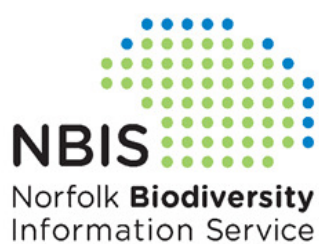
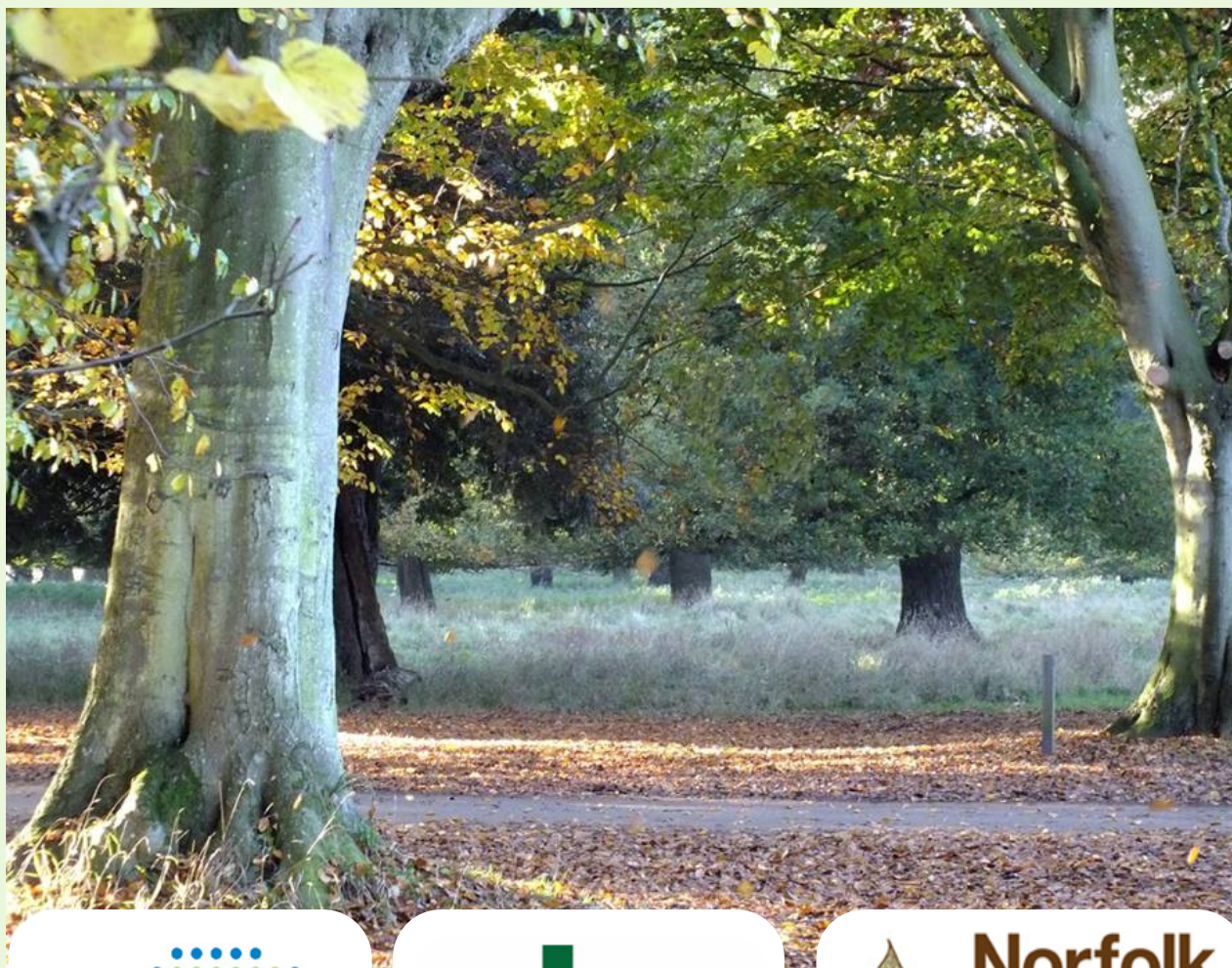


Norfolk County Council

Biodiversity Team

Highlights and Achievements 2017-2018



Norfolk County Council

Lizzy Oddy
Norfolk Biodiversity Information Service
October 2018

Contents

This Report.....	3
The Biodiversity Team	3

Norfolk Biodiversity Information Service

Species Records	4
Data Enquiries'	4
Norfolk Green Infrastructure Mapping Project.....	5
Orchards East - Mapping Norfolk's Traditional Orchards.....	6
Brecks ID Guides	7
NBIS Recorders Evening	8
South Yare Wildlife Group State of the Environment Report	8
Bid-Rex (Biodiversity Data Regional Exchange) Update.....	9

Norfolk Biodiversity Partnership

Planning and Biodiversity Seminar.....	10
Community Biodiversity Awards	11

Norfolk Non-native Species initiative

Enquiries.....	13
Controlling Floating Pennywort on the River Waveney.....	13
Norfolk Mink Project	14
Rapid LIFE	15

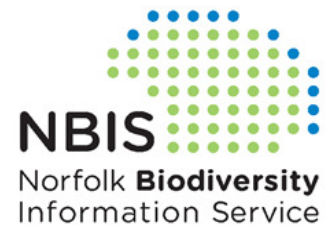
This Report

Norfolk County Council Biodiversity Team is part of the Environment Team, within the Community and Environmental Services Department. Working in partnership with the County Council and other organisations, the Biodiversity Team works to provide high quality information, co-ordinate resources and expertise across the county, work with local communities and provide 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.

The Biodiversity Team

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 (NNSI)

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.



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 **3,250,635 species records** (including a number from our neighbouring counties of Suffolk and Cambridgeshire, collated as part of cross-county biodiversity audits). In 2017-18 **1,351,496*** records were imported.

*The large number imported is due to a replacement of the moth dataset with an updated version.

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 commercial enquiries within **5 working days** and to enquiries from our funding partners within **3 working days**.

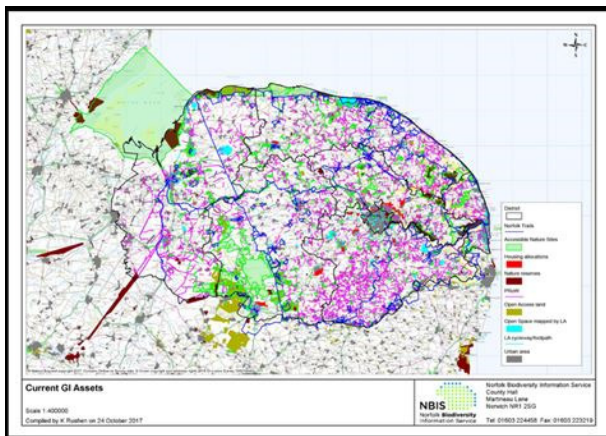
In 2017-2018 **NBIS responded to 502 enquiries**. These can be broken down as follows:

Commercial (E.g. ecological consultants)	444
Local Authority Enquiries	8
Funding Partner enquiries (e.g. NE, EA etc.)	1
Non-Commercial Enquiries (E.g. Students, members of the public and community groups)	49

Norfolk Green Infrastructure Mapping Project

Commissioned by the Norfolk Strategic Planning Officer Group, this project aimed to:

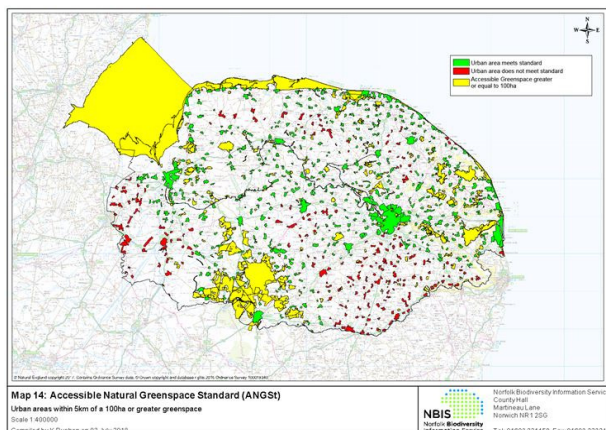
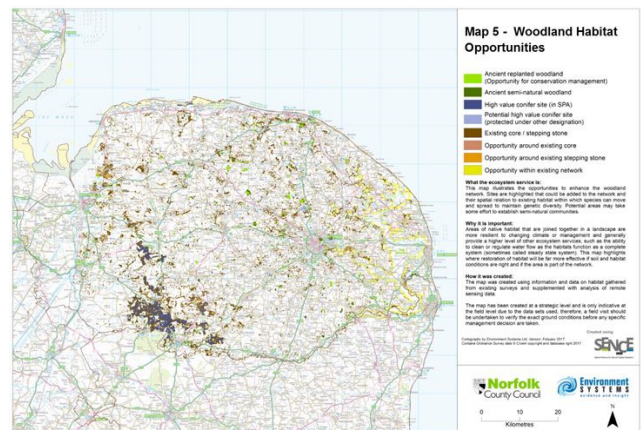
- Make the 'connections' between green infrastructure (GI) and growth, providing the Local Planning Authorities with a deliverable approach to addressing GI matters to enable and support growth
- Map the GI network of Norfolk, maximising the benefits it brings to the communities of Norfolk
- Identify deficiencies in GI provision
- Identify opportunities for enhancements



Mapping was undertaken by NBIS and consultants Environment Systems. Maps produced included **GI Access Asset Mapping** (including Norfolk Trails, public rights of way, open access land and accessible nature reserves), **GI Network Mapping** (assessing the potential links between existing semi-natural habitats and protected sites, and producing a series of

proposed GI corridors) and **Ecological Network and Opportunity Mapping** (for grassland/ heathland, woodland and wetland habitats, and combined)

The GI Access Asset map was used as the basis for **assessing potential GI deficiency** in the County, using the Natural England Accessible Natural Green-



space Standards (ANGSt) guidelines and the Woodland Trust Woodland Access Standard.

Additionally, two maps were produced relating to **natural flood management** in the county.

Orchards East - Mapping Norfolk's Traditional Orchards

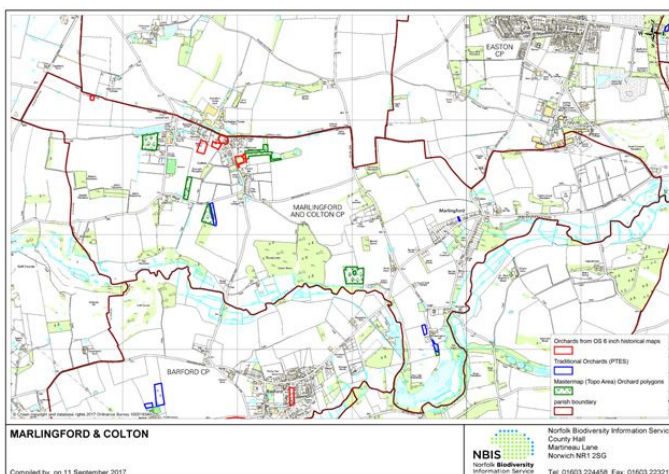
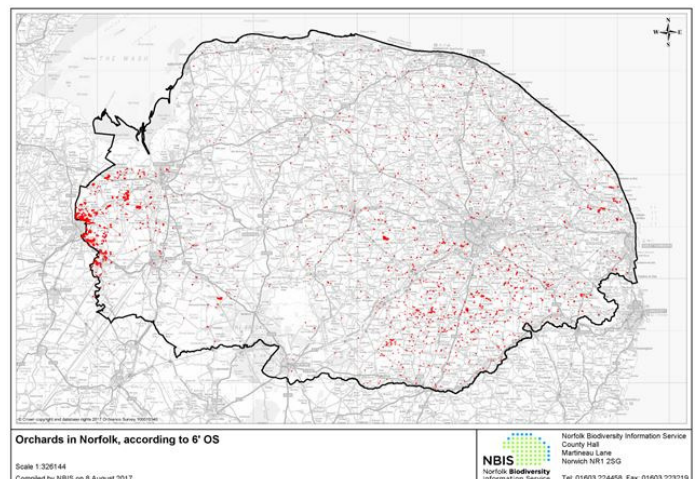
Orchard's East is a **three year project** covering six counties in the East of England, including Norfolk. Funded by the Heritage Lottery Fund and based at UEA it is devoted to **discovering and understanding the past, present and future of orchards in Eastern England**.

Working with hundreds of new volunteers, the project will survey and record old orchard sites across the region.

NBIS has been involved in **mapping historic orchards** in Norfolk, as they provide the best evidence of Traditional Orchard habitat locations before large scale losses and land use change occurred, especially post WWII. These maps help **target areas for detailed survey** to determine if the orchards still exist, their current extent and condition and whether or not they are currently being managed appropriately.

OS 6 and 25 inch maps (1879 - 1943) were used for digitising the historic orchards in Norfolk. Orchard polygons were either copied, pasted and edited from OS MasterMap or digitised by hand using the OS 6 inch or other OS base mapping.

252 5km grid squares were scanned through to identify orchards, with over 1387 orchards digitised. Commercial and private orchards were mapped.

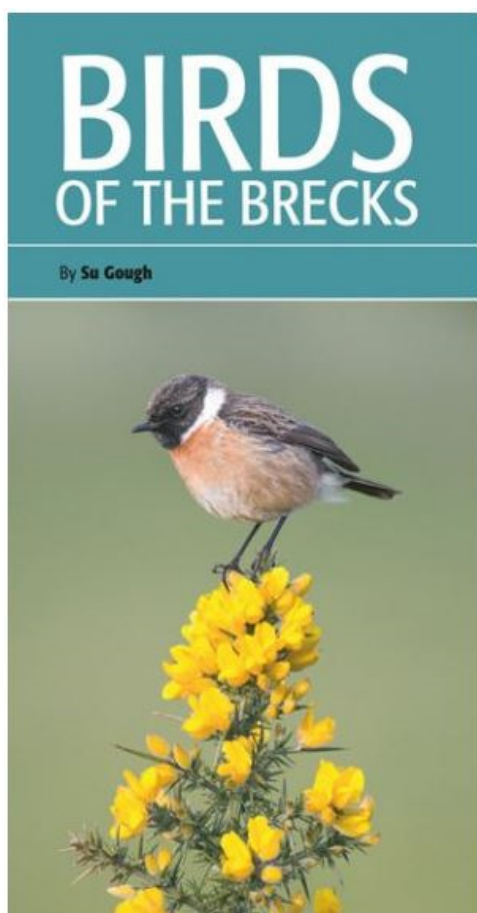


Parish maps were then produced to be included in **survey packs for volunteer surveyors** to refer to on the ground. This work continues into 2018-19.

Find out more about the Orchards East Project at <https://www.uea.ac.uk/orchards-east/home>

Brecks ID Guides

NBIS, along with several other local organisations, including The Breckland Society (www.brecsoc.org.uk), British Trust for Ornithology (BTO) (www.bto.org), Suffolk Naturalists' Society (www.sns.org.uk) and the Norfolk and Norwich Naturalists' Society (www.nnns.org.uk), have come together to deliver a **new series of Brecks Wildlife Guides**, the first two of which were published in early 2018.



It is hoped that these **affordable and informative** books will introduce new audiences to the area's rich wildlife.

Birds of the Brecks was authored by Su Gough, whose experience in teaching people how to identify birds has helped to deliver a highly accessible book.

Flowers of the Brecks: Part One – Heath & Grassland was authored by Mike Crewe, a keen botanist with an expert knowledge of the region's flora.

NBIS has put considerable effort in the last few years into helping to improve the wildlife identification (ID) skills in the Brecks. This work

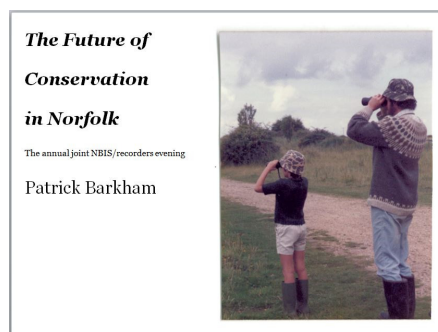
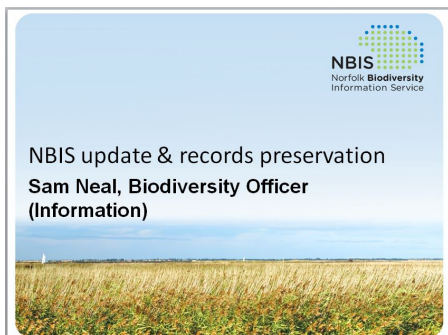
has helped us recognise how vital it is for beginners, visitors to the area and families learning together with their children, to have access to an **affordable easy-to-use ID guide that helps you make that identification and tells you how to record that wildlife sighting properly** - this is the gap that these Brecks guides fill.

The guides are available to buy now.

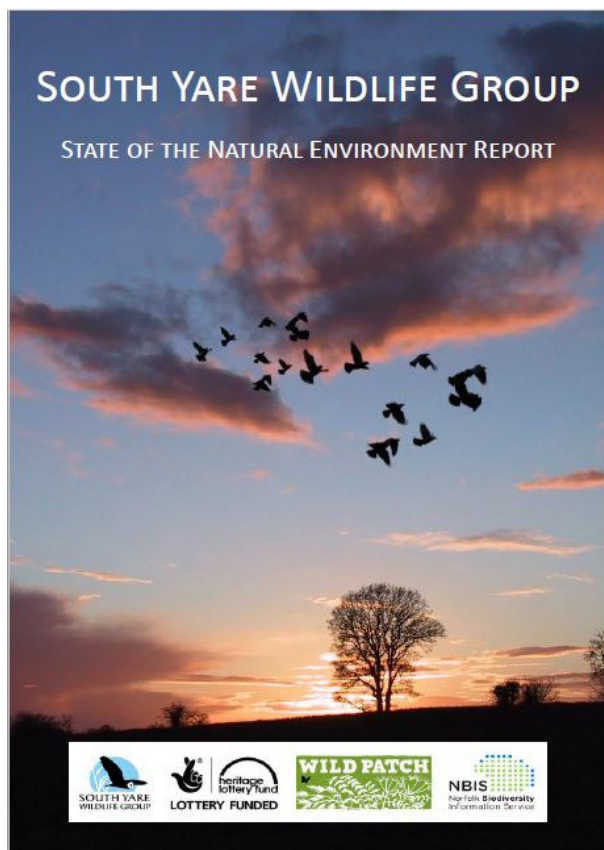


NBIS and Norfolk and Norwich Naturalists' Society Recorders Evening

Held on the evening of 30th March 2017 at the Abbey Conference Centre, this annual event was based on the **theme of "New to Norfolk"**.



After enjoying a buffet and the chance to catch up with friends and colleagues, attendees heard **keynote speaker** Patrick Barkham, speak on "the future of conservation in Norfolk". There were also talks by Stuart Newson (BTO and Norfolk Bat Survey), Doreen Wells (County Ant Recorder), Rob Spray (Seasearch East) and Ken Saul (Norfolk Moth Society) as well as an update on what NBIS had been working on over the past year. The event was concluded by Tony Irwin, from the Norfolk and Norwich Naturalists' Society.



South Yare Wildlife Group State of the Environment Report

South Yare Wildlife Group commissioned NBIS to write a State of the Environment Report for their area. The report covers topics such as landscape and geodiversity, protected sites, habitats and land-use, species, water quality and local action groups. The report was launched at one of the group's evening meetings and copies provided to members.

Bid-Rex (Biodiversity Data Regional Exchange) Update



BID-REX is an **Interreg Europe funded project** focussing on better utilisation of biodiversity data in the delivery of policy. **The project will develop an interactive interregional partnership to explore and exchange best practices through identifying information needs for decision makers, matching information to needs, improving data flows and capacity building for decision-makers and data providers.**

What will we be doing?

Norfolk County Council and the University of East Anglia are delivering the project in the UK and will **build on recent work such as the Breckland and Broads Biodiversity Audits, the Norfolk Living Map and the Norfolk Species Surveillance Network.** We will work with data users and providers to assess data **needs of decision-makers** and the way in which these are met, highlight examples of **best practice**, assess **future needs** and ways to access data, focus on the use of **added-value data** such as opportunity maps and ecological network models.

2017 - 18 Update

In September 2017, Norfolk County Council held the **third Local Stakeholder Workshop** at the Natural History Museum with partners from the **National Biodiversity Network** and the **Association of Local Environmental Records Centres.** Discussions focussed on the ways in which biodiversity data can be made available via the NBN Atlas in particular the way in which **Open Data layers of modelled and interpreted data** can be published.



Photo © Norfolk County Council

The fourth Norfolk **Local Stakeholder Meeting** was held in January 2018 in King's Lynn and focussed on better understanding the **biodiversity data needs** of end users, such as site and regional conservation managers.

Norfolk County Council staff also attended two meetings hosted by BID-REX European partners, in Bilbao and Budapest to exchange experiences and good practice.

This project will continue in 2018-2019.

More information on the BID-REX Project can be found at <https://www.interregeurope.eu/bid-rex/>

East Anglian Planning and Biodiversity Seminar

Held on the 24th November 2017, the seminar was **attended by 100 people involved in the planning process** including local authorities, statutory bodies, wildlife organisations and professional ecologists. The range of topics meant there was something of interest for everyone and the excellent speakers informed, inspired and entertained.

Dusty Gedge gave a fine **keynote presentation** on Nature Based Solutions in the Urban Realm - Green Roofs and Rain Gardens and the organisers hope to see many more developments incorporating green roofs as a result. The day also covered practical measures for dormice and farmland birds, great crested newt licensing, an overview of current key biodiversity issues in planning, an innovative RAMS strategy, Brexit and the environment and Biodiversity Net Gain.

Participant feedback included *"Brilliant event"*, *"Really interesting presentations covering a wide range of topics"* and *"Many interesting topics and excellent speakers"*.

The presentations from the event are available online at <http://www.suffolkbis.org.uk/biodiversity/statutoryobligations/plannerspage>



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 2017 the awards were kindly sponsored by Pensthorpe Natural Park, the Diocese of Norwich, The Landscape Partnership (TLP) and Kelling Heath Holiday Park**

2017 NBP Community Biodiversity Award Winners
Credit: Keiron Tovell



Inspiring Children and Young People Award

(sponsored by Kelling Heath Holiday Park)



Winner: Bacton Primary School

for their work to transform an underused area of school grounds into an inspiring space for learning about the natural environment

Churchyards and Cemeteries Award

(sponsored by The Church of England, Norwich Diocese)



Winner: Holt Town Council

for their work to create a place of living and renewal at Holt Town Council Cemetery

Parish and Town Councils Award

(sponsored by The Landscape Partnership)



Winner: Sprowston Town Council

for their work to manage Harrison's Wood for wildlife and public access

Groups Award

(sponsored by The Norfolk Biodiversity partnership)



Winner: Clinks Care Farm

for their work to combine care for land, biodiversity and people

Watery Wildlife and Habitats Award

(sponsored by Pensthorpe Natural park)



Winner: Trinity Broad's Volunteer Group

for their impressive and sustained work to tackle varied tasks to manage the biodiversity of this wetland site

Outstanding Achievements Award (Watery Wildlife and Habitats)

Winner: Carl Sayer

for his work over many years to conserve aquatic wildlife in Norfolk, bringing together communities, scientists and landowners

Winner: Helen Smith

for her work to conserve the endangered fen raft spider and for her role in establishing and running the Little Ouse Headwaters Project

Many congratulations to all of the winners!



Norfolk Non Native Species Initiative

Enquiries

In 2017 the NNNSI handled **over 81** different reports of invasive species from members of the public across the county, ranging from Japanese knotweed to American mink. This is again an increase on the previous year. The NNNSI was able to successfully resolve each enquiry through offering **identification assistance, management advice** and carrying out **control work**.

Funding Successes

In 2017-18 the NNNSI raised **£24,667 of external funding** for invasive species projects including eradication of floating pennywort on River Waveney and American mink across Norfolk

Controlling Floating Pennywort on the River Waveney

The NNNSI has again been working with Native Landscapes to build on progress previously made as part of the contracted work to **control floating pennywort** on the River Waveney between 2010 – 2016. Much of this year's control work was funded by the **Environment Agency**.

The removal of floating pennywort plants in 2017 has seen a **significant reduction in the use of herbicides**, with manual removal being undertaken wherever possible.



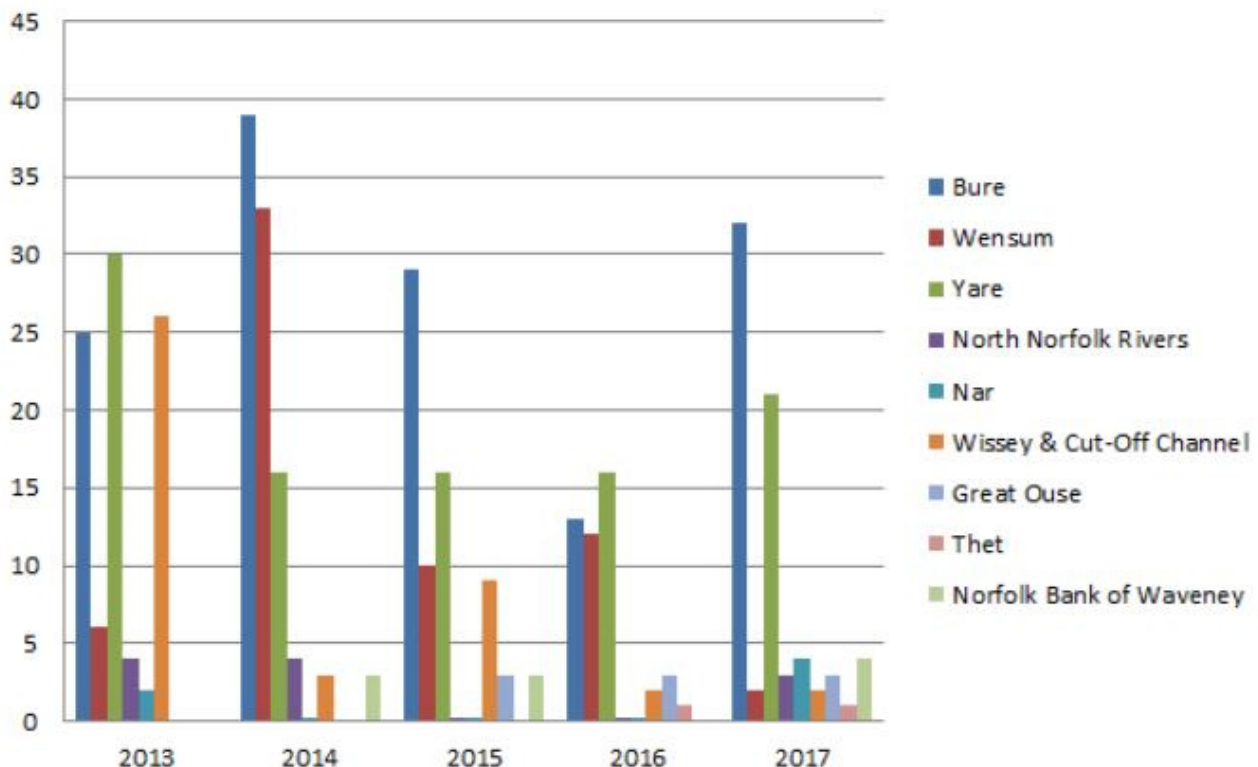
Floating Pennywort on the River Waveney © Environment Agency)

Mapping of floating pennywort records since the project began has shown that the stretch of river between **Diss and Billingford** has been **clear of the plant for the last two years** (this was backed up by the contractor).

The **Billingford ditch network** was included in the control and eradication programme, funded by the IDB, as it is believed to be a **source of floating pennywort reintroduction** to the river during flood events. This network will continue to be targeted in 2018.

Norfolk Mink Project

2017 was another busy year for the project. In total **422** rafts were deployed and **430** traps were loaned resulting in the capture of **72** mink across the county. The number of mink taken is **22 animals up on 2016** but well down on historic levels. Particular increases were seen on the **Bure and Yare catchments in Broadland**. Possible reasons for this pattern of increase are discussed in the **2017 Mink Project newsletter**, which can be found on the project website (see below).



The number of mink taken per catchment by year 2013 - 2017 © Norfolk Mink Project

The contribution of volunteers has once again been vital to the success of the project. In 2017 total of **288 volunteers** were involved in monitoring and trapping mink which we calculate is worth **in the region of £115,000 per year**. Thank-you to all those involved. New volunteers are always needed to help fill in the trapping gaps across the county. If you would like to get involved with the project as a volunteer please have a look at our website (see below) for more information and to contact us.

Our **project website**, launched in 2015 continues to be a fantastic resource and a great place to keep up to date with our **latest news**, report **mink sightings** and find out how you can **get involved** with the project. Do check it out at <http://thenorfolkproject.org.uk>.

RAPID LIFE

RAPID (Reduction and Prevention of Invasive Alien Species Dispersal) LIFE is a

European funded **3 year project** (2017 - 2020) led by the **Animal and Plant Health Agency (APHA) and Bristol Zoo**. The goal of the project is to protect freshwater aquatic, riparian and coastal biodiversity by embedding a coordinated, strategic and evidence-based approach to managing Invasive Alien Species (IAS) across England whilst demonstrating the efficacy of this approach for replication across Europe.



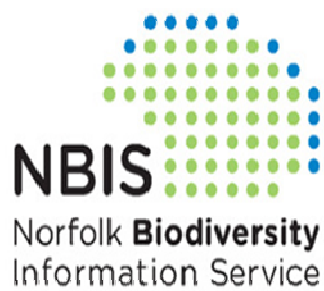
The project has two phases: the **preparatory phase** will mobilise regional stakeholders in the production of five Regional IAS Management Plans using templates and guidance produced by national IAS experts. A national IAS toolkit will also be prepared, along with revised and more effective materials to improve uptake of biosecurity. The **delivery phase** of the project will involve stakeholders utilising the materials produced in the preparatory phase to deliver consistent (but regionally tailored) prevention, early warning, rapid response, eradication and control of IAS throughout England.

Specific objectives are:

1. Establish a *regionally-based framework* across England to deliver more effective management based on Regional IAS Management Plans.
2. Prevent the introduction of novel IAS to the project's target environments by *increasing biosecurity awareness* amongst target audiences through a coordinated programme of engagement.
3. Increase awareness and efficacy of *GB-level and local level early warning and rapid response systems and protocols* within England.
4. *Eradicate and/or control established IAS* in high-priority areas whilst demonstrating strategic and best practice approaches.
5. *Disseminate the exemplar approach* throughout European and international networks.

As a technical partner, NNNSI is involved in delivering aspects of the project in the East of England. A number of sites have been selected for a trial of using a rust fungus to control Himalayan balsam. The project continues in 2018-19.





Norfolk County Council