



**RWE Renewables UK Dogger Bank
South (West) Limited**

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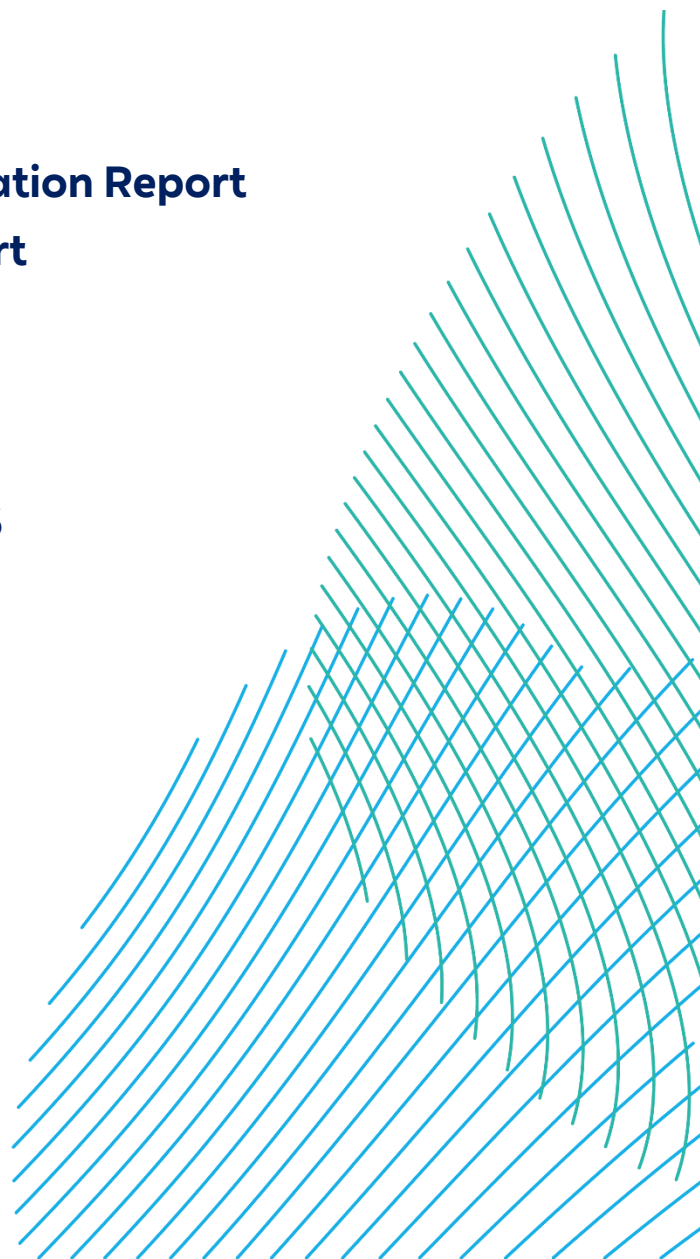
Dogger Bank South Offshore Wind Farms

**Preliminary Environmental Information Report
Appendix 18-2 – Desk Study Report**

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Appendix 18-2 Desk Study Report

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EXECUTIVE SUMMARY

Overview

This report has been prepared by Peak Ecology Ltd on behalf of Royal HaskoningDHV. This desk study relates to the Onshore Study Area for the Dogger Bank South Offshore Wind Farms (the Projects) (correct as of June 2022).

This document presents the findings of a desk-based study carried out for the Onshore Study Area for the Projects.

Online sources were checked in June 2022 for environmental information relating to the Onshore Study Area and included the Multi-Agency Geographic Information for the Countryside (MAGIC) mapping application. Biological records data was acquired from the North and East Yorkshire Environmental Data Centre (NEYEDC) for the Onshore Study Area plus a 2km buffer for most species, this was extended to 5km for bats. The buffer was also extended to 10km when searching for internationally important wildlife sites.

A total of 1420 species records were received from the NEYEDC incorporating approximately 187 species. This report summarises this information and highlights key species that are considered to be of interest for the Projects.

It is anticipated that this report will be updated as the corridor is refined and the programme progresses, new data from NEYEDC may be acquired and other data sources may be accessed if appropriate.

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INTRODUCTION

1.1 Scope of Report

This report has been prepared by Peak Ecology Ltd on behalf of Royal HaskoningDHV. This desk study relates to the Onshore Study Area for the Dogger Bank South Offshore Wind Farms (the Projects) (correct as of September 2022).

The Onshore Study Area has been refined over time. This report is based on the Onshore Study Area as of September 2022, illustrated in Figure 1. This includes an 250m wide onshore export cable corridor with multiple possible route options around Beverley, the possible landfall location and the area of search for the substation zones. Where appropriate buffers have been applied, the size of which depends on the species or habitats in question; the buffer also varies to consider different types of wildlife site.

This report presents the findings of a desk-based study carried out for the Onshore Study Area for the Projects.

The purpose of this report is to:

- Present the findings of the desk-based study;
- Highlight any statutory and non-statutory sites for nature conservation;
- Highlight any key protected habitats, and
- Highlight and key protected, priority and/or notable species.

All work follows best practice published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017) and the British Standards Institution (BSI, 2013). Details of the methodology are provided in Section 0.

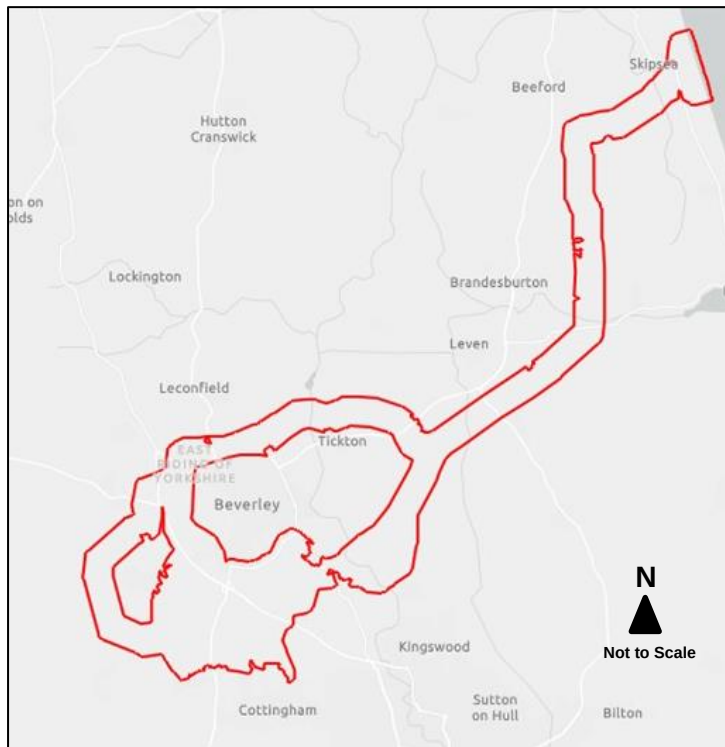
1.2 Onshore Study Area Description

The Onshore Study Area and surrounding area is largely arable with some pasture. Small pockets of broad-leaved woodland are present. The onshore cable corridor avoids the majority of built-up areas, although there are residential gardens and a golf course that are within the Onshore Study Area.

The land is generally low-lying and largely below 10m AOD to the east of Beverley. The highest point is to the west of Walkington at approximately 100m AOD.

The Onshore Study Area intersects various watercourses including the River Hull, the Beverley and Barmston Drain, Catfoss Drain and the Holderness Drain as well as many minor watercourses and drains/ditches. Numerous standing waterbodies are within the Onshore Study Area and comprise of small field ponds to larger ponds which are fisheries.

Figure 1: Onshore Study Area (September 2022)



1.3 Legislative context

1.3.1 *Relevant designated sites definitions*

Special Protection Area (SPA)

SPAs are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

Sites of Special Scientific Interest (SSSI)

SSSIs are notified under Section 28 of the Wildlife and Countryside Act 1981. Notification is a statement of scientific value which does not carry prohibitive powers. However, a SSSI is given certain protection against damaging operations, and any such operations should be authorised by the designating body. The status also affords a certain amount of planning protection, depending on the reasons for designation.

The Countryside and Rights of Way (CROW) Act 2000 made some significant changes to SSSI legislation in England and Wales, such that the law was strengthened giving greater power to the designating body to enter into management agreements, to refuse consent for damaging operations, and to take action where damage is being caused through neglect or inappropriate management. Local Authorities and other public institutions now also have a statutory duty to further the conservation and enhancement of SSSIs both in carrying out their operations, and in exercising their decision-making functions, which includes planning decisions.

1.3.2 ***Relevant non-designated sites definitions***

Natural England's Natural Areas

Natural England has identified over 140 Natural Areas, covering the land surface and the coast of England, each of which can be characterised by its unique combination of wildlife, landform, land use and human history. The boundaries of these Natural Areas do not necessarily follow administrative boundaries but relate instead to variations in the character of the landscape. They provide the framework for much of Natural England's work, and are important for achieving, enabling and promoting nature conservation in England. These are also related to Landscape Character Areas (LCA), which offer restraints on development that may impact on the aesthetic ('character') of the landscape; however, this report is focused on nature conservation and the relevant LCA will not be considered further.

1.3.3 ***Protected species***

The European Habitats Directive (92/43/EEC) and The European Birds Directive (2009/147/EC) form the cornerstone of Europe's nature conservation policy and are promulgated into UK legislation via The Wildlife and Countryside Act 1981 (as amended in the 2000 CRoW Act) and The Conservation of Habitats and Species Regulations 2010. An overview of the principal legislation and the EU Directives is provided below:

The Conservation of Habitats and Species Regulations 2017

The Habitats and Species Regulations 2017 primarily provide measures for the protection of European sites and European protected species. They also require Local Planning Authorities to include policies encouraging the management of features in the landscape that are of major importance for wild flora and fauna.

The Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act is the major legal instrument for wildlife protection in the United Kingdom and was implemented to comply with the European Habitats and Birds Directives. Sites of Special Scientific Interest (SSSI) are notified under Section 28 of the Act. It gives protection to native species (especially those under threat), controls the release and spread of invasive non-native species, enhances the protection of SSSIs and provides comprehensive protection of wild birds and their nests and eggs.

The Habitats Directive (92/43/EEC)

The Habitats Directive is one of the EU's two directives in relation to wildlife and nature conservation, the other being the Birds Directive. It aims to protect some 220 habitats and approximately 1,000 species listed in the Directive's Annexes. Annex I covers habitats, Annex II species requiring designation of Special Areas of Conservation (SAC), Annex IV species in need of strict protection, and Annex V species whose taking from the wild can be restricted by European law. These are species and habitats which are considered to be of European interest, following criteria given in the directive.

The Birds Directive (2009/147/EC)

The Directive relates to all naturally occurring birds in the wild within the European Community, addressing the protection, management and control of these species and lays down rules for their exploitation. The provisions apply to birds, their eggs, nests and habitats. Under the EU Birds Directive all bird species naturally occurring on the European territory of the EU are protected. Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

The species listed in Annex I of the Birds Directive are, according to the Directive, those in danger of extinction, rare, vulnerable to specific changes in their habitat or requiring particular attention for reasons of the specific nature of their habitat. Currently, there are 195 species or sub-species listed on Annex I, many of which are even threatened at global level.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are the main regulations aimed at protecting hedgerows in their own right. These regulations are a part of the planning regulations. They are administered by the district councils in England, county councils or county borough councils in Wales, and by National Park Authority and Broads Authority. These regulations, intended to protect important countryside hedges from removal, apply only in England and Wales. It is against the law to remove most hedges without permission, with removal being defined as uprooting or otherwise destroying a hedgerow. Serious damage to the root system or over-maintenance resulting in the death of the hedgerow counts as removal.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities Act places a duty on public authorities to conserve wider biodiversity in addition to the statutory protection given to certain sites and species. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

A list of 56 habitats and 943 species was subsequently drawn up to fulfil the requirements of the act. Under Section 41, public bodies such as local authorities and utilities companies have a 'duty to conserve' these habitats and species of principal importance. The S41 list supersedes previous lists generated through the UK BAP process.

Protection of Badgers Act 1992

This Act was created to protect badgers from persecution and cruelty. It makes it an offence to harm, injure or kill a badger and also to disturb a badger whilst in the sett; the act also outlaws certain specific acts of cruelty. It goes further to protect badger setts from damage, destruction and obstruction.

A licence can be obtained which will enable the holder to undertake certain actions which otherwise would be an offence; this could include, disturbance of a badger and a sett closure.

METHODOLOGY

2.1 Desk Study

Biological records data was requested from the North and East Yorkshire Ecological Data Centre (NEYEDC), this included information relating to statutory and non-statutory sites of nature conservation, protected, priority and notable species and habitats within the Onshore Study Area and the appropriate buffer. Record Centres, such as NEYEDC tend to collate records from numerous sources including specialist groups such as bat groups and bird groups. If additional data sets, outside of those held by the NEYEDC are identified, these will be acquired and presented in any subsequent reporting.

In addition, the Multi-Agency Geographic Information for the Countryside (MAGIC) website was accessed (June 2022) to identify statutory designated sites of international importance up to 15km from the Onshore Study Area.

In producing this report, the desk-based study has been undertaken of the Onshore Study Area. Further refinements to the Onshore Study Area will be made as the Projects are further developed. Consequently, any additional data that may be identified, in the event that the Onshore Study Area is realigned, will be incorporated into final reports and considered in the Environmental Statement (ES).

2.2 Constraints

The biological records data from NEYEDC is generated from many sources and quality and accuracy cannot be guaranteed. This is not a definitive data set and a lack of data in any particular area does not necessarily denote an absence of species or habitats. Records tend to be concentrated around residential areas, wildlife sites and popular visitor locations.

The biological records data that has been used to inform this report is up to 20 years old; older data is available and has not been included; the data used is considered wholly adequate for the purpose of this report.

2.2.1 *Lifespan of Data*

The biological records data included within this desk study report are generated by third parties and accuracy cannot be guaranteed by the authors. The data itself remains valid for any subsequent report; however, additional data may become available and would serve to compliment the information already generated. It is therefore recommended that any additional data is acquired and incorporated into the ES.

RESULTS

3.1 Desk Study

3.1.1 Designated Sites

Table 1 includes a list of statutory designated wildlife sites for nature conservation which lie within 2km of the Onshore Study Area, internationally important sites are included when they lie within 10km of the Onshore Study Area. Statutory designated sites are included in Appendix A, Figure 1.

Table 1: Statutory designated sites identified during the desk study

Site Name	Description
SPA	
Greater Wash SPA	The site is important for both breeding and non-breeding sea birds and is particularly important for species such as red-throated diver and little gull.
Hornsea Mere SPA	A large shallow waterbody with associated fen, carr woodland and reedswamp of particular value for various bird species particularly over-wintering gadwall. The site is also important for over-wintering golden eye, pochard, shoveller and tufted ducks. The site is also important for post-breeding mute swan.
SSSI	
Burton Bushes SSSI	Ancient woodland and rich woodland species, dominated by oak, mainly <i>Quercus robur</i> , with a well-developed understorey.
Bryan Mills Field SSSI	A fen habitat supporting stands of lesser pond sedge, greater tussock-sedge, common reed, reed sweet-grass, meadowsweet, great willowherb, common valerian and blunt-flowered rush. Numerous other marsh and fen species are also present.
Hornsea Mere SSSI	Important reedswamp, fen and carr woodland habitats with a rich aquatic macrophyte assemblage. Over-wintering birds, including many species of duck and breeding gadwall and shoveler. Other bird species that use the habitat include breeding reed warbler and roosts of starling.
Leven Canal SSSI	A good range of emergent and riparian plants with extensive beds of common reed and common clubrush
Pulfin Bog SSSI	One of the last remnants of a fenland reedswamp community in the Hull Valley, valued for its botanical interest and the extensive reedbed. Various breeding birds including reed bunting and sedge warbler
River Hull Headwaters SSSI	Britains most northerly chalk stream. Various tributaries which vary in structure and support a range of aquatic and emergent species including, stream water-crowfoot, lesser water parsnip, mares-tail, Canadian waterweed, spiked water-milfoil, fennel pondweed, curled pondweed, shining pondweed and flat-stalked pondweed. Various other plants including a range of emergent species and river water-dropwort at the northern limit of its distribution.

Skipsea Bail Mere SSSI	A geological site important for the underlying lake deposits. Its ecological importance lies with the pollen and macrofaunal record that extends from the Devensian Late Glacial period.
Tophill Low SSSI	Two artificial storage reservoirs which support nationally important concentrations of Gadwall, Shoveler and Tufted Duck together with locally important populations of Goldeneye, Great Crested Grebe, Mallard, Pochard, Teal and Wigeon. The reservoirs also attract a wide range of other wildfowl species throughout the year, particularly during spring and autumn migration.
Withow Gap, Skipsea SSSI	A geological SSSI with underlying late Devensian and Flandrian measures, some of which are exposed in a coastal section. A valuable record of pollen, plant macrofossils and molluscs.

In addition to the statutory designated wildlife sites outlined in Table 1, the following non-statutory designated sites area located within 2km of the Onshore Study Area:

- Arram Carrs Local Wildlife Site (LWS);
- Beverley Westwood LWS;
- Fraisthorpe Beach LWS;
- Low Wood, Wassand LWS; and
- Tophill Low LWS.

3.2 Habitats

3.2.1 *Natural Areas*

With regard to Natural Areas, in order to provide a clearer picture of the context of the designated wildlife sites and habitats, it is useful to provide an overview of the wider landscape in this part of East Yorkshire. This is best achieved by including a summary of Natural Character Area (NCA) Holderness (NE437) as described by Natural England; all of the land within the Onshore Study Area is enclosed within Holderness.

“Holderness [Natural Area] is a rural, low-lying, undulating plain with the broad, shallow valley of the River Hull flowing southwards through the centre towards Hull. The river eventually joins the expansive Humber Estuary where it becomes tidal, enclosed by flood banks, and drains into the North Sea.

The National Character Area (NCA) is bounded by the dip slope of the Yorkshire Wolds to the north and west, while eastwards, beyond the coastline of soft boulder clay cliffs, lies the North Sea. Rapid erosion of these cliffs is a conspicuous feature of this NCA, and forms part of an important coastal process of sediment transfer. Holderness is the single most important source of sediment in the southern North Sea: the sediment is carried south to the Humber, the Lincolnshire coast and the Wash, where it feeds beaches and through accretion helps intertidal habitats to adjust to rising sea levels.”

The land uses Onshore Study Area are predominantly arable and pasture farmland, comprised of large fields, with sparse woodland and tree cover, resulting in an open, exposed landscape. Key nature conservation features within Holderness Natural Area (NCA Profile: 40: Holderness (NE437)) include The River Hull and its riparian fringes, wetlands, woodland, hedges and scrub and farmland. The full descriptions of these are available on the Natural England website (<http://publications.naturalengland.org.uk/publication/8569014>).

3.2.2 *Watercourses and waterbodies*

From reviewing information provided RWE Renewables and Ordnance Survey (OS) Mastermap, over 70 ponds and numerous ditches have been identified to be within the Onshore Study Area. All of these features have the potential to support legally protected and/or notable species (for example but not limited to great crested newts *Cristatus triturus*, water voles *Arvicola terrestris*) and therefore will require further consideration and/or species-specific surveys to be undertaken.

3.2.3 *Hedgerows*

Due to the dominant land use within East Yorkshire being arable there are many hedgerows present within the Onshore Study Area. These will be subject to further consideration and/or targeted hedgerow surveys to determine whether they meet the criteria of 'important hedgerows' under the Hedgerow Regulations 1997. Furthermore, consideration of these hedgerows to support legally protected and/or notable species (for example but not limited to foraging/commuting/roosting bats) will be required and where required species-specific surveys undertaken.

3.3 *Species*

A total of 1420 species records were received from the NEYEDC incorporating approximately 187 species. A summary of these records is presented in Table 2 below and maps for selected species or groups, namely, Flowering plants, Birds, Terrestrial Mammals (exc. Bats) and Bats have been included in Appendix B, Figures 1A to 1D.

Table 2 – Summary of NEYEDC Records

Group	Number of Species	Number of Records	Number of Locations
Amphibians – Great Crested Newt (GCN) only	1	17	6
Amphibians – exc. GCN	4	23	14
Reptiles	2	10	9
Insects	6	17	11
Bony Fish	4	17	14
Agnatha (Lamprey)	2	4	4

Group	Number of Species	Number of Records	Number of Locations
Marine Mammals	1	1	1
Terrestrial Mammals – exc. bats	10	172	100
Mammals – bats only, exc. roosts	7	85	81
Mammals – bats only, roosts	7	283	225
Fungi	1	1	1
Fern (Azolla sp.)	1	1	1
Conifers	1	8	8
Flowering Plants	69	392	328
Birds	75	389	326

The maps in Appendix B show how the records are biased towards urban areas and locations with large numbers of visitors. Records are also biased towards animals and plants that are more easily seen and recognised; this may explain the low numbers of fungi records. Other low numbers, such as conifers, may reflect the low numbers of this group of trees in the area. The spatial distribution and the difference in numbers reinforces the fact that it is difficult to draw conclusions on this type of data. Nonetheless, the large amount of data does make it useful and particularly when considered alongside current habitat data it can influence any additional species-specific survey work. Some of the key groups and species are described further below. In describing the protection received under legislation only the unlawful actions which could be relevant are described. For example, in most cases it is an offence to take a protected species from the wild and an offence to keep or sell that species; these offences are considered less relevant and have not been described below.

Amphibians

Five amphibian species were returned with the NEYEDC biological data records. The majority of amphibian records were for great crested newt *Triturus cristatus* and these were largely from Swine Moor Common and Catwick; smooth newt *Lissotriton vulgaris* was also present at these two locations. Common toad *Bufo bufo* was present at two locations, this species, along with great crested newt, is included on the Section 41 (NERC Act) Species of Principal Importance list. All amphibians are protected against injury and killing under the Wildlife & Countryside Act 1981, great crested newts receive additional protection under the act and under the Conservation of Habitats and Species Regulations 2017; they are protected against disturbance and protection is extended to their breeding sites and places of shelter.

The dataset included one record for Marsh frog *Pelophylax ridibundus*; this species is not native to the UK and in some parts of the country it is invasive. It is included on Schedule 9 of the Wildlife and Countryside Act.

Reptiles

Of the seven records, six were for grass snake *Natrix natrix* and one was for adder *Vipera berus*; the majority of records were between 2009 and 2013. The most recent record was a grass snake seen in 2016.

It would be unlikely to find any of the rarer native reptile species, the more common species are protected under the Wildlife & Countryside Act 1981 against Injuring and killing.

Insects

Six insect records were returned by NEYEDC, comprising three beetle species and three butterflies.

Birds

Of the 75 bird species, 12 were Schedule 1 species as listed in the Wildlife & Countryside Act 1981.

The Royal Society for the Protection of Birds (RSPB) has produced a list; Birds of Conservation Concern 5 (2021). This list categorises bird species into three lists, Red, Amber and Green; of the records received 19 were Red List species and 25 Amber List, the remainder being on the Green List. The Schedule 1 species and Red List species have been included in Table 3 below.

Under the Wildlife & Countryside Act 1981 all wild birds are protected from killing and injuring, although some exceptions may apply. All nests, including eggs and chicks, are protected against taking, damaging and destroying. Under the same act, Schedule 1 species receive greater protection.

Table 3 – Schedule 1 and Red List Bird Species

Common Name	Scientific Name	Sch. 1	Red
Black Redstart	<i>Phoenicurus ochruros</i>	✓	
Cuckoo	<i>Cuculus canorus</i>		✓
Curlew	<i>Numenius arquata</i>		✓
Eurasian Whimbrel	<i>Numenius phaeopus</i>	✓	✓
Grasshopper Warbler	<i>Locustella naevia</i>		✓
Green Sandpiper	<i>Tringa ochropus</i>	✓	
Greenfinch	<i>Chloris chloris</i>		✓
Grey Partridge	<i>Perdix perdix</i>		✓
Hen Harrier	<i>Circus cyaneus</i>	✓	✓
Hoopoe	<i>Upupa epops</i>	✓	
House Martin	<i>Delichon urbicum</i>		✓
House Sparrow	<i>Passer domesticus</i>		✓
Kingfisher	<i>Alcedo atthis</i>	✓	

Lapwing	<i>Vanellus vanellus</i>		✓
Linnet	<i>Carduelis cannabina</i>		✓
Little Ringed Plover	<i>Little Ringed Plover</i>	✓	
Marsh Harrier	<i>Circus aeruginosus</i>	✓	
Marsh Tit	<i>Poecile palustris</i>		✓
Mistle Thrush	<i>Turdus viscivorus</i>		✓
Peregrine	<i>Falco peregrinus</i>	✓	
Red Kite	<i>Milvus milvus</i>	✓	
Skylark	<i>Alauda arvensis</i>		✓
Starling	<i>Sturnus vulgaris</i>		✓
Swift	<i>Apus apus</i>		✓
Tree Sparrow	<i>Passer montanus</i>		✓
Barn Owl	<i>Tito alba</i>	✓	
Yellow Wagtail	<i>Motacilla flava</i>		✓
Whooper Swan	<i>Cygnus cygnus</i>	✓	
Woodcock	<i>Scolopax rusticola</i>		✓
Yellowhammer	<i>Emberiza citrinella</i>		✓

Terrestrial Mammals (excluding bats)

Records included a short list of mammals with ten species, the most relevant of which would be the European protected otter *Lutra lutra* (Conservation of Habitats and Species Regulations 2017) and water vole both of which have full protection under the Wildlife and Countryside Act 1981. Other species of interest included hedgehog *Erinaceus europaeus*, brown hare *Lepus europaeus* and water shrew *Neomys fodiens*. Five records for badger *Meles meles* were included as well as records of the non-native mink *Neovison vison* and grey squirrel *Sciurus carolinensis*.

Badgers have their own legislation, the Protection of Badgers Act 1992, this makes it an offence to disturb, injure or kill a badger, it also protects their setts. Mammals in general are also protected under the Wild Mammals (Protection) Act 1996, which makes it an offence to be cruel to a wild mammal.

Bats

The bat species data is divided into two types, firstly the sightings of bats and secondly bat roosts. The 85 'sighting' records were dominated by common pipistrelle *Pipistrellus pipistrellus* (66 records); of interest was a record of the parti-coloured bat *Vespertilio murinus* a European mainland species rarely found in the UK. The data has been displayed in Appendix B Figure 1D, this shows a concentration around Beverley and demonstrates the close association of bats and properties where some species will commonly roost.

The roost data comprised 283 records; unfortunately, 85 of these are recorded only as bats *Vespertilionidae*. Of the remaining records, 93 are included as pipistrelle *Pipistrellus* sp. and 60 are attributed to common pipistrelle.

All bats are fully protected at UK and European level by the Wildlife & Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017. This means that they are protected against disturbance, injury and killing and protection is extended to their roost sites, even when they are not present.

A summary of species recorded is included in Table 4.

Table 4 – Bat species records

Common Name	Scientific Name	Sighting Record	Roost Record
Daubenton's	<i>Myotis daubentonii</i>	✓	✓
Whiskered	<i>M. mystacinus</i>	✓	✓
Natterer's	<i>M. nattereri</i>		✓
Noctule	<i>Nyctalus noctula</i>	✓	✓
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	✓	✓
Soprano pipistrelle	<i>P. pygmaeus</i>		✓
Nathusius' pipistrelle	<i>P. nathusii</i>	✓	
Brown long-eared	<i>Plecotus auritus</i>	✓	✓
Parti-coloured	<i>Vespertilio murinus</i>	✓	

Flowering Plants

NEYEDC returned many records of flowering plants; the majority of which were common species. One plant, the native bluebell *Hyacinthoides non-scripta* is listed on Schedule 8 of the Wildlife and Countryside Act 1981 and therefore is protected under the Act. Four species, listed in Table 5 below, are included as Species of Principal Importance in the NERC Section 41 list.

Table 5 – Important flowering plant species

Common Name	Scientific Name	Sch. 8	S. 41
Bluebell	<i>Hyacinthoides non-scripta</i>	✓	
Cornflower	<i>Centaurea cyanus</i>		✓
Tubular water-dropwort	<i>Oenanthe fistulosa</i>		✓
Greater water-parsnip	<i>Sium latifolium</i>		✓
Perfoliate penny-cress	<i>Thlaspi perfoliatum</i>		✓

The list of flowering plants included many non-native species, some of which are considered invasive. Those species which are listed on Schedule 9 of the Wildlife and Countryside Act 1981 are included in Table 6.

Table 6 – Desk study non-native invasive plant species.

Common Name	Scientific Name
Canadian waterweed	<i>Elodea canadensis</i>
Cotoneaster	<i>Cotoneaster sp.*</i>
Curly waterweed	<i>Lagarosiphon major</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>
Indian/Himalayan balsam	<i>Impatiens glandulifera</i>
Japanese knotweed	<i>Fallopia japonica</i>
Japanese rose	<i>Rosa rugosa</i>
New Zealand pigmyweed	<i>Crassula helmsii</i>
Rhododendron	<i>Rhododendron ponticum</i>
Water fern	<i>Azolla filiculoides</i>

*Only included to genus level, five species are included in Schedule 9

FURTHER SURVEY REQUIREMENTS

3.4 Recommendations

This report may need to be updated should the Onshore Study Area be refined to such a degree that it would warrant a refreshed desk study. Any additional data that may be identified, in the event that the Onshore Study Area is realigned, will be incorporated into final reports and considered in the Environmental Statement (ES).

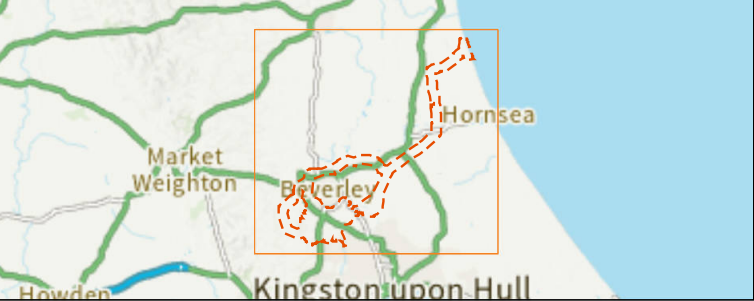
REFERENCES

Multi-Agency Geographic Information for the Countryside Website.

CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.

British Standards Institution (BS 42020:2013). Biodiversity. Code of practice for planning and development.

APPENDIX A – STATUTORY DESIGNATED SITES MAP

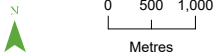


Survey Information	
	Onshore study area (21/08/22)
	Site of Special Scientific Interest (SSSI)
	Special Protection Area (SPA)

Additional Information:

Only SSSIs and SPAs within 2km of the onshore study area are shown on the map.

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PROJECT TITLE

DOGGER BANK SOUTH

DRAWING TITLE

Figure 1. Statutory Designated Wildlife Sites

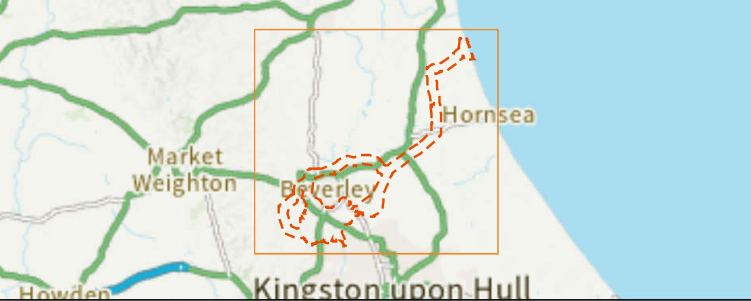
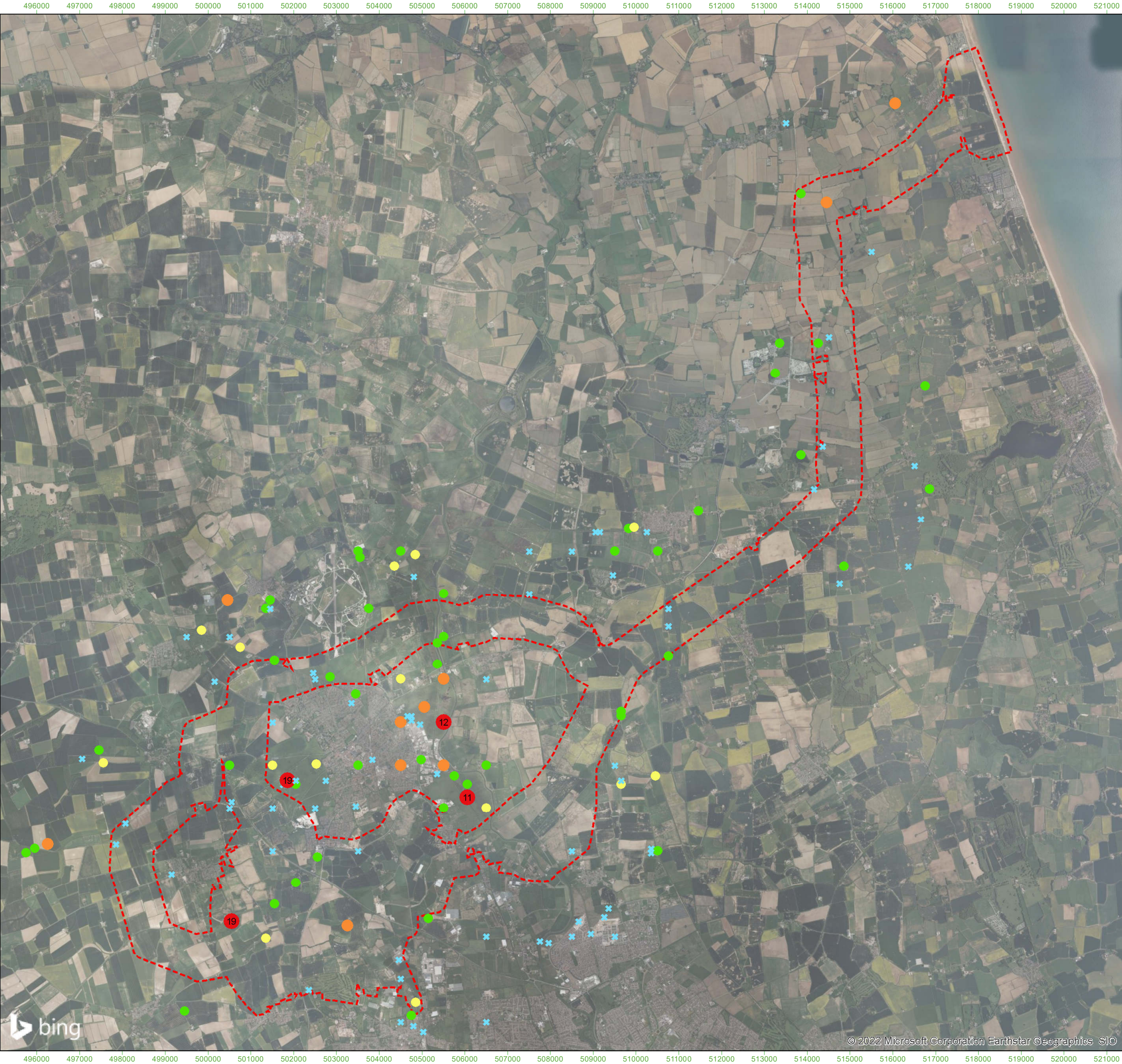
VER	DATE	REMARKS	Drawn	Checked
1.1	06/12/22	Designations	MP	JB

DRAWING NUMBER:

PeakEcology/DB2//Designations/SSSISPA

 peakecology LIMITED ECOLOGICAL CONSULTANTS	Arden House, Deepdale Business Park, Bakewell, Derbyshire, DE45 1GT. www.peakecology.co.uk		DATUM	OSGB
			PROJECTION	BNG
			PLOT SIZE	A3
			SCALE	1:87,000

APPENDIX B - SELECTED DESK STUDY DATA MAPS



Survey Information	
	Onshore study area (21/08/22)
	1 search record
	2-3 search records
	4-5 search records
	6-10 search records
	>10 search records

Additional Information:

Only records within 2km of the onshore study area (21/08/22) are shown.

Number associated with a point refer to the number of records when more than ten records are coincident.

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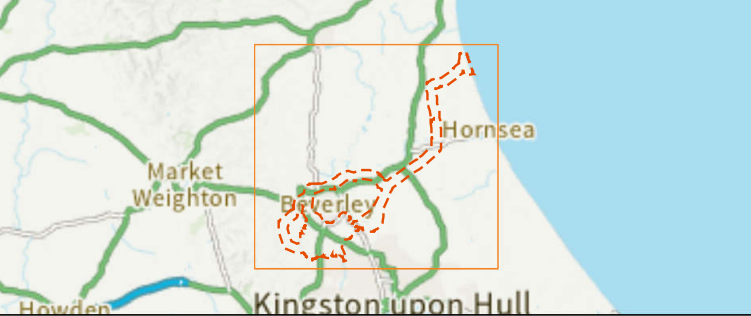
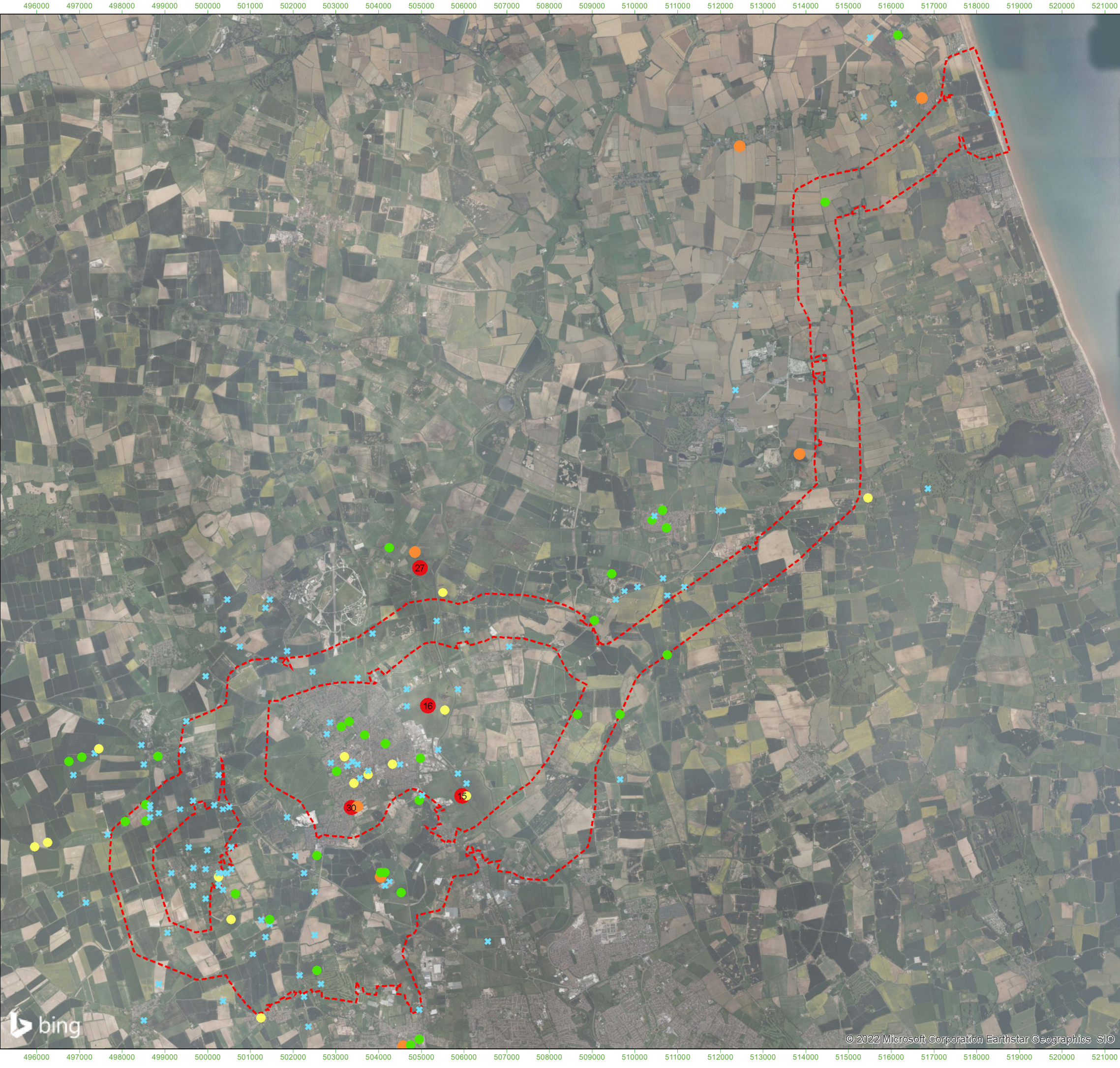
DOGGER BANK SOUTH

DRAWING TITLE				
Figure 1A. Flowering Plants Search Data - Grouped				
VER	DATE	REMARKS	Drawn	Checked
1.0	07/10/22	Flowering Plants	MP	CP

DRAWING NUMBER:

PeakEcology/DB2/Search/flowering plant

 peakecology LIMITED ECOLOGICAL CONSULTANTS	Arden House, Deepdale Business Park, Bakewell, Derbyshire, DE45 1GT. www.peakecology.co.uk	DATUM	OSGB
		PROJECTION	BNG
		PLOT SIZE	A3
		SCALE	1:87,000



Survey Information	
	Onshore study area (21/08/22)
	1 search record
	2-3 search records
	4-5 search records
	6-10 search records
	>10 search records

Additional Information:

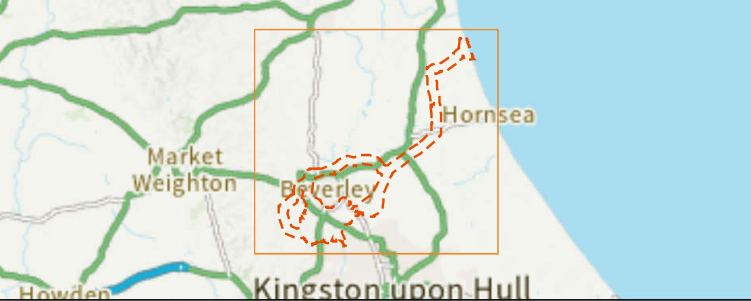
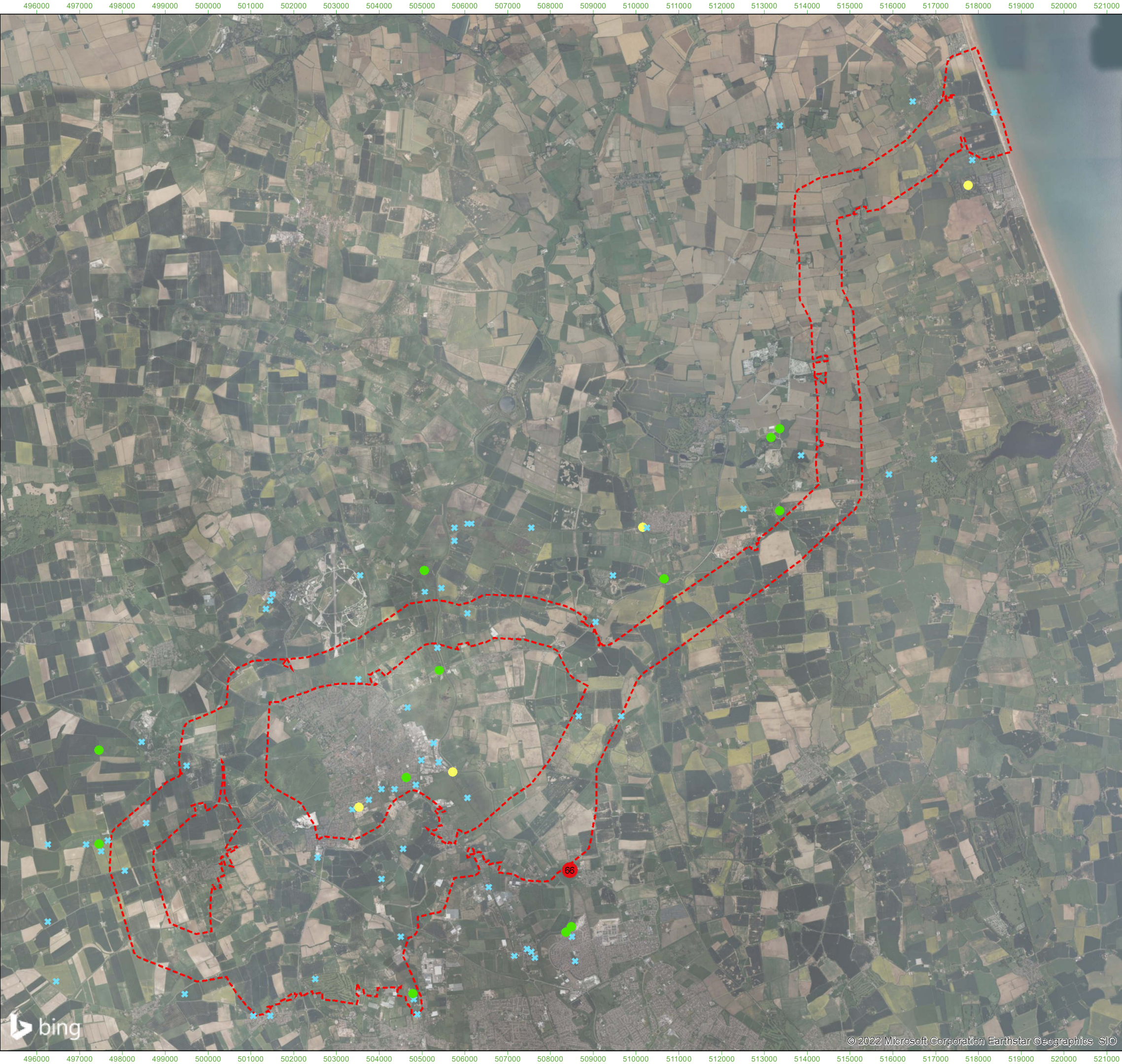
Only records within 2km of the onshore study area (21/08/22) are shown.

Number associated with a point refer to the number of records when more than ten records are coincident.

Source:
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0 500 1,000
Metres

PROJECT TITLE				
DOGGER BANK SOUTH				
DRAWING TITLE				
Figure 1B. Birds Search Data - Grouped				
VER	DATE	REMARKS	Drawn	Checked
1.0	07/10/22	Birds	MP	CP
DRAWING NUMBER:				
PeakEcology/DB2/Search/bird				
 peakecology LIMITED ECOLOGICAL CONSULTANTS		Arden House, Deepdale Business Park, Bakewell, Derbyshire, DE45 1GT. www.peakecology.co.uk		
		DATUM	OSGB	
		PROJECTION	BNG	
		PLOT SIZE	A3	
		SCALE	1:87,000	



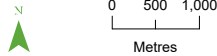
Survey Information	
	Onshore study area (21/08/22)
	1 search record
	2-3 search records
	4-5 search records
	6-10 search records
	>10 search records

Additional Information:

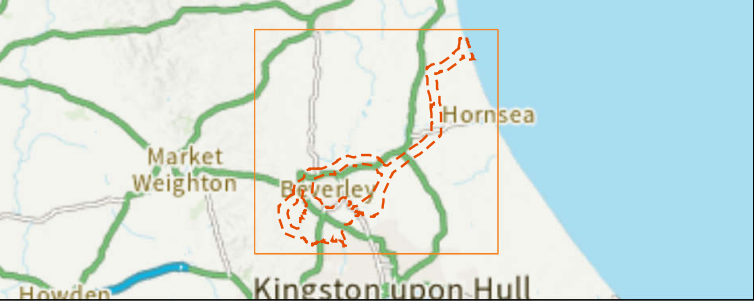
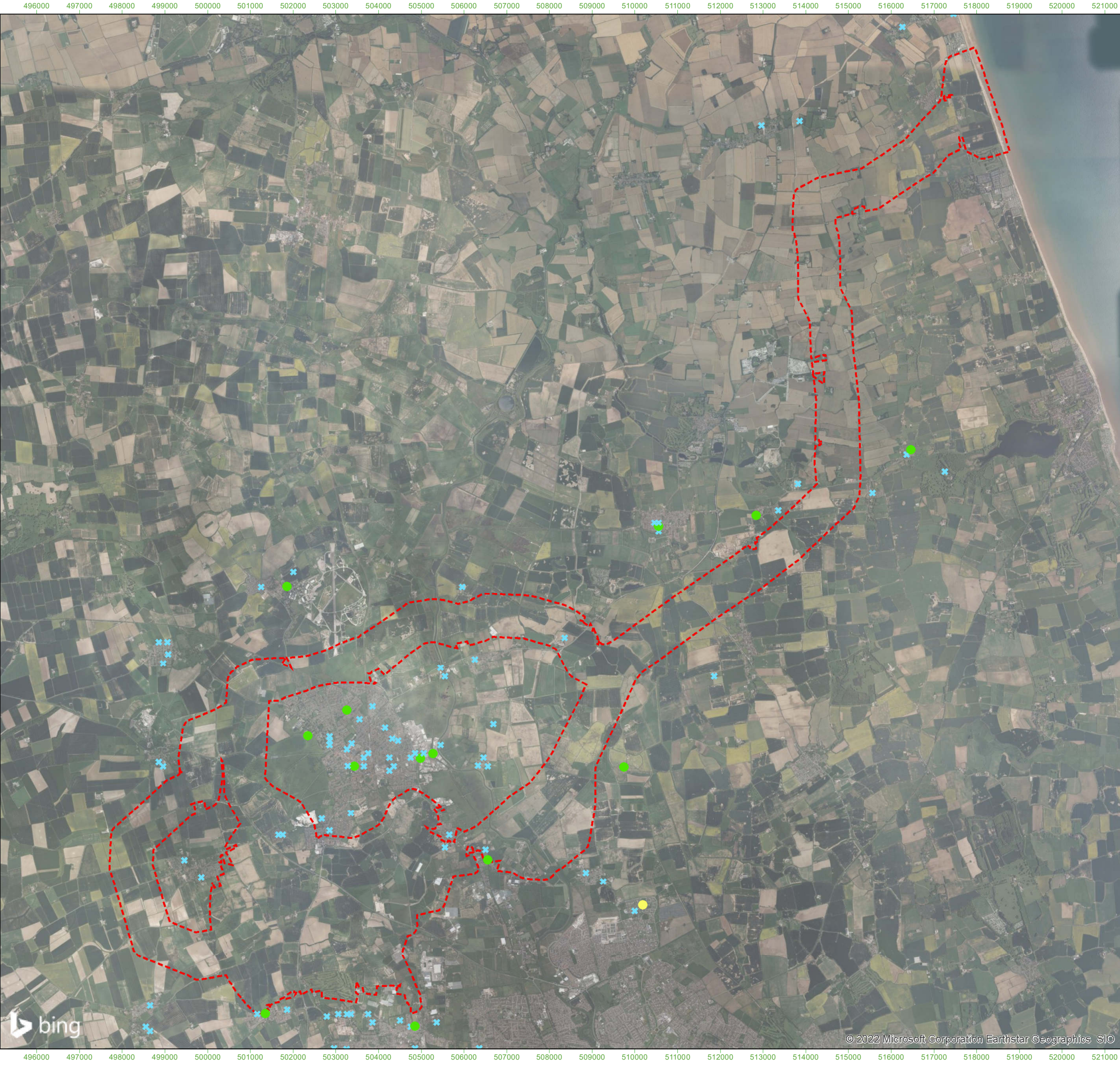
Only records within 2km of the onshore study area (21/08/22) are shown.

Number associated with a point refer to the number of records when more than ten records are coincident.

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PROJECT TITLE				
DOGGER BANK SOUTH				
DRAWING TITLE				
Figure 1C. Terrestrial Mammals Search Data - Grouped				
VER	DATE	REMARKS	Drawn	Checked
1.0	07/10/22	Terrestrial Mammals	MP	CP
DRAWING NUMBER:				
PeakEcology/DB2/Search/terrestrial mammal				
peakecology ECOLOGICAL CONSULTANTS			DATUM	OSGB
			PROJECTION	BNG
			PLOT SIZE	A3
			SCALE	1:87,000



Survey Information	
	Onshore study area (21/08/22)
	1 search record
	2-3 search records
	4-5 search records
	6-10 search records
	>10 search records

Additional Information:

Only records within 2km of the onshore study area (21/08/22) are shown.

Number associated with a point refer to the number of records when more than ten records are coincident.

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PROJECT TITLE

DOGGER BANK SOUTH

DRAWING TITLE				
Figure 1D. Bats Search Data - Grouped				
VER	DATE	REMARKS	Drawn	Checked
1.0	07/10/22	Bats	MP	CP

DRAWING NUMBER:
PeakEcology/DB2/Search/terrestrial mammal - bat

 peakecology LIMITED ECOLOGICAL CONSULTANTS	Arden House, Deepdale Business Park, Bakewell, Derbyshire, DE45 1GT. www.peakecology.co.uk		DATUM	OSGB
			PROJECTION	BNG
			PLOT SIZE	A3
			SCALE	1:87,000