 3 | 2 |
| Pochard | 14 | 24 | 8 | 4 | 8 | 10 | 1 | 3 | 1 | 1 | 4 | 20 |
| Redshank | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 27 | 0 | 9 | 1 | 12 |
| Ringed plover | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 13 | 44 | 5 | 35 | 1 |
| Scaup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Shelduck | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 2 | 2 | 0 |
| Teal | 131 | 11 | 36 | 0 | 0 | 0 | 5 | 14 | 104 | 129 | 95 | 264 |
| Whooper swan | 46 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 8 | 55 |



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| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wigeon | 237 | 327 | 138 | 0 | 1 | 0 | 0 | 1 | 7 | 852 | 39 | 289 |



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Table 22.10: BTO WeBS average monthly peak counts within Frampton North 60 survey sector, 2014-2018

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 11 | 7 | 16 | 1 | 0 | 2 | 76 | 0 | 0 | n/a | 0 | 14 |
| Brent goose (dark-bellied) | 140 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 6 | 31 |
| Curlew | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Eider | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Grey plover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Herring gull | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | n/a | 1 | 3 |
| Little gull | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Redshank | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Shag | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shelduck | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teal | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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Table 22.11: BTO WeBS average monthly peak counts within Frampton South 01 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 3 | 11 | 2 | 1 | 2 | n/a | 2 | 0 | 191 | 11 | 52 | 4 |
| Black-tailed godwit | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 |
| Curlew | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Gadwall | 6 | 2 | 1 | 0 | 1 | 0 | 6 | 8 | 16 | 18 | 28 | 11 |
| Goldeneye | 1 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Greylag goose | 0 | 0 | 0 | 1 | 7 | 0 | 0 | 9 | 0 | 0 | 0 | 0 |
| Herring gull | 0 | 12 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 1 | 4 | 0 |
| Lapwing | 0 | 0 | 0 | 2 | 5 | 2 | 6 | 0 | 0 | 0 | 1 | 0 |
| Pintail | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Pochard | 6 | 8 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 3 | 0 |
| Redshank | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Ruff | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teal | 16 | 8 | 1 | 0 | 0 | 0 | 0 | 1 | 4 | 2 | 5 | 8 |
| Whooper swan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |



| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wigeon | 255 | 125 | 66 | 1 | 0 | 0 | 0 | 2 | 164 | 58 | 16 | 79 |

Table 22.12: BTO WeBS average monthly peak counts within Frampton South 41 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 9 | 17 | 3 |
| Brent goose (dark-bellied) | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Golden plover | 1500 | 1000 | 241 | 0 | 0 | 0 | 0 | 33 | 0 | 8 | 1 | 1 |
| Greylag goose | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 27 | 5 |
| Herring gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 40 | 13 | 4 |
| Lapwing | 0 | 167 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 2 | 1 | 1 |
| Pink-footed goose | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 151 |
| Sandwich tern | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Whooper swan | 43 | 64 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 15 |



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Table 22.13: BTO WeBS average monthly peak counts with Frampton South 42 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Avocet | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black-headed gull | 0 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black-tailed godwit | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 23 |
| Brent goose (dark-bellied) | 0 | 3 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Curlew | 8 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21 | 22 |
| Dunlin | 0 | 21 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gadwall | 0 | 2 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Golden plover | 779 | 2175 | 5 | 33 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 570 |
| Greylag goose | 0 | 0 | 0 | 1 | 15 | 0 | 0 | 1 | 0 | 7 | 3 | 3 |
| Lapwing | 259 | 1091 | 21 | 22 | 4 | 0 | 0 | 0 | 2 | 78 | 1 | 91 |
| Pintail | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Redshank | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 5 |
| Ruff | 10 | 1 | 11 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Shelduck | 0 | 0 | 2 | 7 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |



| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Teal | 0 | 28 | 15 | 7 | 3 | 0 | 0 | 0 | 0 | 4 | 28 | 49 |
| Whooper swan | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wigeon | 127 | 332 | 164 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 24 | 770 |

Table 22.14: BTO WeBS average monthly peak counts within Frampton South 43 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Avocet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 |
| Black-headed gull | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 0 |
| Black-tailed godwit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 1 |
| Brent goose (dark-bellied) | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Curlew | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunlin | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 1 |
| Gadwall | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 |
| Golden plover | 11 | 667 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |



| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Greylag goose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 1 |
| Knot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Lapwing | 50 | 25 | 5 | 1 | 3 | 0 | 0 | 0 | 3 | 3 | 188 | 40 |
| Pintail | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 |
| Redshank | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 |
| Ringed plover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 |
| Ruff | 0 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 10 | 5 |
| Shelduck | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 |
| Teal | 0 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 25 | 7 |
| Wigeon | 0 | 67 | 46 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 475 | 39 |



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Table 22.15: BTO WeBS average monthly peak counts within Frampton South 44 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Avocet | 0 | 0 | 0 | 6 | 14 | 3 | 13 | 6 | 0 | 0 | 0 | 0 |
| Barnacle goose | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bar-tailed godwit | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Black-headed gull | 2 | 0 | 2 | 9 | 9 | 2 | 13 | 20 | 7 | 1 | 0 | 0 |
| Black-tailed godwit | 3 | 12 | 2 | 88 | 1 | 0 | 3 | 1 | 2 | 0 | 3 | 6 |
| Brent goose (dark-bellied) | 102 | 193 | 41 | 199 | 44 | 0 | 0 | 0 | 0 | 0 | 8 | 5 |
| Curlew | 52 | 11 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 11 |
| Dunlin | 152 | 111 | 21 | 1 | 3 | 0 | 29 | 3 | 72 | 4 | 1 | 10 |
| Gadwall | 7 | 22 | 16 | 30 | 8 | 0 | 0 | 0 | 5 | 2 | 2 | 9 |
| Golden plover | 6460 | 4317 | 128 | 2 | 2 | 0 | 0 | 0 | 3 | 51 | 81 | 3660 |
| Greylag goose | 0 | 0 | 1 | 5 | 2 | 0 | 4 | 8 | 0 | 10 | 49 | 28 |
| Lapwing | 3332 | 715 | 44 | 59 | 32 | 3 | 6 | 3 | 21 | 111 | 180 | 2775 |
| Little ringed plover | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oystercatcher | 0 | 0 | 1 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |



| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------------------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Pink-footed goose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 44 |
| Pintail | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Pochard | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Redshank | 17 | 26 | 3 | 3 | 5 | 0 | 4 | 3 | 0 | 2 | 2 | 28 |
| Ringed plover | 0 | 6 | 0 | 1 | 6 | 0 | 1 | 2 | 4 | 0 | 0 | 3 |
| Ruff | 11 | 23 | 10 | 18 | 4 | 0 | 3 | 2 | 1 | 0 | 0 | 22 |
| Shelduck | 8 | 53 | 31 | 77 | 42 | 1 | 1 | 3 | 2 | 1 | 1 | 5 |
| Teal | 146 | 679 | 79 | 79 | 12 | 0 | 0 | 2 | 7 | 21 | 42 | 344 |
| Whimbrel | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wigeon | 4622 | 3300 | 971 | 54 | 0 | 0 | 0 | 0 | 26 | 17 | 498 | 1477 |
| Wood sandpiper | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |



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Table 22.16: BTO WeBS average monthly peak counts within Kirton 40 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 4 | 2 | 1 | 7 | 5 | 0 | 8 | 3 | 0 | 47 | 5 | 10 |
| Curlew | 10 | 6 | 27 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 20 | 9 |
| Gadwall | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Golden plover | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Herring gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Lapwing | 100 | 0 | 0 | 1 | 1 | 0 | 28 | 20 | 0 | 8 | 20 | 7 |
| Redshank | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Ruff | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Shelduck | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teal | 6 | 8 | 12 | 3 | 0 | 0 | 0 | 0 | 2 | 7 | 12 | 3 |
| Whooper swan | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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Table 22.17: BTO WeBS average monthly peak counts within Kirton 41 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 20 | 4 | 0 |
| Curlew | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 6 |
| Golden plover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 2 | 30 |
| Lapwing | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 10 | 18 | 50 |
| Oystercatcher | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Redshank | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 |
| Ruff | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |



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Table 22.18: BTO WeBS average monthly peak counts within Kirton 42 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Curlew | 23 | 12 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 6 |
| Golden plover | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lapwing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 9 |
| Oystercatcher | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Redshank | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ruff | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Shelduck | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 22.19: BTO WeBS average monthly peak counts within Kirton 43 survey sector, 2017-2021

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Black-headed gull | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 6 | 0 | 5 | 0 |
| Curlew | 5 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Golden plover | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 |
| Lapwing | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 0 |



Table 22.20: LWT non-breeding bird species records within the Study Area

| Species | Conservation & Protection Status ¹ | Site where recorded | Distance from ECC segment (km) to site | Species Summary |
|--------------------------|---|---------------------------|---|--|
| Barn owl | S1 | Wolla Bank Reedbed | 0.01 | Regularly present throughout winter. See Volume 3, Appendix 22.1A: Confidential Ornithology Desk Study for breeding records. |
| Bearded tit | S1 | Wolla Bank Reedbed | 0.01 | Over ten birds overwintering. See Volume 3, Appendix 22.1A: Confidential Ornithology Desk Study for breeding records. |
| Bittern | S1, A1, AL | Wolla Bank Reedbed | 0.01 | Present in late winter-early spring. Records increasing. |
| Garganey | S1, AL | Anderby Marsh | 0 | Present. Records increasing. |
| Golden plover | A1, | Anderby Marsh | 0 | Good numbers overwintering on the marsh (up to 175 in February 2023). |
| Kingfisher | S1, A1 | Wolla Bank Reedbed | 0.01 | Present often in late summer – spring. |
| Pink- footed goose | AL | Anderby Marsh | 0 | Up to 2000 roosting over winter (2021-2022) following increased water capacity on the marsh. |
| Short- eared owl | A1, AL | Wolla Bank Reedbed | 0.01 | Regularly present throughout winter. |



| Species | Conservation & Protection Status ¹ | Site where recorded | Distance from ECC segment (km) to site | | |
|-------------------|---|---------------------------|---|--|--|
| Spoonbill | S1, A1, AL | Anderby Marsh | 0 | Present almost daily in late spring and late summer. | |
| Wood sandpiper | S1, A1, AL | Anderby Marsh | 0 | Present almost daily in late spring and late summer. | |

¹ Listed on Annex I of the EC Birds Directive **(A1)**; Schedule 1 of the Wildlife and Countryside Act, as amended **(S1)**; UK BoCC Red-listed species **(RL)**; UK BoCC Amber-listed species **(AL)**; listed under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act **(S41)**.



Table 22.21: Internal Drainage Board non-breeding bird species records within the Study Area

| Species | Conservation & protection status ¹ | Internal Drainage Board | Distance of Drainage Board boundary from Order Limits ² | Species summary |
|---------------|---|----------------------------|---|--|
| Barn Owl | S1 | Black Sluice | 0.0 | See Volume 3, Appendix 22.1A: Confidential Ornithology Desk Study for breeding records. |
| | | Lindsey Marsh | 0.0 | Present. |
| | | Welland and Deepings | 0.0 | Present. |
| | | Witham Fourth | 0.0 | Present. |
| Bittern | S1, A1, AL | Lindsey Marsh | 0.0 | See Volume 3, Appendix 22.1A: Confidential Ornithology Desk Study for breeding records. |
| Kingfisher | S1, A1 | Black Sluice | 0.0 | Present throughout the Board's area. Plans to install artificial nest sites at suitable locations. |
| | | Witham Fourth | 0.0 | Present. Nest boxes provided. |
| Marsh warbler | S1, RL, S41 | Black Sluice | 0.0 | See Volume 3, Appendix 22.1A: Confidential Ornithology Desk |
| | | Lindsey Marsh | 0.0 | Study for breeding records. |
| Peregrine | S1, A1 | Witham Fourth | 0.0 | See Volume 3, Appendix 22.1A: Confidential Ornithology Desk Study for breeding records. |

^{1.} Listed on Schedule 1 of the Wildlife and Countryside Act, as amended **(\$1)**; listed on Annex I of the EC Birds Directive **(A1)**; UK BoCC Red-listed species **(RL)**; UK BoCC Amber-listed species **(AL)**; listed under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) **(\$41)** (Stanbury et al., 2021).



² Note that the exact locations of non-breeding bird species' records were not provided by any Internal Drainage Board and that the stated distances are the minimum distance from each Internal Drainage Board's boundary to Order Limits. Record locations may fall anywhere within each Drainage Board's area and so may differ from the stated distances.

Table 22.22: RSPB Frampton Marsh non-breeding bird species records within the Study Area, 2021-2023

| Species | Conservation & protection status | Number of records | Species summary |
|---------------------|----------------------------------|-------------------|---|
| Arctic tern | A1, AL | 5 | A flock of four birds recorded in April 2020. Single individuals recorded during the breeding season in 2023. |
| Barnacle goose | A1 | 54 | Flocks of up to 17 recorded each winter, with a small number of birds (up to six) remaining throughout the breeding season. |
| Barn owl | S1 | 23 | Individuals regularly recorded throughout the year. |
| Bearded tit | S1 | 29 | Up to six birds overwintering each year. |
| Bewick's swan | S1, A1, RL, S41 | 8 | Up to nine individuals recorded each winter. |
| Bittern | S1, A1, AL | 1 | A single individual recorded in February 2022. |
| Black-necked grebe | S1, AL | 5 | Up to three individuals recorded throughout April and May 2021 and 2022. |
| Black-tailed godwit | S1, RL, S41 | 23 | Large flocks of thousands reported on passage each autumn with a peak count of 3950 recorded in August 2021. Smaller flocks of 10-20 birds reported to overwinter on the reserve. |
| Black tern | S1, A1 | 6 | A single individual typically recorded each breeding season. Two individuals reported in June 2023. |
| Brambling | S1 | 16 | Up to two individuals recorded each winter. |
| Dotterel | S1, A1, RL | 1 | A single individual recorded in April 2021. |
| Fieldfare | S1, RL | 9 | Flocks of 20-50 recorded each year, peak count of 300 in December 2021. |
| Garganey | S1, AL | 21 | Small flocks of up to eight recorded each winter. |
| Goldeneye | S1, RL | 121 | Small flocks of up to five individuals recorded regularly throughout the winter. Peak count of 23 individuals in February 2021. |



| Species | Conservation & protection status | Number of records | Species summary |
|------------------|----------------------------------|-------------------|---|
| Golden plover | A1 | 47 | Large flocks of up to 10000 recorded each winter. |
| Green sandpiper | S1, AL | 44 | Individuals and small flocks (<5) regularly recorded throughout the breeding season. Peak count of 12 in 2021. |
| Greenshank | S1, AL | 58 | Individuals and flocks of up to 25 typically recorded each year, usually in July, with a peak count of 63 in July 2021. |
| Hen harrier | S1, A1, RL, S41 | 13 | Single individuals are regularly recorded throughout winter. |
| Hobby | S1 | 30 | Single individuals recorded regularly throughout the breeding season, with a peak count of three birds in August 2021. |
| Little gull | S1 | 27 | Individuals and occasional pairs recorded throughout the breeding season each year. |
| Long-tailed duck | S1, RL | 2 | Few records. A single individual recorded in winter 2022. |
| Merlin | S1, A1, RL | 28 | Individuals recorded regularly in winter each year. Two birds recorded several times in winter 2021. |
| Peregrine | S1, A1 | 28 | One to two birds recorded regularly throughout the year. |
| Pintail | S1, AL | 42 | Flocks of 10-20 recorded each winter, with a peak count of 43 in January 2021. |
| Ruff | S1, A1, RL | 101 | Flocks of 50 regularly reported each breeding season, with a peak count of 140 individuals in April 2023. |
| Scaup | S1, RL, S41 | 6 | No records provided after 2021. Single individuals recorded in autumn 2021. |
| Short-eared owl | A1, AL | 15 | Up to four individuals recorded throughout the year. |
| Snow bunting | S1, AL | 1 | A single individual recorded in winter 2021. |
| Spoonbill | S1, A1, AL | 148 | Individuals and flocks of 20-30 recorded each breeding season, with a peak count of 39 in September 2021. |
| Spotted crake | S1, A1, AL | 1 | A single individual recorded in April 2022. |



| Species | Conservation & protection status | Number of records | Species summary |
|------------------|----------------------------------|-------------------|---|
| Temminck's stint | S1 | 3 | A single individual and a record of three birds in May 2021, in addition to a single individual reported in August 2021. |
| Whimbrel | S1, RL | 18 | Individuals and small flocks regularly reported throughout the breeding season, with a peak count of 11 recorded in 2021. |
| Whooper swan | S1, AL | 96 | Flocks of 100-200 recorded each winter, with a peak count of 358 in March 2021. |
| Wood sandpiper | S1, A1, AL | 37 | Individuals and small flocks of up to three regularly reported during the breeding season. |



References

Lincolnshire Wildlife Trust webpage (a) Anderby Marsh. Available at: https://www.lincstrust.org.uk/nature-reserves/anderby-marsh (Accessed: 22 November 2023).

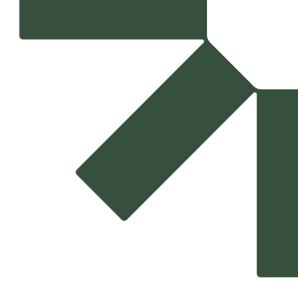
Lincolnshire Wildlife Trust webpage (b) Chapel Pit. Available at: https://www.lincstrust.org.uk/nature-reserves/chapel-pit (Accessed: 22 November 2023).

Lincolnshire Wildlife Trust webpage (c) Frampton Marsh. Available at: https://www.lincstrust.org.uk/nature-reserves/frampton-marsh (Accessed: 22 November 2023).

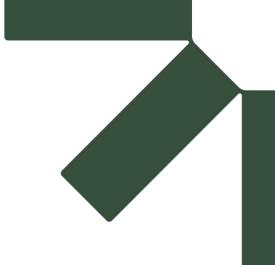
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Lincolnshire Wildlife Trust webpage (f) Wolla Bank Reedbed Available at: https://www.lincstrust.org.uk/nature-reserves/wolla-bank-reedbed (Accessed: 24 November 2023).







Annex A: Figures

Volume 3, Appendix 22.1: Ornithology Desk Study

Outer Dowsing Offshore Wind Environmental Statement

Ornithology Desk Study

SLR Project No.: 410.V05356.00013

1 March 2024



