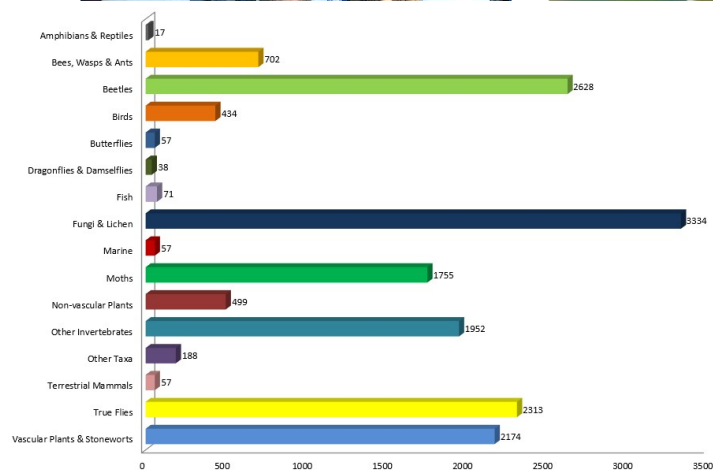


NBIS Annual Report 2018/19



Image © Bid-Rex

Image © Bid-Rex



Cream-spot tiger (© Chris Jones); *Carder Bee* (© Barry Madden); *Orange peel fungus* (© Tony Leech); *Southern Marsh-orchid* (© Graham Cresswell); *Sedge Warbler* (© Jo Hobart)



Introduction and NBIS objectives

The Norfolk Biodiversity Information Service (NBIS) is a Local Environmental Records Centre covering the county of Norfolk. NBIS is a member of the Association of Local Environmental Records Centres (ALERC) and operates within the framework of the National Biodiversity Network.

Thanks to its position and diverse range of habitats, over 16,300 different species have been recorded in Norfolk since 1670. The North Norfolk coast is a mecca for bird watchers, the Broads are a stronghold to the rare Norfolk Hawker dragonfly and Swallowtail butterfly, whilst the Brecks host several plant and invertebrate species unique to the area.

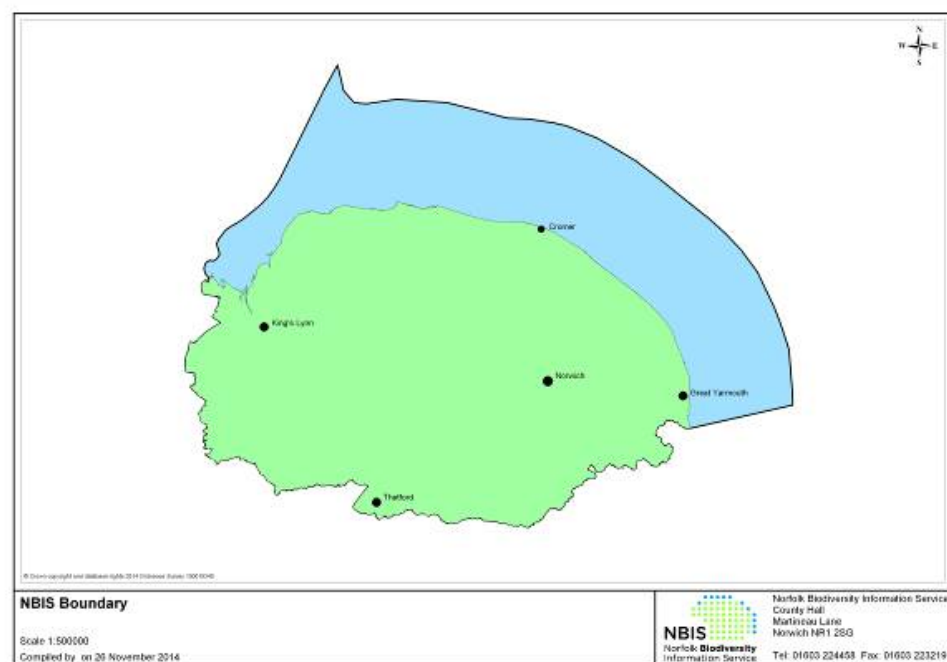
2328 of these species are classified as 'Species of Conservation Concern'. This means they are rare, threatened or protected by law. NBIS also holds 22,301 records of 56 invasive non-native species.

Based at County Hall, Norwich the service sits within the Environment Team of Norfolk County Council, part of the Communities and Environmental Services Department.

NBIS aims to be a single, central point for obtaining high quality environmental information for Norfolk, providing quick and easy access to information on species, geodiversity, habitats and protected sites.

To fulfil this aim NBIS operates under the principles set out in its [Operational Framework](#).

NBIS is guided and supported by a Steering Group that meets twice each year and is made up of representatives of its users. These include funding partners (County and District Councils, IDBs, Consultants and Environment Agency), Norfolk and Norwich Naturalists' Society, Norfolk Wildlife Trust, Rivers Waveney Trust, amongst others. The steering group now works under a [Terms of Reference](#) since our meeting in October 2015. These terms of reference are reviewed every 2 years and were reviewed and agreed in the October 2017 meeting and are due to be adopted in the January 2020 meeting.



Map showing the boundary of the NBIS area, including the marine component

Staff:

- Martin Horlock – Environment Manager (Information & Partnerships – Line manages NBIS staff.
- Sam Neal – Biodiversity Officer (Information) (1fte) – Manages the day-to-day running of NBIS and GIS and project work.
- Lizzy Oddy - Assistant Biodiversity Officer (Information) (0.61fte) - Data enquiries, data management & project work
- Nicola Dixon – Assistant Biodiversity Officer (Information) (1fte) – NBIS database cleaning and move to new system, data management & project work.
- Liam Dixon - Communities and Nature Assistant (1fte) – Public engagement and events, volunteer management, NBP assistance.

Volunteers (in-house):

- Tim Holt-Wilson (Candidate County Geodiversity Sites boundary mapping and attribute updating)

Much of the species data held by NBIS and made available for planning and conservation decision making is provided by the voluntary network of County Recorders. These people are members of the Norfolk and Norwich Naturalists Society and are experts in their taxonomic fields.

They provide or check all of the records going on to the NBIS database to ensure high quality data, spending hours of their own time verifying the records for us each year. We would like to express our thanks to these recorders and all the volunteers who record and gather species records over the year. Without the dedication and support of the recorders, County Recorders and volunteers we would struggle to be able to function as an effective Local Environmental Record Centre.

Partners

Our Service Level Agreement (SLA)/MOA partners for 2018/19:

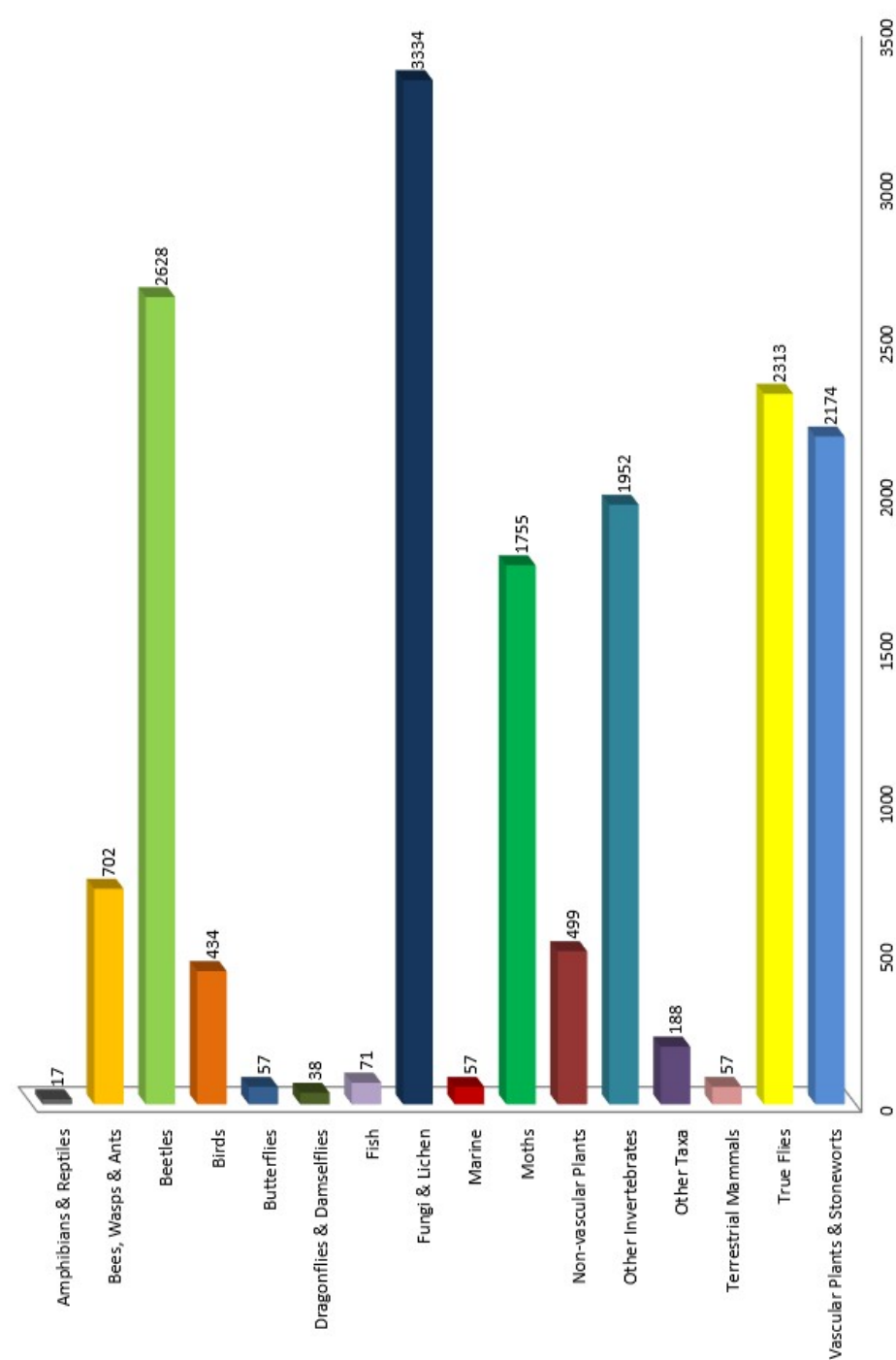
- Environment Agency
- Norfolk County Council
- South Norfolk District Council
- Anglian Water
- Breckland District Council
- 1 environmental consultant

We are currently in negotiation with several Local authorities, IDBs and utilities about continuing funding or establishing new SLAs.

11 ecological consultancies by March 2019 were bulk-buying data searches in a rolling programme.

The NBIS Steering Group, made up of funding and advisory partners meets regularly to ensure the sustainability and direction of NBIS. We are very grateful for the time and commitment that our Partners give in attending meetings and providing guidance. For more information see our Steering Group [Terms of Reference](#).

How many species have been recorded in Norfolk?



Species diversity in Norfolk, by taxonomic group (based on data held by NBIS, March 2019)

The NBIS database currently contains **3,337,680 species records** (as of 31st March 2019, including a number from our neighbouring counties of Suffolk and Cambridgeshire, collated as part of cross-county biodiversity audits).

Habitat and land-use mapping has now been completed for the whole county as part of a project trialling the use of remote sensing for habitat mapping.

Upload of data to the NBN Atlas

NBIS loads species data onto the National Biodiversity Network (NBN) Atlas online, this as one dataset containing the majority of verified and non-sensitive data NBIS holds. Details of metadata of this dataset can be provided on request. These data are visible to the public at 10km resolution.

Data Agreements (as of March 2019)

Current Data Agreements Type of Agreement	Organisation
Hosting Agreement	Norfolk County Council
Licence (negotiated annually)	Environment Agency
Service Level Agreement (negotiated annually)	South Norfolk District Council
Service Level Agreement (negotiated annually)	Breckland DC
Service Level Agreement	Anglian Water
Data exchange agreements	Norfolk Wildlife Trust; BTO.
We are working towards Data Exchange Agreements with our County Recorders	Norfolk and Norwich Naturalist Society and its members/ County Recorders
Draft data exchange agreement being discussed.	Wildfowl and Wetlands Trust; National Trust and others
We are in discussions for a SLA	North Norfolk DC
We are in discussions for a SLA	Broadland DC
We are in discussions for a SLA	King's Lynn and West Norfolk DC
We are in discussions for an agreement	IDBs

Green = live agreements; Orange are agreements in discussion.

Data Enquiries

Responding to data enquiries is a core function for NBIS and is a daily task. Requests come in from sources such as ecological consultants, conservation bodies, local authorities, students and interested members of the public; often wanting to know about protected species (and sites) in a particular area. NBIS aims to respond to all enquiries within 5 working days and to enquiries from our funding partners within 3 working days.

NBIS continues to operate the Regional Standard Enquiry Service. This service, the result of a 12-month project undertaken by NBIS, was developed with ecological consultants and will ensure that anyone requesting a data search for planning purposes from the region's LERCs will receive a standard set of protected species and site data within 10 days.

Number of each enquiry type processed each year:

	2014/15	2015/16	2016/17	2017/18	2018/19
Commercial Searches	285	386	439	444	541
Non-commercial Searches	63	74	37	49	69
Partner Searches (Including Districts)	57	20	17	9	19
TOTAL	405	480	493	502	629

Summary of general NBIS record centre statistics for the past 3 years

Stat	2015-16	2016-17	2017-18	2018-19
LRC size	2.33fte, plus volunteers)	2.33fte, plus volunteers and Year in industry)	2.33fte, plus volunteers and Year in industries)	3.61fte
Total number of species observations	2612119	3,171,900	3,250,635	3,337,680
Habitat data % cover?	100	100	100	100
Estimated % data on NBN Atlas	~75	~75	~75	~75
Number of local authorities with SLAs / partnership agreements	2	2	3	3
Number of data exchange agreements with voluntary groups or county recorders	0, but in discussions	7, in discussions with 15	12, in discussions with others	12, in discussions with others
Number of data enquiries	480	493	502	629
Total amount of time spent on these enquiries (hours)	260	X	X	X
Proportion of data enquiries that are non-chargeable (%)	15.41	7.51	9.76	10.97
Total amount of time spent on these enquiries (hours)	36	X	X	X
Average number of hours per week contributed by vols (office based)	7	25	6	5
Number of externally funded projects worked on	Estimate - 8	Estimate - 14	Estimate - 10	Estimate - 5

Local Sites Monitoring

On behalf of Norfolk County Council, NBIS monitors Single Data List 160-01 (previously National Indicator 197) – percentage of Local Sites (Wildlife and Geodiversity) in Positive Conservation Management (PCM). Data was submitted to Defra end of November 2019.

Government guidance published on 13th October 2014 states that public authorities can use this indicator to measure their commitment to the “**biodiversity duty**”, part of the **Natural Environment and Rural Communities Act 2006** - more details about this guidance [here](#). The data contributes to the Defra Biodiversity 2020 indicators which are used to measure the success of England’s biodiversity strategy.

The data submitted to Defra in November 2019 presented no percentage change in Local Sites in PCM (on the previous year) in Norfolk for the year 2018/19. A total of 76% of Local Sites are therefore in PCM.

On behalf of Norfolk County Council, NBIS undertakes the analysis of this indicator (with assistance from Norfolk Wildlife Trust) and reports the findings directly to Defra, as required under the SDL. The 2018/19 figures (for the period of 5 years up to March 31st 2019) can be viewed for Norfolk and by district in the PDF that can be obtained from NBIS: ‘**SDL-160 2018-19 district summary**’ ([available on request](#)). A map of sites in and NOT in PCM for the whole of Norfolk can be obtained from NBIS: ‘**SDL-160 2018-19 Results Map**’([available on request](#)). A PDF showing the changes in PCM over time compared to the England average is available from NBIS: ‘**PCM Trends 2019**’([available on request](#)).

NBIS has provided Annual Monitoring Report data to a number of local councils in 2018/19, as required.

County Wildlife Sites (CWS)

NBIS works with staff at Norfolk Wildlife Trust (NWT) and through the Local Sites Partnership to coordinate, create and provide to users the CWS annual update. Data and information for the 2019 update is available and downloadable to partners.

NBIS, volunteers and NWT have undertaken an exercise to assess the mapping of all CWS to ensure that they meet national standards and that any changes or losses to sites can be recorded.

This project is nearing completion with almost all of the 1300 sites remapped in GIS and new maps for citations produced. Completion of the program of ground-truthing is all that remains for the final by NWT.

Regional and National Collaboration

NBIS joins other Record Centres within the East of England and staff attended two regional Record Centre meetings during the year. The meetings facilitate discussion about sharing best practice, joint-working options and provide a regional overview.

Staff also attended the ALERC Conference in Birmingham in October 2019 and the NBN Conference in Nottingham in November 2019.

NBIS has continued to maintain a presence on the CWS steering group, Geodiversity Partnership group, Norfolk Ponds Project, Brecks Biodiversity Delivery Group and the Communities and Nature Working Group.

The Biodiversity Officer (information) represented NBIS on the council of the Norfolk and Norwich Naturalists' Society, and as a member of their Research Committee. Also, the officer represented NBIS on the advisory board for Orchards East and the Journal of Breckland Studies.

NBIS has continued membership of the Association of Local Environmental Records Centres (ALERC) and following the launch of the accreditation process in July 2012 NBIS began work to meet the necessary criteria in preparation for applying for accreditation in 2015. NBIS was assessed in August 2015 and following a successful result officially an accredited LERC. This means that NBIS demonstrated that we were meeting or exceeding a set of criteria draw up by ALERC to ensure LERC's are providing a good service to their users and providers. Accreditation is valid for 5 years, NBIS will be re-assessed in 2020.

Events

NBIS continues to promote its services through attending wildlife themed events.

In 2018/19 we attended the following:

- Wild about the Wensum (April)
- Seaweed ID workshop (NBIS organised and co-hosted with Marine County Recorders Rob Spray and Dawn Watson)
- Uk Habs training workshop (December)
- Wildlife in Common mini Conference (January 2019)

Supporting Recording

NBIS operates a fund to support wildlife recording in Norfolk. This fund consists of the monies raised from commercial enquiries during the previous year and is designed to reinvest in our local recording network to provide the records we need to process these enquiries. The fund runs during the financial year with any remaining monies rolling over to the next.

For 2018-19 our priorities were to gather species data from the following:

Under-recorded groups

Fish

Invertebrates

Non-native Invasive Species

Habitats

Farmland

Marine

Brownfield (Open Mosaic Habitats on Previously Developed Land – as defined in the new Biodiversity action Plan)

Areas

West Norfolk and the Fens

South Norfolk Claylands

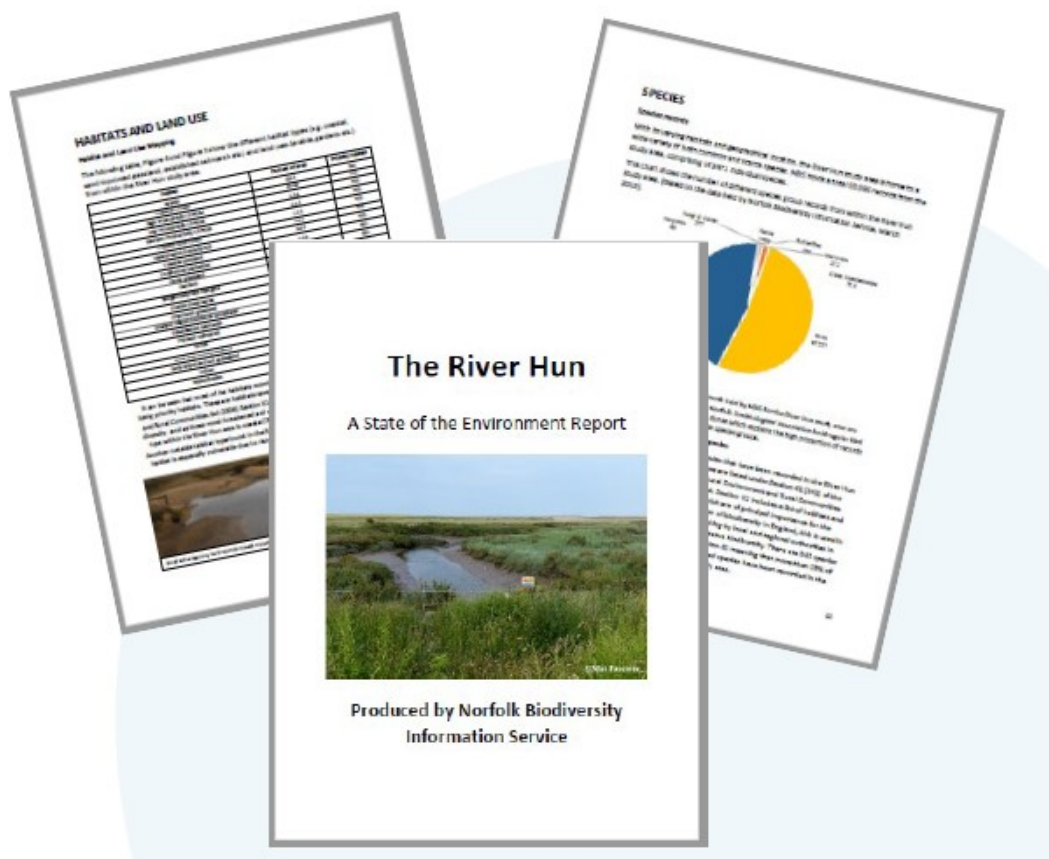
In 2018-19 no significant projects were funded

Projects

River Hun State of the Environment Report

In March 2019, NBIS compiled a State of the Environment Report for an area surrounding the River Hun in north-west Norfolk for the Norfolk Coast Partnership.

The River Hun is a short chalk stream that runs just 6km from its source in Hunstanton Park to where it meets the North Sea at Holme Dunes National Nature Reserve. Covering an area of 3.82km² adjacent to the river the report explains the geological features, flora and fauna that make the River Hun area an outstanding environment with national and international recognition and protection. These designations reflect the fact that the area has more valuable and diverse habitats than most other similarly sized areas which includes reed beds, sand dunes, saline lagoons and a multitude of other habitats.



The Ethics of Invertebrate Recording in Norfolk

NBIS have written a paper on the ethics of invertebrate recording in Norfolk, to be published in an upcoming edition of the Transactions of the Norfolk and Norwich Naturalists' Society.

The paper is a result of the skills workshops and volunteer training events organised by NBIS in the Brecks as part of the Breaking New Ground 'Wildlife Recorders of Tomorrow' project. These workshops highlighted the issue of volunteers not being comfortable with, or not being aware of, the issues regarding the ethics of killing specimens as part of invertebrate recording.

The paper uses surveys of 'Wildlife Recorders of Tomorrow' volunteers, invertebrate County Recorders and national entomologist experts including Matt Shardlow (CEO of Buglife) and author Steven Falk, all undertaken during the Breaking New Ground project. A literature review on the ethics of killing specimens and the debate regarding invertebrate sentience was also conducted.

Arguments for and against killing specimens are presented and recommendations for future citizen science projects and general invertebrate surveying in Norfolk are presented.



Images: Breaking New Ground Recorders of Tomorrow Project © NBIS

Annual Recorders Evening

The Annual Joint NBIS and Norfolk and Norwich Naturalists' Society Recorders' Evening was held at the Norfolk Snowsports Club on the 19th March 2018.

As in previous years the evening began with a hot buffet and a chance to catch up and network with friends and colleagues.

The theme of the evening was 'Hi-tech recording' and a wide variety of topics were explored by the speakers, from trail cameras, to the use of DNA in recording; sound-recording birds at night, to reporting diseases in garden wildlife online.

Keynote speaker Kathy James talked about how advances in technology have been utilised by the Sea Watch Foundation in monitoring marine mammals. Digiscoping, apps, telemetry and drones are all being used to study cetaceans and current technologies could all be developed further.

Feedback from the event was very positive with some good suggestions for future meetings.



Communications

NBIS have continued to develop our online recording facility.

NBIS now has a presence on Facebook, Twitter and Flickr.

NBIS produces jointly with NBP and NNNSI a monthly e-news bulletin. This is distributed via email to a wide contacts list

Finance

The table below shows the budget for 2018-19 and the previous year. The future forecast is uncertain at the moment as Defra body and local authority budgets are being cut. It is therefore essential that NBIS continues to secure external project funding to ensure the centre can continue to run as effectively when income is shorter. The below table does not include the contributing costs of Norfolk County Council to the hosting of NBIS.

Expenditure (in £)	2016-17	2017-18	2018-19
Staff salaries/training/travel	-66110.6	-26548.86	-62446.2
IT hardware/software & general equipment purchase	-1812.04	-333.75	-765.84
Subscriptions (e.g. ALERC)	-400	-2103.79	-750
Contractor costs	-1591.15	-6986.44	-2248.17
Venue hire	-4.17	-1085.02	-100
Printing/marketing/design	-250	-32.49	0
other/misc	-86.8	-6	-6
Publications/NBIS recorders fund/recorder support	-2920	-61.5	-2594
Budget adjustments/financials	-15180.99	-25000	0
Match Funding	0	0	-999.99
Total expenditure	-88355.75	-62157.85	-69910.2

Income (in £)	2016-17	2017-18	2018-19
Data Searches	47,615	41,550	44,285
Project work/other charges	5,852	8,502	5,000
Service Level Agreements with Local Authorities/IDBs	0	10,000	10,050
Service Level Agreements with utilities	2,700	2,700	2,825
Service Level Agreements with Defra bodies	12,600	12,600	12,600
Recharge (other departments)	0	0	0
Match Funding	0	0	1,200
Total income	68,767	75,352	75,960

Balance (in £)	-19,588.75	13,194.44	6,049.80
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The balance figures for each year do not represent profit – the figures of surplus are already assigned to projects or staff costs and the opposite figures mainly show debit due to project or staff cost spend or matching assigned, from monies received in previous financial years. Some SLA monies have been received in different financial years to which they should have been received.