

NBIS Metadata

Species Data

The NBIS database currently holds over 8.9 million species records covering all the major taxon groups. We are always aiming to increase our data holdings, particularly for species and geographical areas for which records are currently sparse.

TEMPORAL COVERAGE

NBIS hold species records from 1600 to present. Earlier records are usually to year with more recent records having a full date. There are a small number of records with unknown date. While large datasets are generally updated annually by the County Recorders and other groups, records are received throughout the year.

GEOGRAPHICAL COVERAGE

The species records held cover the entire administrative boundary of Norfolk including the marine environment; however the west of the County is less well covered than elsewhere. Data resolution varies between and within taxa. Uneven coverage is due to casual recording and surveying effort being localised. Overall, the majority of records are at 1km or 100m resolution. See metadata for individual taxon groups for more details.

METHODS OF DATA CAPTURE

Data have been collected via a variety of methods, including surveys by specialist groups, reports written by ecological consultants as part of the planning process and from NBIS staff and members of the public. The purpose of data capture is to record the species of Norfolk.

ACCURACY OF RECORDS

The majority of records submitted to NBIS are verified by the network of County Recorders. The remaining records are verified in-house by NBIS staff prior to their inclusion on the database. Some unintentional inaccuracies may be present. Records are entered onto an ORCA database which validates them on input with regards dates and grid references.

CONFIDENTIAL RECORDS

NBIS holds a small number of confidential records which are not released in data searches. Access to these records is via the data owner or the appropriate County Recorder.

PRIORITY SPECIES RECORDS

NBIS holds 624623 records of Biodiversity Action Plan Priority species and 1258707 records of Section 41 (Priority) species. The currency and precision are summarised below:

BAP

11% of records are from 2017-2022; 32% are from 2012-2017; 36% are from 2002-2012. The remainder were recorded before 2002.

4% of records have a grid reference resolution of 1m; 1% have a resolution of 10m; 21% of records have a grid reference resolution of 100m (a 6 figure grid reference); 55% of records have a resolution of 1km; 11% of records have a tetrad (2x2km) resolution and 8% are recorded to 10km.

Section 41

13% of records are from 2017-2022; 32% are from 2012-2017; 36% are from 2002-2012. The remainder were recorded before 2002.

2% of records have a grid reference resolution of 1m; <1% have a resolution of 10m; 11% of records have a grid reference resolution of 100m (a 6 figure grid reference); 66% of records have a resolution of 1km; 13% of records have a tetrad (2x2km) resolution and 8% are recorded to 10km.

FURTHER INFORMATION

NBIS holds records for the majority of taxa found in the county. However, updates of some taxon groups have not been received recently. Please contact us for details of particular taxonomic groups.

Negative records are included in data searches and are displayed in eMapper with a minus sign.

SPECIFIC KNOWN DATA GAPS

Stone Curlew, Nightjar and Woodlark – While we do hold some records of these three bird species, our data holdings are currently incomplete. NBIS recommends requesting RSPB data via their [data portal](#) for areas where these three species are likely to occur, particularly in the Brecks.

Farm Environment Plans - We do carry out searches for, but additional data should always be sought from other organisations who hold more relevant data for this type of request and be supported by sufficient survey.

Marine searches – We can provide data for the marine environment, but this is limited. NBIS recommends using our data to supplement information obtained by using **MarLIN** as a starting point.

DATA SECURITY

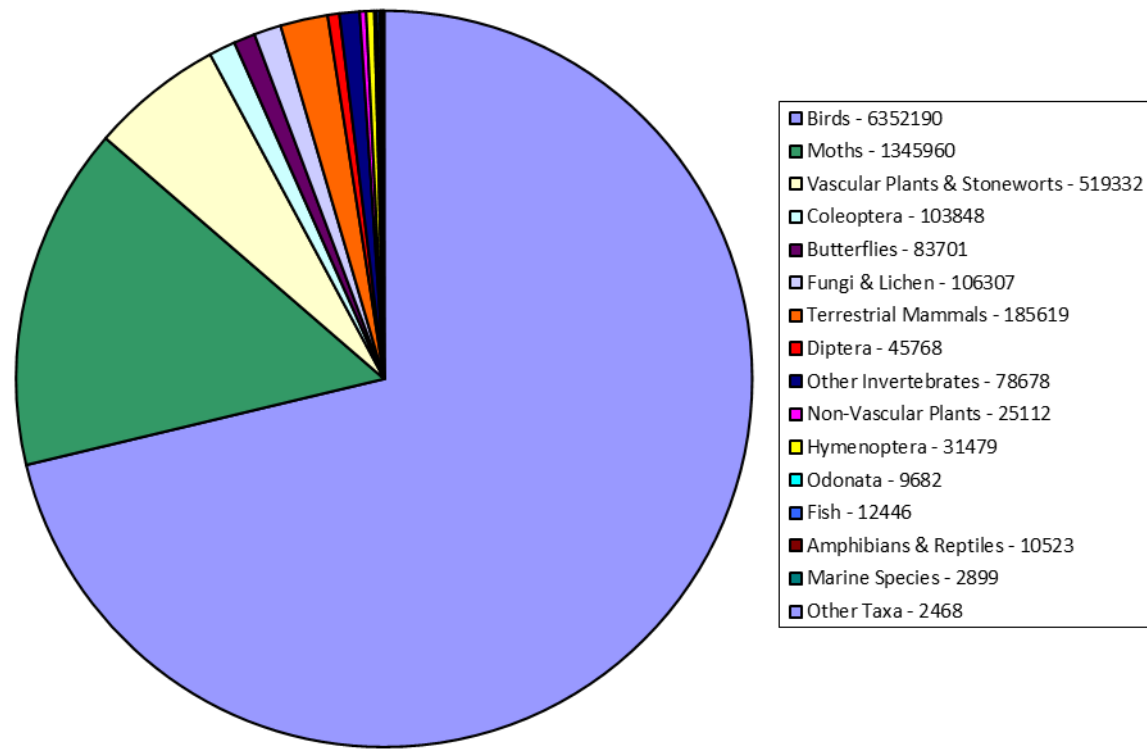
Records are kept on a password-protected, secure ORCA database which is maintained by Cofnod. The data is backed up to a cloud service every 15 minutes. The Cofnod system is maintained in accordance with their Disaster Recovery Plan.

Paper copies of records which have been digitised in house are scanned in and retained electronically on the secure Norfolk County Council server in case future reference is necessary. These files are backed up daily.

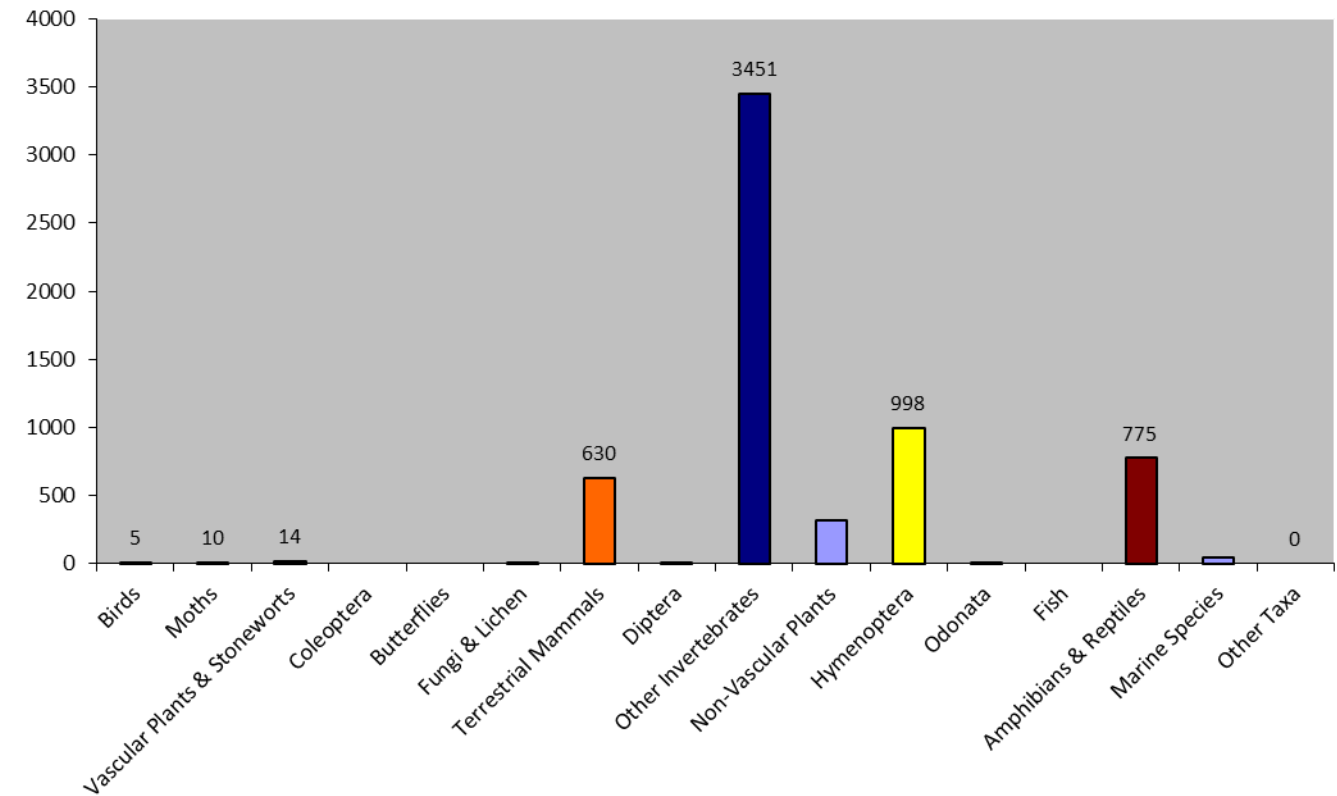
Most paper files are held within the Norfolk Archive Centre, with a small number of files in frequent use stored in the NBIS office.

INDIVIDUAL TAXONOMIC GROUPS

Total Number of Records Held



Number of Negative Records



First and Last Record Dates

Taxon Group	Earliest Record	Latest Record
Moths	1762	2017
Vascular Plants & Stoneworts	1670	2017
Birds	1605	2019
Coleoptera	1762	2021
Butterflies	1827	2018
Fungi & Lichen	1800	2020
Terrestrial Mammals	1705	2021
Diptera	1762	2019
Other Invertebrates	1600	2022
Non-Vascular Plants	1795	2017
Hymenoptera	1858	2020
Odonata	1800	2019
Fish	1898	2019
Amphibians & Reptiles	1741	2020
Marine Species	1910	2020
Other Taxa	1900	2019

Geographical Coverage

Overall there is a good coverage of records across the county, though records tend to be sparser towards the west of the county.

Moths – Coverage across Norfolk. Records focussed on light trap locations.

Vascular Plants & Stoneworts – Throughout Norfolk.

Birds – Good coverage across Norfolk.

Coleoptera – Throughout Norfolk. Concentrations of records in the Broads and Brecks.

Butterflies – Records throughout Norfolk. Concentrations in the north and east of the county.

Fungi & Lichen – Good coverage to the east of the county, sparser further west.

Terrestrial Mammals – Good coverage throughout Norfolk, but slightly sparser to the west of the county.

Diptera – Fewer records in the west of the county. Concentrations of records in The Broads and Brecks.

Other Invertebrates – Throughout Norfolk. Concentrations around waterways and The Brecks.

Non-Vascular Plants – Concentrations to south and east of the county. Sparser to the north and west.

Hymenoptera – Throughout Norfolk, but sparser to the west of the county.

Odonata – Records from across the county but higher density in the Broads.

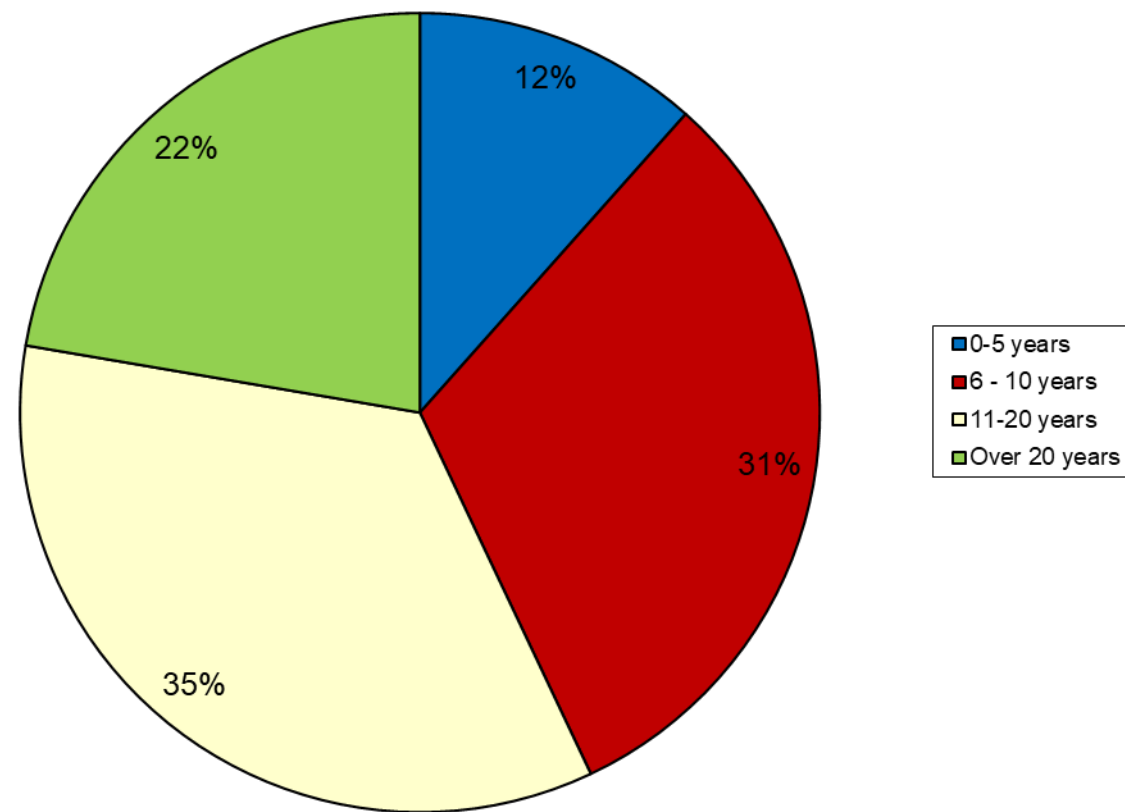
Fish – Throughout Norfolk.

Amphibians & Reptiles – Throughout Norfolk, but sparser to the west of the county.

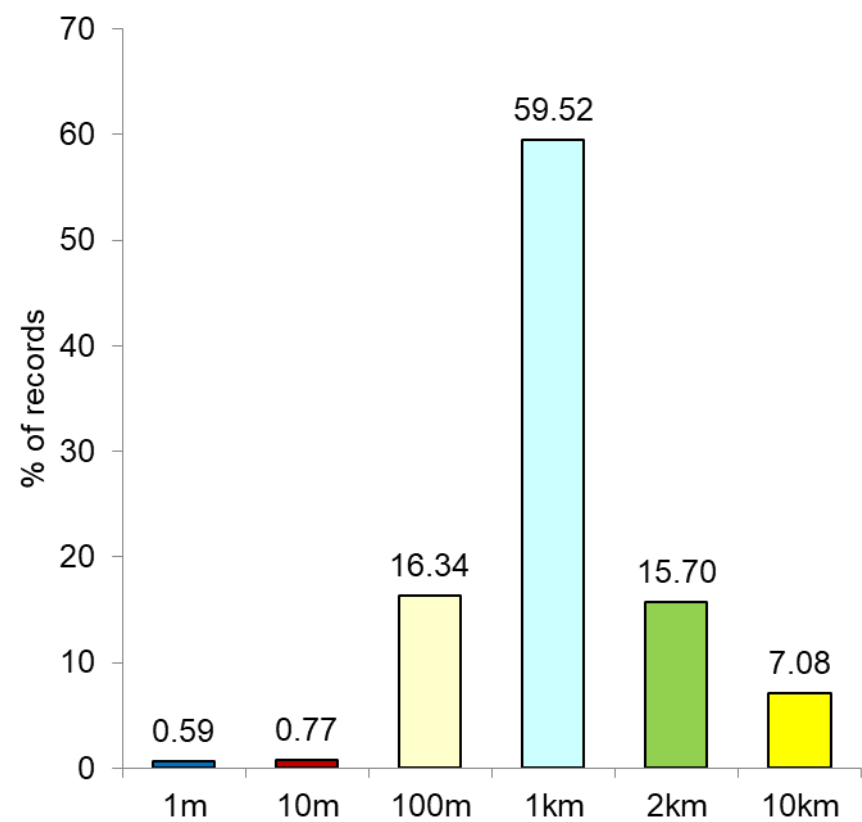
Marine Species – Good coverage around the coast of Norfolk

Other Taxa – Sparse coverage across the county.

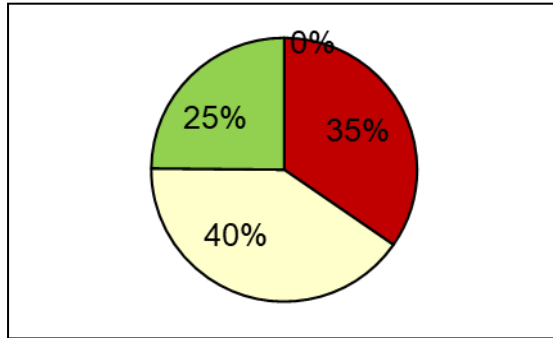
Overall Record Currency



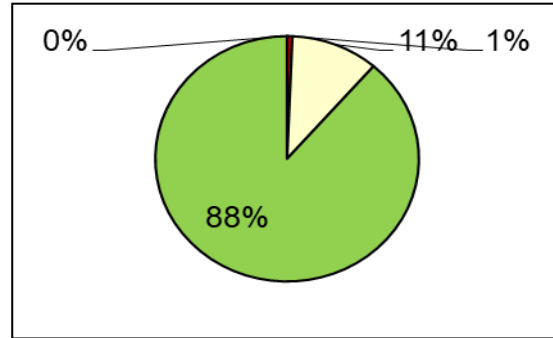
Overall Records Resolution



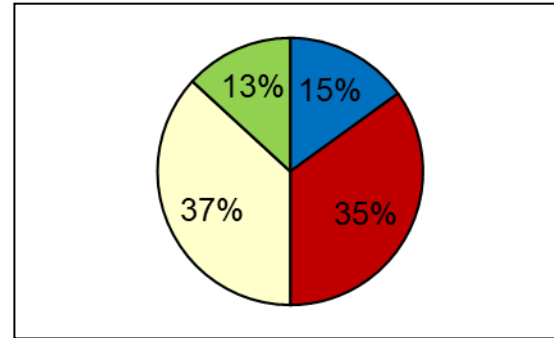
Records Currency by Taxon Group



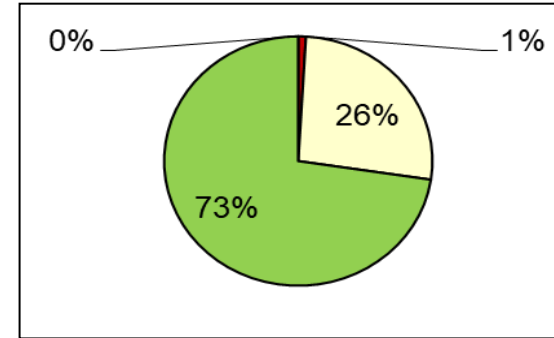
Moths



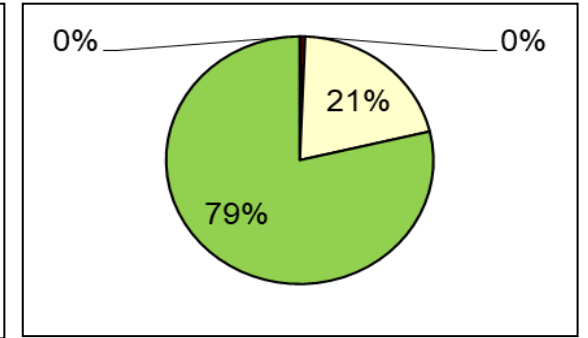
Vascular Plants & Stoneworts



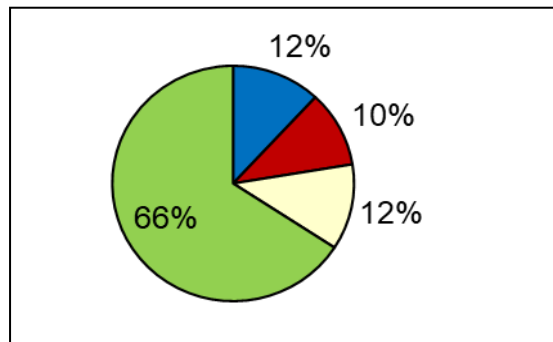
Birds



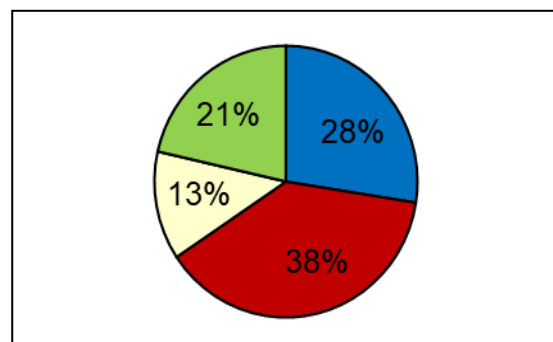
Coleoptera



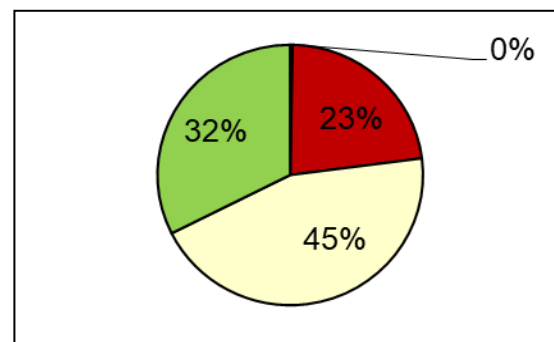
Butterflies



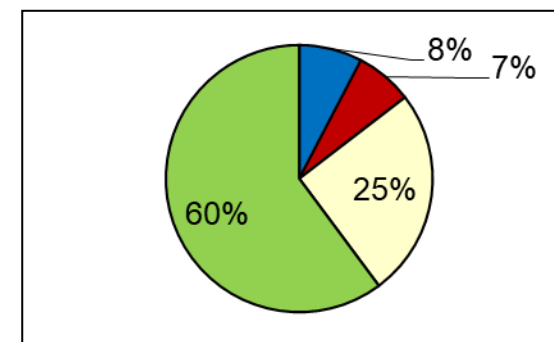
Fungi & Lichen



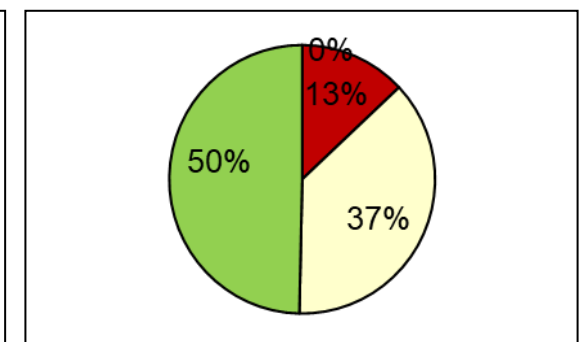
Terrestrial Mammals



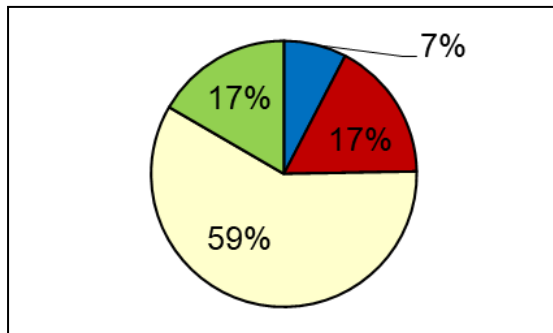
Diptera



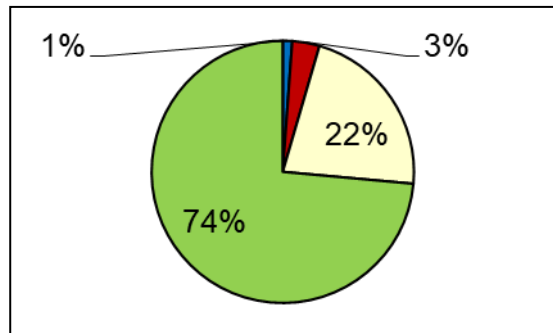
Other Invertebrates



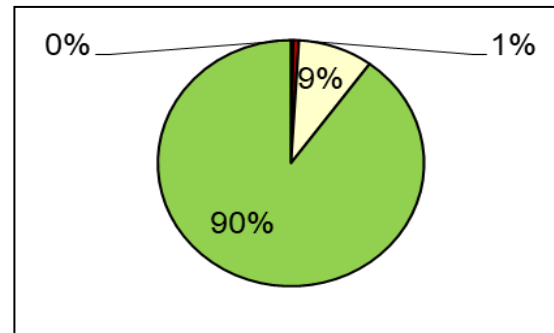
Non-Vascular Plants



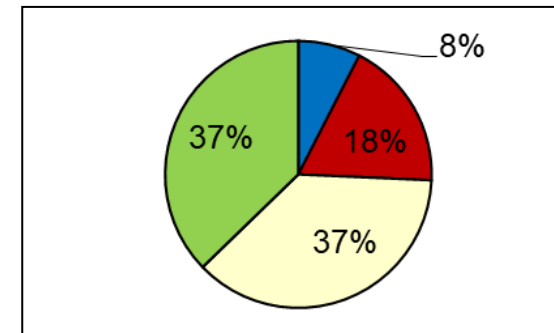
Hymenoptera



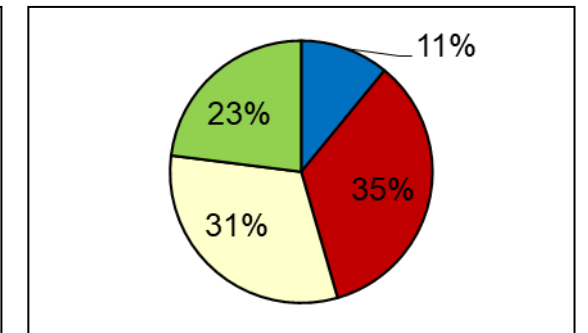
Odonata



Fish



Amphibians & Reptiles

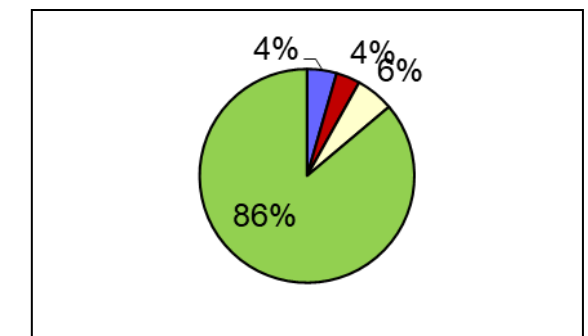


Marine Species

KEY

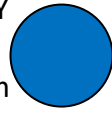
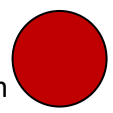
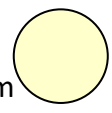
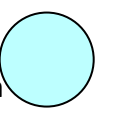

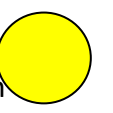
● 1 – 5 years old
 ● 6 – 10 years old
 ● 11 – 20 years old
 ● >20 years old

Please note, 0% means less than 1%.



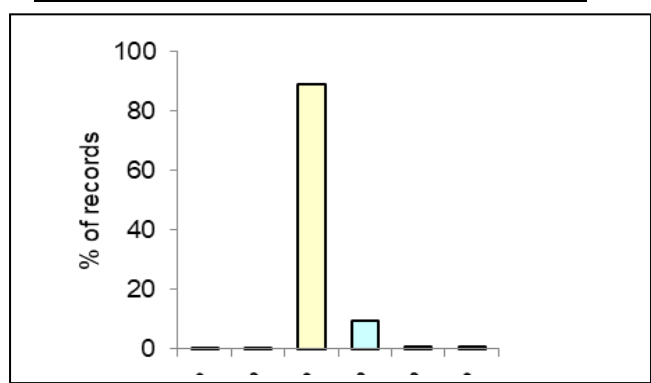
Other Taxa

KEY

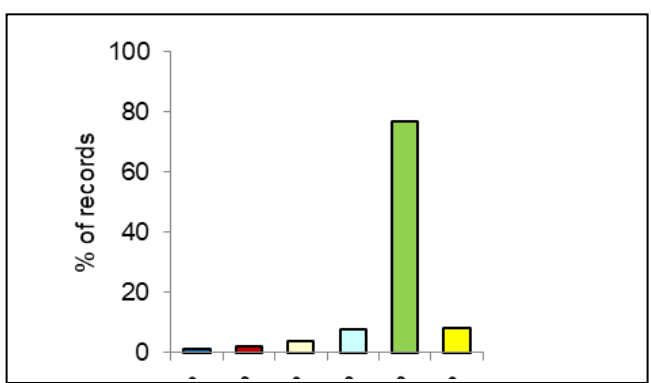
1m  10m  100m  1km  2km  10km 

Please note, 0% means less than 1%.

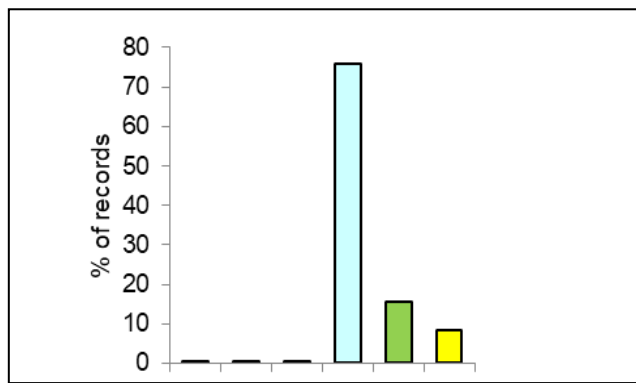
Records Resolution by Taxon Group



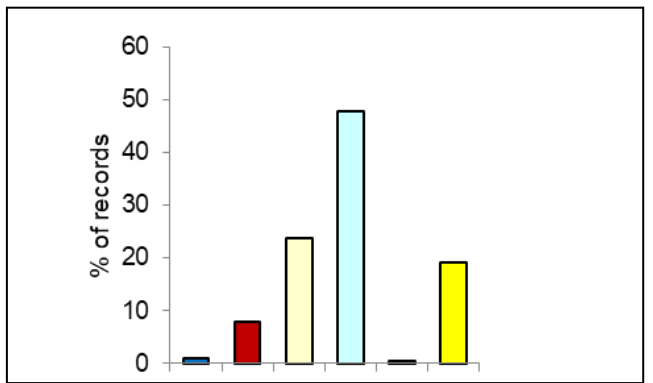
Moths



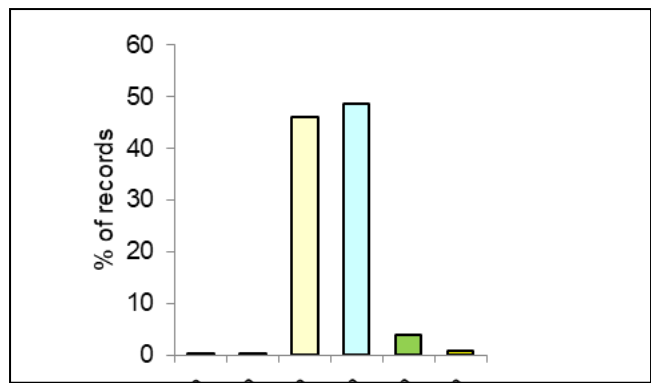
Vascular Plants & Stoneworts



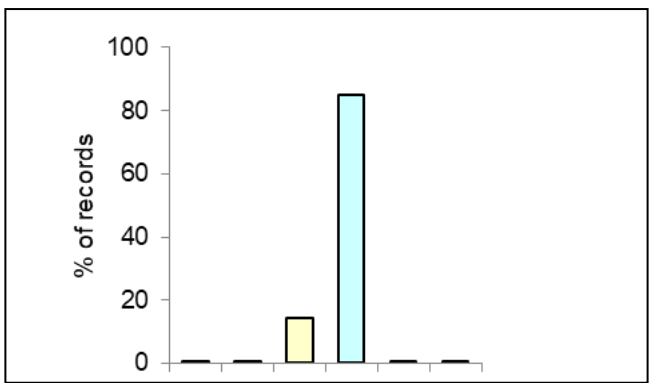
Birds



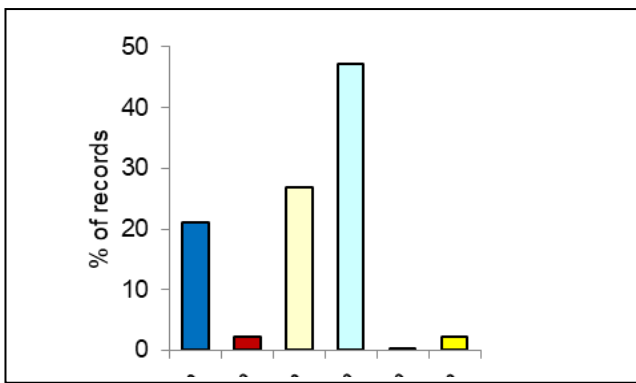
Coleoptera



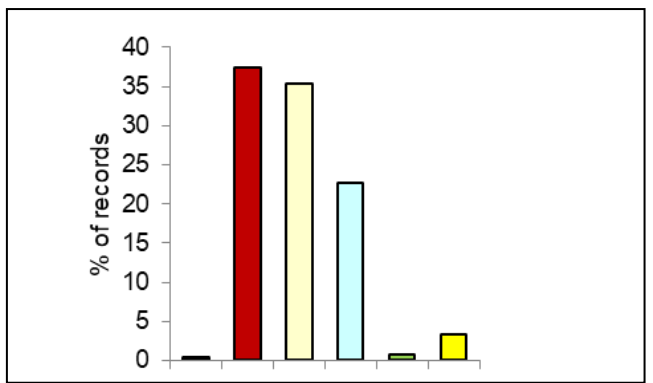
Butterflies



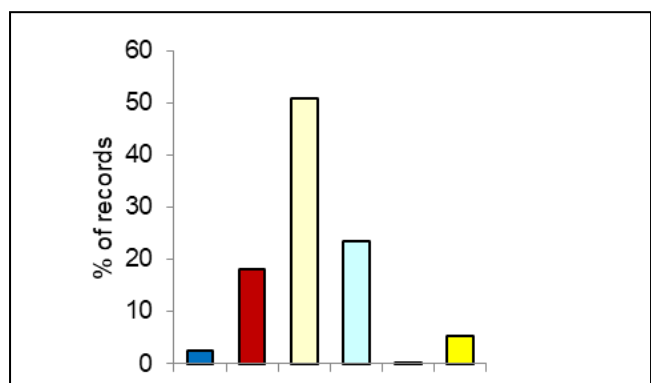
Fungi & Lichen



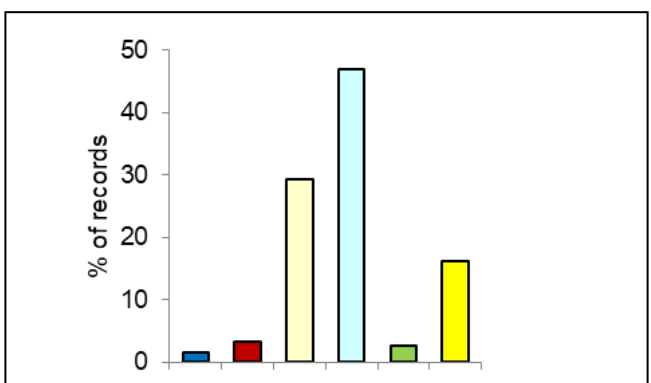
Terrestrial Mammals



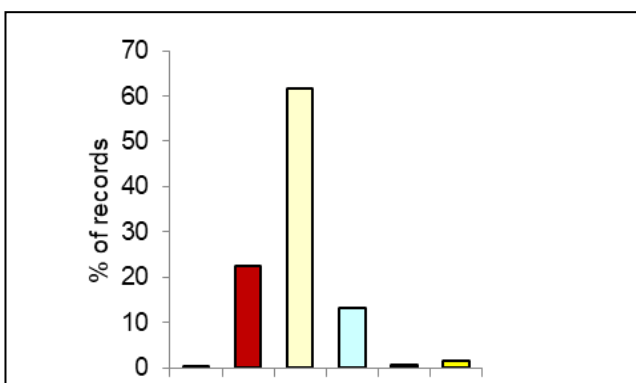
Diptera



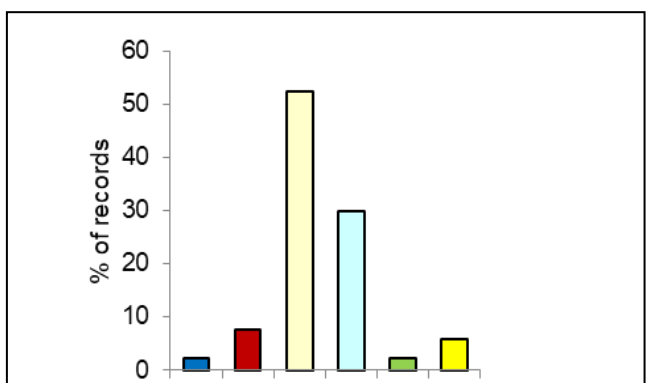
Other Invertebrates



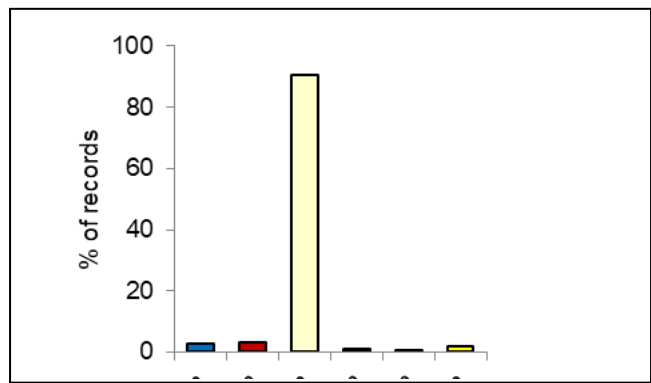
Non-Vascular Plants



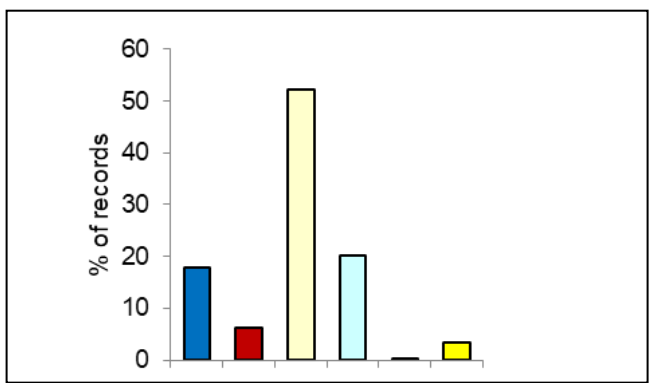
Hymenoptera



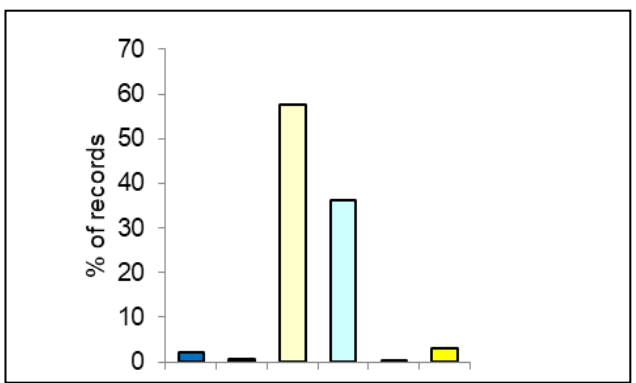
Odonata



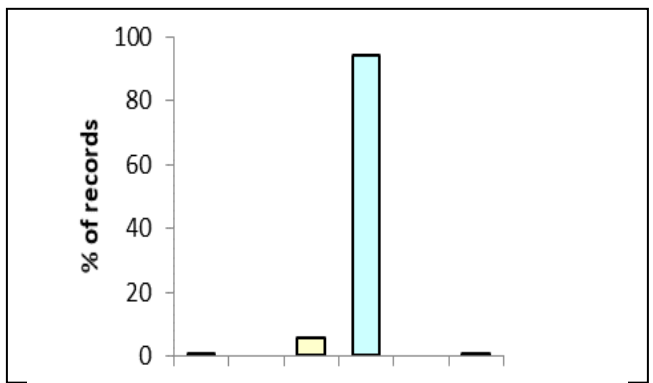
Fish



Amphibians & Reptiles



Marine Species



1m 10m 100m 1km 2km 10km

SITE INFORMATION

NBIS holds site boundary information for the following sites:

Site Type	Date Last Updated	Origin	Designator	Extent	Use Restrictions
Ramsar	12/10/2022	Natural England	JNCC	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Special Areas of Conservation (SAC)	12/10/2022	Natural England	JNCC	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Special Protection Areas (SPA)	13/10/2022	Natural England	JNCC	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Sites of Special Scientific Interest (SSSI)	12/10/2022	Natural England	Natural England	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Sites of Special Scientific Interest Units (SSSI Units)	12/10/2022	Natural England	Natural England	Norfolk	Based on OS MasterMap so valid licence required for GIS files
SSSI Impact Risk Zones	02/08/2022	Natural England	Natural England	Norfolk	Based on OS MasterMap so valid licence required for GIS files
National Nature Reserves (NNR)	12/10/2022	Natural England	Natural England	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Local Nature Reserves (LNR)	12/10/2022	Natural England	Local Authorities	Norfolk	Based on OS MasterMap so valid licence required for GIS files
County Geological Sites (CGS)	01/11/2018	Norfolk Geodiversity Partnership	Norfolk Geodiversity Partnership	Norfolk	Based on OS MasterMap so valid licence required for GIS files
County Wildlife Sites (CWS)	13/10/2022	Norfolk CWS Partnership	Norfolk CWS Partnership	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Roadside Nature Reserves (RNR)	12/08/2022	Norfolk County Council	Norfolk County Council	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Ancient Woodland Inventory	12/10/2022	Natural England		Norfolk	Based on OS MasterMap so valid licence required for GIS files
Candidate County Geodiversity Sites	23/11/2020	Norfolk Geodiversity Partnership	Norfolk Geodiversity Partnership	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Important Bird Areas (IBA)	25/11/2020	Royal Society for the Protection of Birds	Royal Society for the Protection of Birds	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Important Invertebrate Areas (IIA)	08/04/2021	Buglife	Buglife	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Important Plant Areas (Specific Criteria (IPA))	17/12/2020	Plantlife	Plantlife	Norfolk	Based on OS MasterMap so valid licence required for GIS files
Veteran Trees	12/08/2022	Norfolk County Council		Norfolk	Based on OS MasterMap so valid licence required for GIS files

NBIS also holds site details of:

- County Wildlife Sites (Number, name and citation)
- Roadside Nature Reserves (Road name and number, the species for which they are designated and citation)
- Geodiversity Sites (Site name, site description, site type and geodiversity features)

and can provide links to citations of the other site types where available.

HABITAT MAPPING

NBIS holds habitat data mapped in various ways for 100% of the county area.

The habitat information currently used in data enquiries are from the Norfolk Living Map, which is summarised below. As a guide the accuracy of the living map is 80%, but this varies by habitat.

The rest of the habitat mapping held by NBIS consists of working files, which are specific to particular projects and are not made available for other uses due to issues such as incomplete coverage, poor currency or accuracy issues.

Habitat Dataset

Title: Norfolk Living Map

Abstract: Map produced by Environment Systems using a variety of aerial imagery, and ancillary datasets including OS MasterMap. Developed from the pilot stage analyses from the Defra and JNCC project "Making Earth Observation Work for UK Biodiversity – Phase 2". The purpose of the project was "to produce a habitat map of Norfolk by means of object-based analysis of remote sensing imagery. Images were segmented into objects representing individual land cover features using specified image bands and vector layers. Objects were then assigned to habitat classes based on habitat class rules that were developed from image band ratios, topographic characteristics or other contextual measures (such as distance from water). The classification process was hierarchical, such that initial classifications were resegmented into smaller objects and reclassified multiple times until the final class was reached." The report produced for this project was: Medcalf K. A., Parker J.A., Turton, N., and Bell, G. (2013) Making Earth Observation Work for UK Biodiversity Conservation – Phase 2. Report to the JNCC and Defra. Once the pilot areas were finalised, NBIS commissioned Environment Systems to produce the rest of the map for Norfolk.

Topic category: Environment

Temporal Extent: Map produced in 2013. Created using satellite and ancillary datasets from 2011-2012.

Dataset Reference Date: 21/06/2018 (last edit)

Lineage: Dataset created by Environment Systems with input from NBIS and as part of a Defra funded JNCC project.

Extent: Norfolk plus 1km buffer.

Precision: Mapped to OS MasterMap boundaries.

Spatial Reference System: British National Grid.

Data Format: MapInfo Tab File

Responsible Organisation: Norfolk Biodiversity Information Service (nbis@norfolk.gov.uk)

Frequency of Update: Irregular

Use constraints: Caveats must be read and understood prior to use. Mapped to OS MasterMap boundaries so recipients of the GIS files must hold a valid OS licence.

The following habitats and land uses are included in the Norfolk Living Map from Remote Sensing:

Habitat Type	Area (hectares)
Arable	343209.8
Bare Ground	312.9
Beach	499.98
Bracken	847.43
Coastal Floodplain & Grazing Marsh (Coastal)	1426.64
Coastal Floodplain & Grazing Marsh (High Productivity)	9317.25
Coastal Floodplain & Grazing Marsh (Low Productivity)	1899.1
Coastal Floodplain & Grazing Marsh (Medium Productivity)	5204.84
Coastal Dune Heathland	13.43
Coastal Saltmarsh (established)	2639.75
Coastal Saltmarsh (pioneer)	1462.19
Coastal Sand Dunes	527.2
Coastal Sand Dunes (Scrub)	60.81
Coastal Sediment	2107.14
Coniferous Plantation	10091.88
Dune Grassland	533.09
Felled Woodland	281.67
Fen, Marsh & Swamp	2263.8
Gardens	14525.29
Humid Dune Slacks	13.58
Improved (scrub)	32.48
Improved Grassland	24976.53
Lowland Heathland	810.38
Lowland Heathland (scattered)	326.33
Lowland Mixed Deciduous Woodland	31104.37
Maritime Cliff & Slope	102.47
Orchard	440.23
Scrub	6894.72
Semi-Improved Grassland (Poor Condition)	5451.67
Semi-Improved Grassland (Scrub)	1766.16
Semi-Improved Grassland	20566.12
Semi-Improved Grassland (Wet)	65.35
Urban	28811.92
Waterbodies	9289.8
Woodland Rides	1191.99