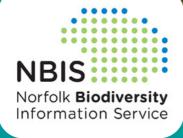
Norfolk County Council Biodiversity Team

Highlights and achievements 2015-16











Norfolk County Council

Lizzy Oddy Norfolk Biodiversity Information Service March 2016

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This Report

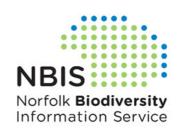
Norfolk County Council Biodiversity Team is part of the Environment Team, hosted within the Community and Environmental Services Department.

Working in partnership with NCC and other organisations, the Biodiversity Team provides high quality information, co-ordinates resources and expertise across the county, works with local communities and provides practical action on the ground to help protect and enhance the natural environment of Norfolk.

This report highlights the activities and achievements of the Norfolk County Council Biodiversity Team over the past year.

Norfolk Biodiversity Information Service (NBIS)

Norfolk Biodiversity Information Service is a Local Environmental Records Centre holding information about species, geodiversity, habitats and protected sites for Norfolk. NBIS provides quick and easy access to high quality information for all.



Norfolk Biodiversity Partnership (NBP)

Established in 1996, the Norfolk Biodiversity Partnership brings together the resources and expertise of local authorities, statutory agencies and voluntary groups in pursuit of a shared goal – to conserve, enhance and restore Norfolk's biological diversity.



Norfolk Non-native Species Initiative (NNNSI)

Launched in 2008, the Norfolk Non-native Species Initiative promotes the prevention, control and eradication of invasive alien species, working through a stakeholder's forum.





Norfolk Biodiversity Information Service

Species Records

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.

The NBIS database currently contains **2612119* species records** (including a number from our neighbouring counties of Suffolk and Cambridgeshire, collated as part of cross-county biodiversity audits). In 2015-16 **60694* records** were imported.

*Figures determined 15 March

Data Enquiries

Responding to **data enquiries** is one of the core tasks of NBIS. 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**.

In 2015-16 **NBIS responded to 480 enquiries**. These can be broken down as follows:

TYPE OF ENQUIRY	NUMBER
Commercial (e.g. ecological consultants)	386
Local Authority Enquiries	15
Funding Partner Enquires (e.g. NE, EA etc)	5
Non-Commercial Enquiries (e.g. students, members of the public, community groups)	74

EODIP 5 - Earth Observation Data Integration Pilot

EODIP5 is a short project, led by British Trust for Ornithology (BTO), to appraise the potential for volunteers and communities to become habitat validators and to look at the open source technology to support this. This project neatly follows on from the results of MEOW Phase 2 (Making Earth Observation Work: http://jncc.defra.gov.uk/page-6279), an initiative to develop new land cover maps or "Living Maps" with a special focus on priority semi-natural habitats which have been identified as most threatened and requiring conservation action.

The first such "Living Map" was developed for Norfolk (the remotely sensed habitat map described in the 2014-15 Biodiversity Team Report), and because it has involved complex analyses of large data sets it is necessary to identify where errors and uncertainties are most likely to arise, and to consider methods for validating the map.

Possible methods for validation could include a **desk-based approach** where volunteers are able to check the Living Map against other data sources, such as earth observation imagery or photographs, or a **field-based approach**, where observers visit certain points, grid squares or habitat patches to validate the habitat in the field.



Arable margin © Martin Horlock



Grazing Marsh © Scott Perkin

Stakeholder interviews undertaken by NBIS are ongoing to determine how a volunteer community of habitat validators might best be set up and promoted to. NBIS is also acting in an advisory role to the steering group on this project. Survey methods and techniques, communications and a technological appraisal for a possible smartphone app and/or website platforms are being undertaken by BTO. A report will be available soon.

Breaking New Ground - Wildlife Recorders of Tomorrow

The Brecks is an important area for wildlife both in a UK and international context. However many of the species records come from a few well recorded designated sites, with recording often done on an ad hoc basis. This means that it is often difficult to detect changes in the biodiversity of the area. There is a need for wider recording of the Brecks area and a structured programme of species surveillance and monitoring.

The project operates at 3 levels:

<u>Beginner</u> – providing training and encouragement to those new to recording wildlife.

<u>Species Surveillance</u> – helping people take the next step into more serious recording of sites. Data collected will feed into the Norfolk Species Surveillance Network.

<u>River Corridor Survey</u> – a non-native survey of the Little Ouse River from its headwaters at Redgrave and Lopham Fen to Brandon.

As of December 2015, **121 people** had signed up to take part in the project in some way. Workshops held so far have covered recording dragonflies, lichens, birds, general invertebrates and lunar yellow underwing moths.

A **bioblitz** at Brandon Country Park in October saw **260 species** recorded by volunteers on the day.

In January, the project organised an Invertebrate Sorting Marathon. Volunteers sorted invertebrates from pitfall traps into six different groups, aided by experienced mentors. As well as learning new taxonomic ID skills, the volunteers were contributing to research into the effect of different management types on invertebrate assemblages in the Brecks. Once sorted, the samples were sent off to local experts to be identified to species level. 28 volunteers attended the event over two days (with 9 volunteers doing both days) with many Saturday attendees returning on the Sunday. All of the samples were successfully sorted!







The Brecks Invertebrate Sorting Marathon © Breaking New Ground

NBIS Recording Fund

Each year, money received from commercial enquiries is made available to support projects which result in more records for the NBIS database via the NBIS Recording Project Fund. In the past this fund has been used to support projects ranging from training for SeaSearch volunteer surveyors to invertebrate sampling in Thetford Forest, from a geodiversity publication to purchasing equipment for the Norfolk Bat Survey. 2015-16 had a distinctly marine feel, and the following projects were funded:

- Contributing to the print run of 250 A5 East coast seaweed pressings books

To help SeaSearch volunteers and interested members of the public identify seaweeds found on our local coast and gain an appreciation of the diversity present.

- Workshop for identification of marine sponges

Funding a two day, non-residential, tutor-led workshop for the identification of marine sponges including field work along the north Norfolk coast.

Six students took part in the workshop, learning through lectures and practical sessions. The course left the whole group "much more confident about using spicule preparation to identify local species at home". It is hoped that the course will result in at least double the number of sponge species recorded for Norfolk by SeaSearch East. One new *Hymedesmia* species was discovered during the course.

Just approved for funding...

- Determining the effect of pond terrestrialisation on pollinators

Little is known about how pond management (e.g. terrestrialisation or marginal vegetation clearance) might affect pollinator communities. As part of a UCL PhD, the student will sample pollinating insect groups and their activity around the margins of 8 open canopy and 8 overgrown ponds. The resulting data will be fed into NBIS and will also inform UK pond conservation strategies.

Update from one of last years' Recording Fund projects

NBIS provided funding to purchase refugia for a **grass snake monitoring project** at Cranwich. Project manager Dave Leech reports that "preliminary results have been very interesting and are starting to garner quite a lot of interest amongst the national herpetological recording community."

Several **notable results** arising from the pilot year were:

- The densities of snakes on site are much higher than previously published estimates.
- There is a very strong seasonal pattern in abundance, with numbers increasing slowly through spring, building to a peak in early August and then declining subsequently.

Experts think the Cranwich project could usefully inform the upcoming review of the **National Amphibian and Reptile recording Scheme** (NARRS). The survey will be repeated this year and Dave is in discussions about a possible PhD project around demographic monitoring of the Cranwich population, which would also include work on the toads there.

Accreditation

In August, NBIS was **awarded accredited status** by the Association of Local Environmental Records Centres. This means that they demonstrated that they 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.

The process of accreditation involved sorting through, updating and in some cases creating documentation to use as evidence that the accreditation criteria were being met. The evidence was submitted to the assessor and followed up by a telephone interview. After gaining the approval of the ALERC accreditation working group and the directors the accredited status was confirmed.

Accreditation is valid for **five years** after which NBIS will need to be re-assessed.



A Red Data Book for Norfolk

Working in partnership with the Norfolk and Norwich Naturalists' Society and Norfolk Wildlife Trust, this project aims to create an online **Red Data Book for Norfolk** that is readily accessible and easy to update.

The first species to be added will be the 'Notable Ninety' species picked by the Norfolk Wildlife Trust as being particularly special to Norfolk. The County Recorders will then be given access to create and update pages for their speciality species.

While many of the species are likely to be designated nationally for their rarity, the Norfolk Red Data Book aims to highlight **species that are particularly important in Norfolk**, so this will not always be the case.

The Red Data Book is being created through a digital tool called **Scratchpads**, and the work done so far has been completed by a NBIS volunteer. Created by the **Natural History Museum**, Scratchpads are designed to broadcast biodiversity data online. Once more complete, the Norfolk Red Data Book will be published and be made accessible via the NBIS and Norfolk & Norwich Naturalists' Society websites.

The current draft Norfolk Red Data Book can be accessed at http://reddatabook.myspecies.info/





Norfolk Biodiversity Partnership

Update

2016 is the 20th year of Norfolk Biodiversity Partnership. It was formed in 1996 to develop a Norfolk Biodiversity Action Plan and then develop and implement species and habitat action plans for those important to Norfolk. 21 Habitat Action Plans and 57 Species Action Plans were developed. A final broad review of all the action plans has been completed to assess the level of implementation as at the end of 2015. This final review will be available on the website soon.

Unfortunately from 1 April 2016 there will no longer be a NBP Coordinator in post due to funding constraints. The partnership will continue and the main point of contact will be the Senior Biodiversity Officer at Norfolk County Council and the Chair Andrea Kelly of the Broads Authority. The key Topic Groups will continue – Planning & Biodiversity, Communities & Nature, Coastal and Marine, Wetlands and Waterbodies and Broads Biodiversity.



Species Action Plan

Planning & Biodiversity Seminar

The 11th annual Planning and Biodiversity seminar, run jointly between NBP and the Suffolk Biodiversity Partnership was held in November 2015.

90 participants heard diverse presentations on swift conservation, tackling wildlife crime, the Norfolk recreation impact project, the Connecting Nature Fund and solar farm monitoring. Delegates came from Norfolk, Suffolk, Essex and Cambridgeshire and **feedback from the event was good.**

The event enjoyed **press coverage in the East Anglian Daily Times**. Links to these articles and the presentations from the day can be found at http://www.suffolkbiodiversity.org/planners-page.aspx

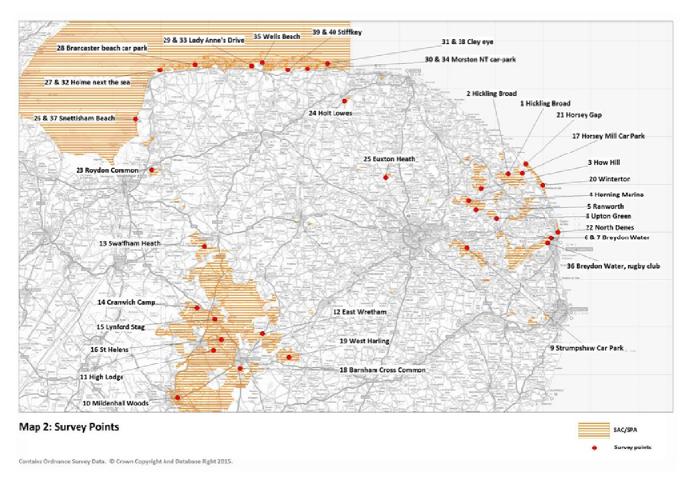
Recreational Impact Project

NBP are project managing this project on behalf of all of the local authorities in Norfolk. The project aims to gather data to **understand visitor patterns and uses** across Norfolk's **Natura 2000** sites.

The last of the 40 visitor sites will be surveyed around Thetford Forest in March 2016, with the **final report due in June 2016**.

An interim report was produced in July 2015, commenting on 18 of the survey sites. Over 600 interviews were conducted at those sites and more than 1155 groups were counted entering the sites.

69% of interviewees were on a day trip or a short visit from home and 29% were holiday makers. Dog walking was the most common main activity (35% of interviewees). Other frequently recorded main activities included walking (27%), wildlife watching (10%) and cycling/mountain biking (7%).



Recreational Impact Project survey points

NBP Community Biodiversity Awards

Each year the Norfolk Biodiversity Partnership hosts the NBP Community Biodiversity Awards to celebrate work done by volunteers, projects and community groups throughout the county for the benefit of biodiversity. In 2015 the awards were kindly sponsored by Richardsons's Boating Holidays, The Landscape Partnership and Kelling Heath Holiday Park. There is a themed award each year – in 2015 it was for heathlands. The winners and highly commended runners-up for each award are summarised on the following pages:

BEST GROUP AWARD WINNER: Shotesham Conservation Group

For their impressive range of activities to improve, conserve and record local biodiversity, successfully engaging with the local community.

Highly Commended: Acle Lands Trust

For their long-term work to enhance the management of wildlife sites in Acle and to inspire community participation.

Highly Commended: Natural Heritage Champions (Norwich Fringe Project)

For their contribution to the work of the Norwich Fringe Project in managing 'greater' Norwich's countryside for community access and biodiversity.

Highly Commended: Poringland Lakes

For their community effort over a short timescale to save the conservation ponds at Poringland and the diversity of wildlife there.

OUTSTANDING LAND MANAGER AWARD WINNER: Natural Surroundings

For their commitment to habitat management and provision of community access.



INSPIRING OTHERS AWARD

JOINT WINNER: East Ruston Area Infant School

For their inspirational vision in creating a wildlife resource that has become an important amenity for the school and wider community.

JOINT WINNER: Wild About Colby

For their 'nest box boost' project which has brought about significant gains for owls and other raptors in north Norfolk whilst engaging and inspiring the local community.

Highly Commended: Friends of the Belfry School

For their commitment to the creation of an inspiring wildlife resource at the school.

Highly Commended: King's Lynn Joint Advisory Group

For their dedicated commitment to the conservation of the Wash and north Norfolk coast habitats and biodiversity, drawing in the local community.

PARISH & TOWN COUNCILS AWARD

JOINT WINNER: Brundall Parish Council

For their enthusiasm in developing green infrastructure in the village for the benefit of wildlife and the community.

JOINT WINNER: Tasburgh Parish Council

For their strategic approach towards increasing the diversity of habitats in the parish and improving access for the local community.

Highly Commended: Scarning Parish Council

For their commitment to the work of Scarning Conservation Volunteers who are making impressive progress in restoring Scarning Water Meadows.



LIFETIME ACHIEVEMENT AWARD WINNER: Joe Cullum

For his outstanding work to conserve and enhance the habitats and wildlife at Buckenham and Hassingham Broads.

THEMED (HEATHLAND) AWARD WINNER: The Assist Trust

For the Trust's achievements at Mousehold Heath which have delivered gains for the heathland and brought real benefit to the individuals involved.

Highly Commended: John Wagstaff

For his outstanding long term contribution to Kelling Heath.



2015 NBP Community Biodiversity Award Winners
© Keiron Tovell



Norfolk Non-native Species Initiative

Enquiries

In 2015 the NNNSI handled **over 50** different reports of invasive species from members of the public across the county, ranging from Himalayan balsam to American mink. The NNNSI was able to successfully resolve each enquiry through offering **identification assistance**, **management advice** and carrying out **control work**.

Catchment Biosecurity Plans

The NNNSI worked with the Environment Agency to produce Biosecurity Plans for **eastern Norfolk and Suffolk**, supplying comprehensive guidance to local stakeholders on effective control and management approaches for invasive non-native species (INS).

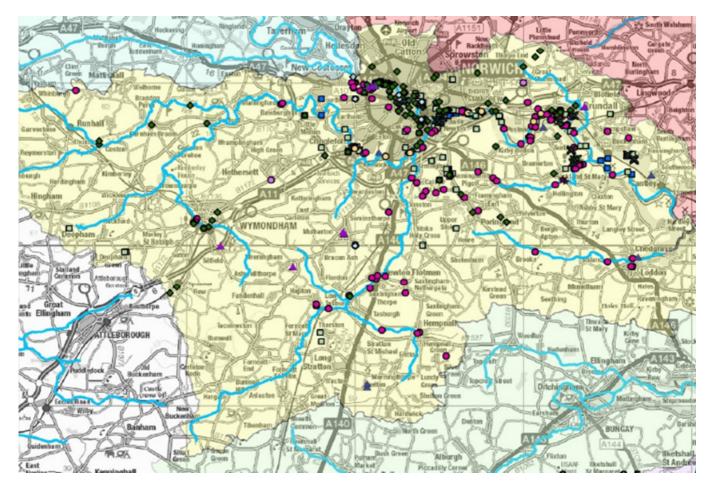
Covering 10 coastal catchments, including the Norfolk and Suffolk

Broads, North Norfolk and Suffolk Coastal AONB, these **ground-breaking plans** target both established and potential freshwater INS. Data from across both counties was collated and analysed, providing an up to date overview of INS status, ensuring cooperation and strategic planning, and helping to develop a sustainable management framework.

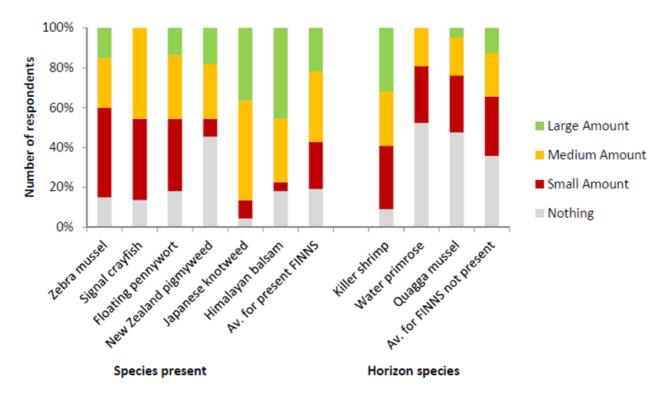
This brings Norfolk in line with the **Defra Key Action** to 'improve ways of supporting strategic local action' to minimise and manage the impact of invasive species, whilst helping to achieve the **Water Framework Directive** target of maintaining 'good ecological status'.



Catchments covered in biosecurity



Records of invasive plant species in the Yare catchment.



Invasive species knowledge levels amongst Yare catchment users.

Norfolk Mink Project

2015 saw the launch of a **new website** for the Norfolk Mink Project (http://thenorfolkminkproject.org.uk), as well as the development of an **innovative 'cloud' database system**, revolutionising the way data is collected and shared across the county. Information can now be quickly and easily viewed on a catchment by catchment basis, through the generation of **'real time' data maps**.



Mink signs, sightings, captures and kills in the River Yare catchment, 2015.

The Project is one of the most successful of its kind in the UK, securing £30,000 of external funding each year to ensure its operations can continue to develop and expand.

2015 statistics:

Total mink killed – 60 Mink rafts deployed - 395 Mink traps on loan – 542 Volunteers involved - 274



American mink © Norfolk Mink Project

SEFINS - Safeguarding the Environment From Invasive Non-native Species

SEFINS (Safeguarding the Environment From Invasive Non-native Species) was an 18 month EU cluster project led by the Environment Team at NCC.

The project won €540,000 of European Regional Development Funding to bring together Partners from France, Belgium, UK and the Netherlands to jointly work towards reducing the environmental and economic impacts of invasive species. The group included both scientific researchers and practical managers who combined their expertise in freshwater, marine and terrestrial environments to focus on the neglected estuarine environment.



Invasive comb jelly M. leidyi © Karl Van Ginderdeuren

SEFINS brought €170,000 to Norfolk, used to create a baseline of estuarine invasive species data in the Wash estuary for the first time. Innovative environmental DNA techniques were developed between laboratories in Norfolk and Belgium and trialled on the North Norfolk coast. This cutting-edge technique was successfully

used to identify the presence of an invasive species of comb ielly in

the Wash estuary, a

world first for this genetic early warning tool.



Sampling locations in the Wash estuary.













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