Norfolk County Council Biodiversity Team

Highlights and Achievements 2018-2019

Lizzy Oddy - Norfolk Biodiversity Information Service

Image: Salthouse Heath © Ed Stocker

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Introduction

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.

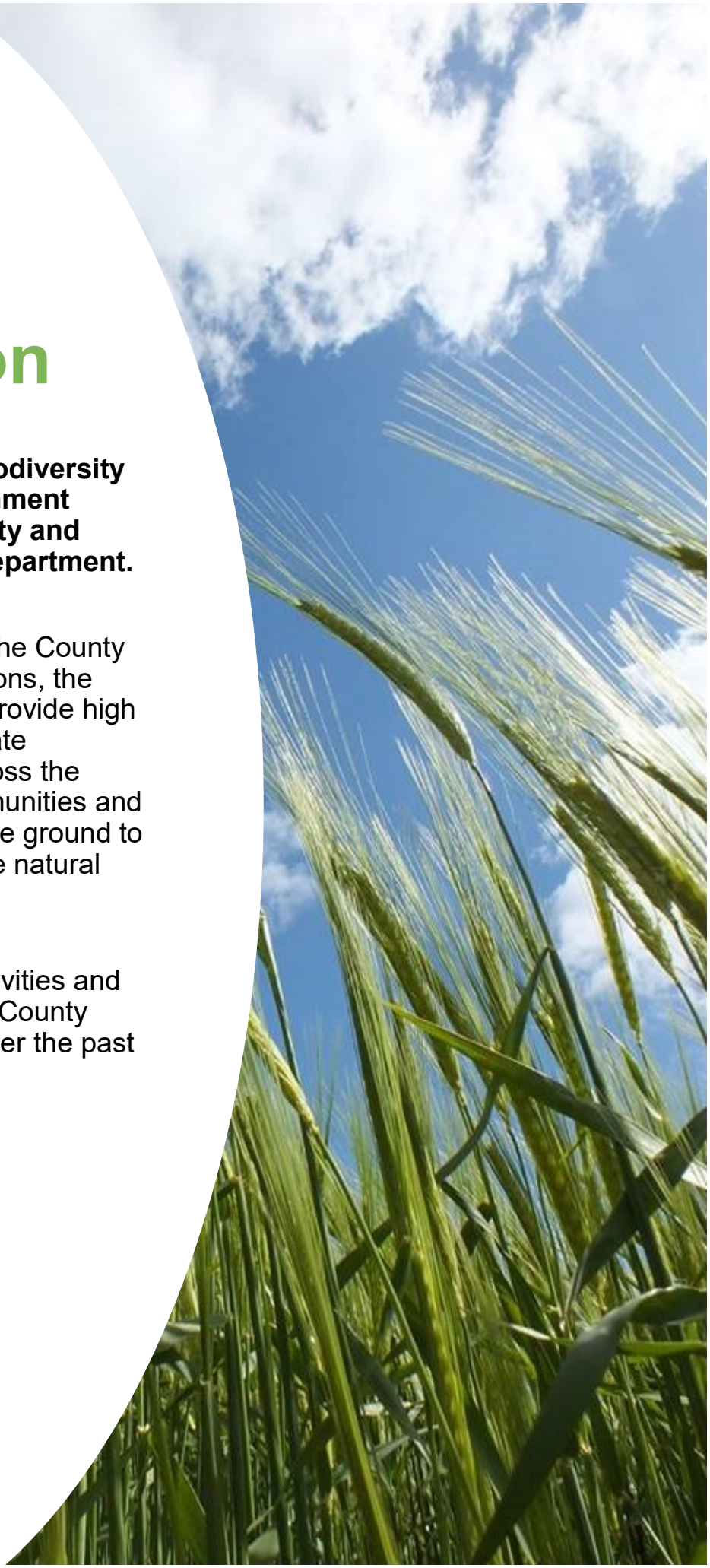


Image: Arable field © Darren Oddy

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 (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.

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 3,337,680 species records (including a number from our neighbouring counties of Suffolk and Cambridgeshire, collated as part of cross-county biodiversity audits).

Cream-spot tiger
© Chris Jones

Carder Bee
© Barry Madden

Orange peel fungus
© Tony Leech

Southern Marsh-orchid
© G Cresswell

Sedge Warbler
© Jo Hobart

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, sites and habitats 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.

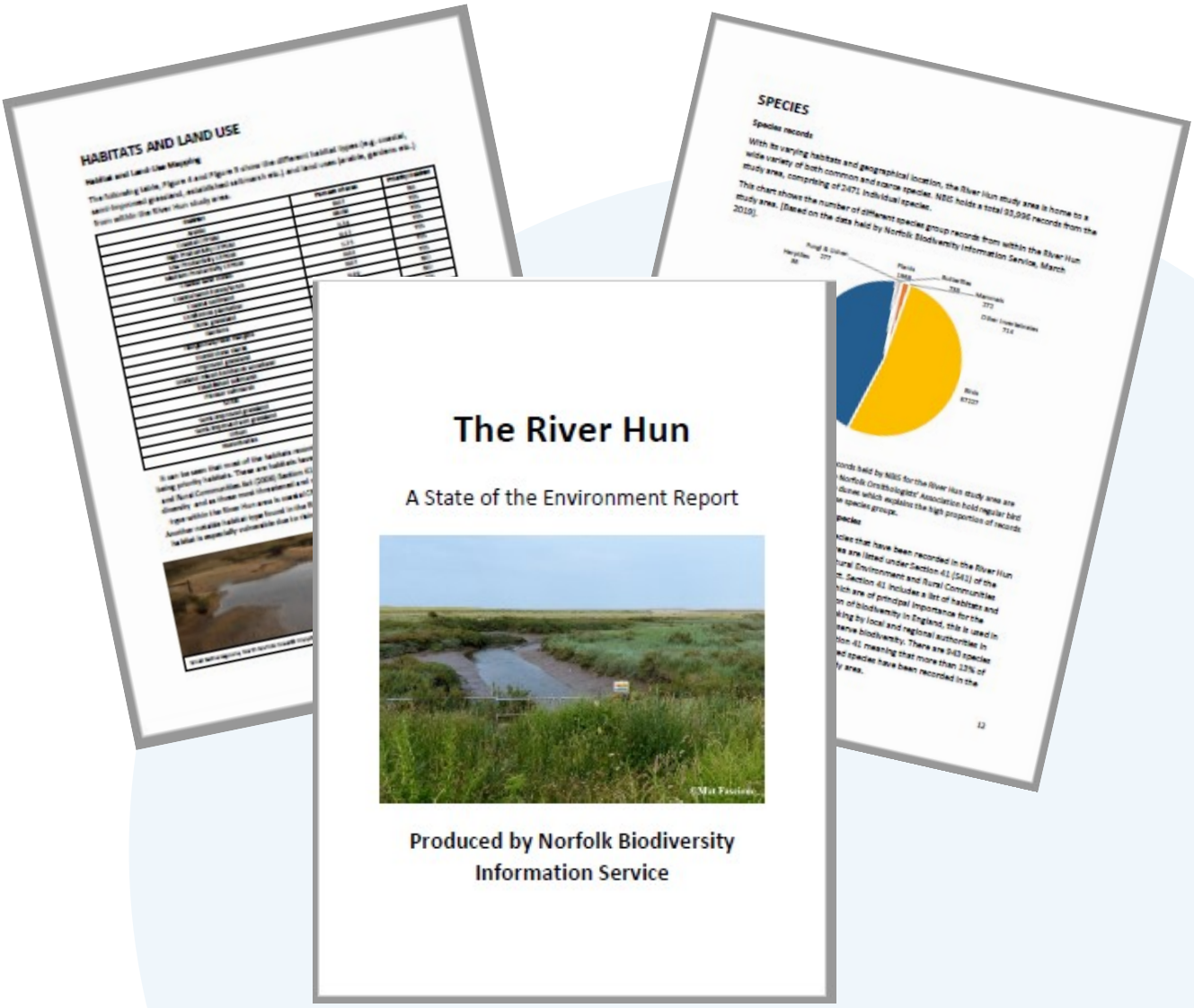
In 2018-2019 NBIS responded to 629 enquiries. These can be broken down as follows:

Commercial (E.g. ecological consultants)	**541**
Local Authority and Partner Enquiries (including for project work)	**19**
Non-Commercial Enquiries (E.g. Students, members of the public and community groups)	**69**

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.

BID-REX (Biodiversity Data Regional Exchange)

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.

Image © BID-REX

2018 - 19 BID-REX Update

Image © BID-REX

In June 2018, Norfolk County Council with the University of East Anglia, organised a very successful two-day conference across two locations showcasing the wonderful biodiversity and cultural heritage of the county. As part of the project, representatives from the 6 partner regions attended: Catalonia, the Basque Country, Slovenia, Belgium, Italy and Hungary.

Day 1 of the conference took place at the British Trust for Ornithology (BTO) in Thetford. The 60 attendees were welcomed by Cllr Martin Wilby of Norfolk County Council, followed by talks on using technology for high quality data collection with examples of bats, bush crickets and acoustic monitoring, BTO surveys and BirdTrack. County Recorders were then given the spotlight they deserve for their hard work helping local recording. Andy Brazil and Tony Leech explaining how data is collected and how volunteers can help with recording fungi.

Talks then moved further afield with Keiron Brown of the Field Studies Council, who presented the exciting BioLinks project which is helping to train and upskill volunteers to develop invertebrate identification skills. The project is also looking at recruiting new volunteers through the creation of emotional links to certain species. The way forward perhaps?

Following a very successful networking lunch of local Norfolk produce, Tom Hunt of the Association of Local Environmental Record Centres (ALERC) provided an insight into data verification and the accreditation scheme established by ALERC. This theme was to be discussed by BID-REX project partners during their workshop later in the week and provided valuable talking points.

John Van Breeda, of BiodiverseIT, presented the Indicia toolkit and how the data can be mobilised effectively. Another important topic under discussion during BID-REX workshops. Capping off talks for the day was Rob Hawkes from the University of East Anglia who presented some biodiversity outcomes of landscape-scale management experiments carried out on the local site of Brandon Heath.

Day 2 involved a change of scenery, from the restored Nunnery to the grandeur of Holkham Hall in North Norfolk. Brian MacSharry from UNEP WCMC captivated the audience with a global perspective on biodiversity data.

2018-19 BID-REX Update (continued…)

Image © Bid-Rex

Jo Judge, CEO of National Biodiversity Network (NBN), then presented the NBN atlas project. The Atlas aggregates biodiversity data from multiple sources and makes it available and usable online.(https://nbnatlas.org/) It is the UK's largest collection of freely available biodiversity data, and a leading project in Europe.

The talks then focused on Norfolk County Council's work on biodiversity within the Environment team. Martin Horlock, Environment Manager, presented NBIS, the Norfolk Biodiversity Information Service, a "one stop shop" for data and information. NBIS uses biodiversity data to meet the needs of decision-makers on a daily basis. Martin presented the success of NBIS on a local scale but also how it fits within a wider data network.

Still from NCC, David White, Green Infrastructure Team Leader, perhaps winning the award of best presentation from those in attendance, presented a case study of usage of biodiversity data in major development schemes in Norfolk. On show, the case of bats and the Northern Distributor Road, a new major ring road built to the north of the city of Norwich. Good to see how data is used in everyday life, and the influence it has, also a topic to be broached during the workshop later that week.

Finally Katy Owen from NCC presented the Norfolk Mink Project Initiative (http://thenorfolkminkproject.org.uk) which she coordinated until 2018 as part of the Norfolk Non-Native Species Initiative (NNNSI). The project works with regional stakeholders and members of the public to limit the decline in the populations of native riparian species (such as water voles) caused by the introduction of the American Mink. Katy showed how moving from paper recording to online digital tools helped the project leap forward and exceed expectations.

Image © Bid-Rex

All presentations from the day are available on the library page of the BID-REX Interreg Europe website along with Good Practices identified over the two days.

Guided by the outcomes of these conferences and other previous stakeholder meetings an action plan will be developed to help integrate relevant biodiversity data to properly inform decision making by regional authorities. This will be finalised in Summer 2019. More information on the BID-REX Project can be found at https://www.interregeurope.eu/bid-rex/

Community Biodiversity Awards 2018

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.

Twelve wonderful projects and individuals were recognised at the annual Community Biodiversity Awards evening on Tuesday July 17th 2018, with 7 overall winners:

Churchyards and Cemeteries Award

(sponsored by Norfolk Wildlife Trust and R&J Hogg Historic Building Specialists)

Winner: Friends of All Saints Church, Hemblington
for the innovative way they approach conservation of local churchyards.

Nature for Health and Wellbeing Award

(sponsored by Norwich Community Green Gym)

Winner: Joe Harkness
for his inspiring commitment to helping people to better health through birdwatching.

Saving Species Award

(sponsored by Pensthorpe Natural Park)

Winner: The Friends of Horsey Seals
for their incredible commitment to, and enthusiasm for, protecting seals and educating the public about them.

Saving Species Award

(sponsored by Pensthorpe Natural Park)

Winner: Jane Harris
for her commitment, long service and achievements in bat conservation

Young People's Achievement

(sponsored by Kelling Heath)

Winner: Amy Ranger
for her work to stimulate a love of nature in young children.

Young People's Achievement

(sponsored by Kelling Heath)

Winner: Joseph Hubbard
for his passion for biodiversity and commitment to communicating it to other young people.

Group Award

(sponsored by The Landscape Partnership)

Winner: Friends of Cremer's Meadow
for demonstrating how a neglected eyesore can be restored to a beautiful wildlife-rich area.

There were many outstanding nominations and inspiring examples of community groups taking on the care for high-quality green spaces across Norfolk. The presentations were made by Steve Scott, Area Director for East and East Midlands-Forestry Commission. Many congratulations to all of the winners!

Norfolk Non Native Species Initiative

Enquiries

In 2018 the NNNSI handled 25 enquiries from members of the public across the county, ranging from Japanese knotweed to American mink. The NNNSI was able to successfully resolve each enquiry through offering identification assistance and management advice.

Funding Successes

In 2018-2019 the NNNSI raised £49,992 of external funding for invasive species projects including eradication of floating pennywort on River Waveney and American mink across Norfolk, writing a regional invasive species management plan, and trialling biocontrol of Himalayan balsam through releases of a rust fungus.

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 – 2019. Much this year's control work was funded by the Environment Agency and the Broads Authority.

The removal of floating pennywort plants in 2018 has seen a significant reduction in the use of herbicides, with only manual removal being undertaken. A reduction of at least 75% was recorded at the end of 2018 compared to that recorded in 2017 with the expectation that it will be eradicated from the Waveney within the next few years.

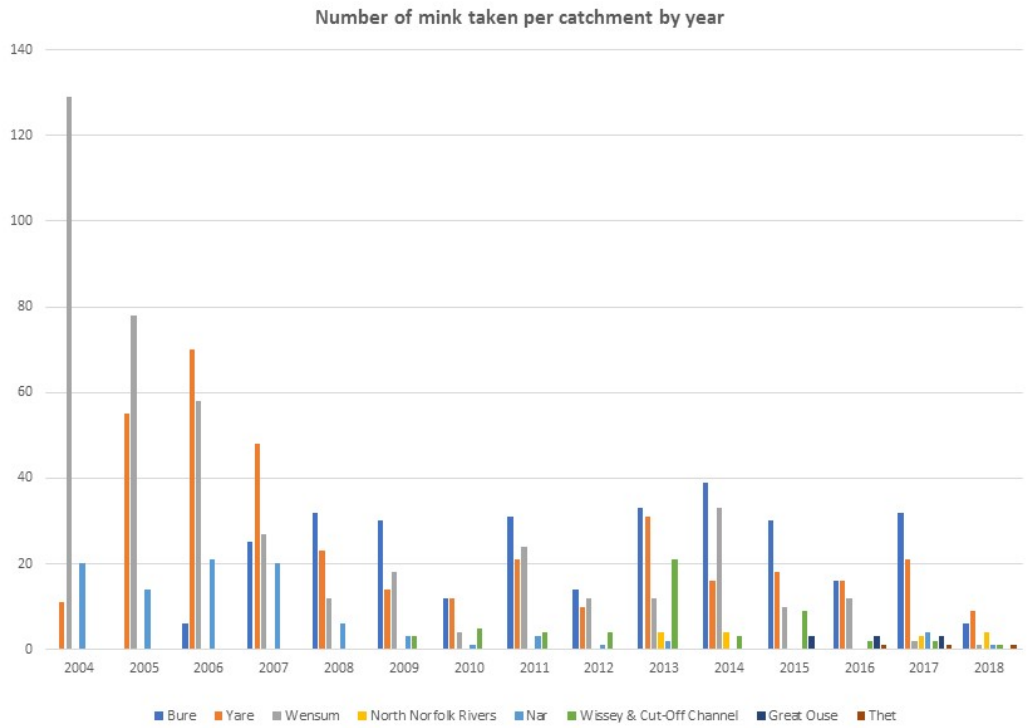
The Billingford ditch network was included in the control and eradication programme, funded by the IDB, as it is believed to be a source of floating pennywort reintroduction to the river during flood events. This network will continue to be targeted in 2019.

Image: Floating pennywort © Environment Agency

Norfolk Mink Project

Through the continued support of 292 volunteers, 2018 saw significant reductions in the number of mink in Norfolk. In total 431 rafts were deployed and 435 traps were loaned resulting in the capture of 39 American mink across the county.

Fewer mink were caught in 2018 than in any year since trapping first began showing decreasing numbers of mink in Norfolk. This is reduction is reflected in our measures of catch-per-unit-effort indicating significant reductions of mink in Norfolk, as much as 90% in some catchments.



The graph shows the number of mink taken per catchment each year since the Project started. In 2018 we caught fewer mink than in any year since the project started and believe that this genuinely reflects a much smaller population of mink than before the project started. However, should control effort relax, mink will quickly become re-established at a higher density, with proportionately greater impact on our wildlife, particularly water voles.

The 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://thenorfolkminkproject.org.uk.

RAPID LIFE

The NNNSI is involved with a number of RAPID LIFE related projects. 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 whist demonstrating the efficacy of this approach for replication across Europe.

As part of this project, the NNNSI produced a Regional Invasive Alien Species Action Plan (RIMP) for the East of England. Using a template and guidance developed by national IAS experts, local experts produced RIMPs for each of five regions in England: North, Midlands, East of England, South West and South East. The RIMPs will deliver consistent (but regionally tailored) recommendations on prevention, early warning, rapid response, eradication and control of IAS (in the above listed target environments) throughout England.

RAPID
Reducing and Preventing
Invasive Alien Species Dispersal

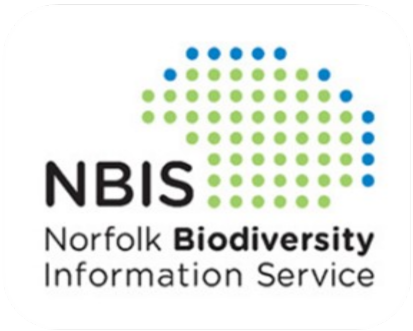
Animal & Plant Health Agency · NATURAL ENGLAND · Bristol Zoological Society · Life · NATURA 2000

RAPID LIFE (continued…)

2018 also saw the successful release of biological control agents (a rust fungus) at 3 sites within Norfolk to tackle the Himalayan balsam problem tackling the RAPID LIFE objective to demonstrate and monitor the use of biological control agents for high priority invasive alien weeds (Himalayan balsam). Himalayan balsam is one of the most persistent and harmful invasive species found within the UK including along many of Norfolk's rivers and waterways. Experts at CABI have developed a biological control technique which enlists the aid of this plants natural enemy – the rust fungus *Puccinia komarovii* var. *glanduliferae*. Trials have been taking place across the UK, in Norfolk the NNNSI tested this technique at 3 sites in 2018. We are pleased to announce that the rust fungus has successfully overwintered at each of the sites. Once established, the fungus will hopefully spread naturally and begin affecting the growth of Himalayan balsam which will relieve pressure on native species and positively impact biodiversity.

Image: Himalayan balsam© GBNNSS

Image: Evidence of rust fungus on seed-lings red/swollen lumpy appearance)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nbp
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Norfolk
Non-native
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Initiative


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