

Scarce Chaser (Libellula fulva) ©Mark Tyrell

Annual Report 2019-20

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Introduction

The Northamptonshire Biological Record Centre (NBRC) is a not-for profit, impartial, independent provider of biodiversity and geodiversity information. The centre launched in 2006 for the custodianship and provision of biological data in Northamptonshire. The centre is one of nearly fifty county-based Local Environmental Records Centres operating across the UK whose collective aim is to support biological recording, data curation and provision of environmental information for decision-making. The centre acts in collaboration with other regional local record centres including regular representation at East of England LERC regional meetings.



The NBRC are current members of the national Association of Local Environmental Records Centres (ALERC), the National Biodiversity Network (NBN), the National Forum for Biological Recording (NFBR), GeoConservationUK, and the county's Biodiversity Partnership and Local Nature Partnership.

The record centre Steering Group, is Chaired by Dr. Duncan McCollin, Senior Lecturer, University of Northampton and comprised of a range of interested parties representing service level partners including statutory bodies and local councils,

environmental charities, biological recorders and researchers. The group meets three times a year to oversee and support NBRC strategic direction.

The Wildlife Trust for **Bedfordshire**, **Cambridgeshire and Northamptonshire** (Wildlife Trust BCN) act as host for the NBRC and we share their Northampton Office.

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The NBRC website http://www.northantsbrc.org.uk/ includes current organisational policies and is where newly approved and updated policies are published.

1.1 NBRC Aims & Objectives

Our Vision

A modern, effective & trusted centre for local wildlife recording and biodiversity information access

Our Mission Statement

The Centre exists

To champion and support all aspects of biological recording in Northamptonshire, by;

- offering a local facility for the collection, validation, verification, collation, storage, analysis, sharing and use of environmental data;
- providing access to an effective evidence base to guide strategies, plans and decisions that have potential to impact on biodiversity; and
- sharing biodiversity information more widely in order to increase understanding
 of the natural environment, and ensure that development and natural resource
 management achieve better, more sustainable outcomes within and beyond the
 county.

Our Values

Independent, straightforward, helpful and evidence-led, we are honest, professional, and impartial in the services and support we provide to all. We are committed to:

- Working collaboratively with others;
- Promoting and valuing the efforts of the county's biological recorders and organisations that utilise biodiversity information;
- Being a learning and enabling organisation;
- Developing our services, technical skills and information infrastructure to continually meet a range of user needs;
- Conducting our business with integrity in an open, honest, transparent and accountable way;

- Making the most of available information whilst recognising its limitations and seeking future improvements;
- Recognising and investing in our staff and volunteers as our greatest resource.

Our Objectives

Ensure access to quality biodiversity information through developing our skills and services to meet the needs of environmental decision makers, maintaining data quality and security and continually achieving operational financial security.

Continually enhance the breadth and depth of biological and environmental information held in our database through engaging, supporting and developing volunteers skill in recording activity, building effective sharing relationships and enhancing our database with both recent and historic coverage.

Improve and maintain effective operational standards, policies, procedures, and reporting in accordance with National Biodiversity Network (NBN) and Association of Local Environmental Records Centres (ALERC) guidance.

1.2 Partnerships & Collaboration

NBRC Steering Group

The NBRC Steering Group comprises of representatives from the following partner organisations & groups. Steering group meetings are held three times annually to support and guide NBRC operations and strategic direction.

Anglian Water Northamptonshire Natural History

Canal & River Trust

Environment Agency Northamptonshire County Recorders

Forestry Commission Natural England

Kelmarsh Hall

University of Northampton

Moulton College Thames Water

North Northamptonshire Joint South Northamptonshire Council

Development & Planning Unit Wildlife Trust of Bedfordshire,

Cambridgeshire & Northamptonshire

We hold collaborative data sharing partnerships with the Wildlife Trust of Bedfordshire, Cambridgeshire & Northamptonshire, the People's Trust for Endangered Species and with the majority of Northamptonshire's county recorders (this includes recording schemes such as Butterfly Conservation). A full list of NBRC data sources will be available online and at request.

1.3 NBRC Staff

Throughout 2019-20, the centre was managed by Rosalind Johnston and staffed by Data Officers Nathalie Hueber, James Skinner and Rachel Tate. Josh Hellon, Wildlife BCN Monitoring and Research Manager continues to oversee and provide line management for all three hosted record centres. With the support of the National Lottery Heritage Fund, the WILDside project was led and delivered by Project Coordinator, Ryan Clark until completion in December 2019. The final project report was prepared with independent external evaluation and made available (from March 2019) on the NBRC website.

Centre Manager

Rosalind Johnston

Data Officers

Nathalie Hueber

James Skinner

Rachel Tate

WILDside Project Coordinator

Ryan Clark



WILDside Aquatic Plants Course as delivered by Nathalie Hueber ©Ryan Clark

Professional Development

The team keep up to date with record centre sector development through accessing the online forum, attendance of regional meetings and the annual national conference. All staff hold current and up-to-date First Aid training, this will be renewed as needed to ensure safe working practice. Through WILDside, staff have contributed their existing knowledge in survey and species identification to the generation of records, as well as engaging, supporting and training of others in these skills.

Conference & Meetings

East of England LERC Meeting (Oct & March), ALERC Conference, NBN Conference, Local Wildlife Sites Panel Meeting, Ox-Cam LNCP Wider Stakeholder Meetings.

Workshops

Staff have attended: Bumblebees, Basic Ecological Skills 1, Bat Sonogram, Leaf Beetles, Plant Galls, Urban Plants, Weevils, Coppicing (all Wildlife Trust), and Habitat Indicators Course (NCV & Phase 1) by the Species Recovery Trust.

Staff have delivered the following courses as trainers: Bumblebees, Urban Plants and Stoneworts.

Development & Training

CAA Commercial Drone Pilot Licence Renewal, Online Technical Specialist Courses (Data Camp, Future Learn and W3Schools), WildNet Personal Development Courses, iHasco courses, Project Management for Conservation by WildTeam.

County Recorders & Volunteers

Through 2019-20, three long-term volunteers continued in their support to us in our digitisation work, as overseen by Rachel Tate and one short-term volunteer was trained and gave some time to support Nathalie Hueber in LWS citation checks. Our volunteers collectively gifted 333 hours of their time to these projects and we thank them whole heartedly for their loyal support.

Digitisation of Northamptonshire historic recording survey cards

We currently have three volunteers working on our long running digitisation of paper surveys, as undertaken by the Wildlife Trust, Women's Institute and others during the 1970's and 1980's covering nearly 1,000 sites. These include habitat recording cards

for pond, hedgerow and woodland surveys and many species recording cards covering Plants, Bryophytes, Birds, Butterflies, Odonata and Molluscs (amongst others that are still being discovered through the project).

Volunteers create scanned copies of the paper records and then digitise the records into our master-spreadsheet template. The project has been running for over three years and in this time our dedicated volunteers have managed to scan and digitise thousands of records for approximately 460 sites. One of our volunteers has, this year, completed an entire drawer with information for approximately 179 sites entered and collectively we are at around 55% completion. Once digitised we intend to validate and incorporate the data for use.

County recorders

We share and exchange records on a regular basis with volunteer county recorders including; bryophytes (mosses and liverworts), both macro and micro moths, butterflies, water bugs, diptera (true flies), birds, hymenoptera and amphibians and reptiles. Regular updates are received covering all these groups, for example during the year, our county recorder for amphibians and reptiles come into the office and verified our GCN records due for database incorporation ensuring these are up to date. Major datasets this year were 2018 & 2019 butterflies (47,000+) records in total and amazing 28,173 of these received in 2019. Also 11,000 records for 2018 birds. Northamptonshire also has county recorders for; vascular plants, mammals, dragonflies, beetles, plant galls, arachnids and lichens. Many of these local experts have agreed to share their contact details in the support of advice, record ID and submission. This information will be added to our updated website in 2020.

The centre engages regularly with this recording community and hosts a bi-annual meeting with our County Recorders. This year, as part of WILDside we hosted two Bioblitz' and held our first recorders conference with local updates from our county recorder expert speakers, as well as speakers from the National Biological Recording Centre and Rockingham Forest Researcher from the Back from the Brink project.

Throughout WILDside County Recorders played a key role, generously giving their valuable time in recording events, site surveys, talks, workshops, shadowing, training and as active project board members thus instrumental in steering the delivery of this project.

Key Achievements 2019-20

2.1 Data Holdings Summary

Sites

Staff completed assessment and reporting for five Local Wildlife Site (LWS) surveys over summer 2019 and attended the 2019 LWS selection panel meeting in February 2020. 39 sites were assessed with new and/or updated Local Wildlife Site (LWS) citations created from the 2019 survey. Additionally, two Protected Wildflower Verges lost their status whilst two new Protected Wildflower Verges were created. Local Wildlife Site (LWS) database checks and corrections have been completed on 713 site citations including 621 LWS citations out of 717 held (86.6%). In addition, we have been working closely with the local geological group with access to existing Local Geological Site maps, a GPS unit and training to collect boundary information, to update our 'points' to 'polygons' on the upcoming sites visits in the south of the county.

Table 1 Sites information held in NBRC database (updated April 2020)

	Number of Sites
Non Statutory Sites	
Local Wildlife Site	717
Potential Wildlife Site	1102
Local Geological Sites	54
Potential Local Geological Site	10
Protected Wildflower Verge	29
Pocket Park	81
Wildlife Trust Reserves	43
Statutory Sites	
Site of Special Scientific Interest	57
National Nature Reserve	2
Local Nature Reserve	18

Habitats

NBRC habitat data is provided, updated, and managed by our partners the Wildlife Trust BCN. GIS layers of 14 Biodiversity Action Plan (BAP) habitats and 4 layers of additional habitat data is held covering all LWS and SSSI sites in Northamptonshire. There were no changes to the layers this year, in our last annual report we included a map of habitats information held in NBRC database. Working with our host this information will be updated during winter 2020-21.

Table 2 Habitats information held in NBRC database (last updated April 2018)

BAP habitats	Area (ha)
Acid Grassland	165
Calcareous Grassland	263
Eutrophic Standing Water	
(+2ha)	19890
Floodplain Grazing Marsh	1157
Lowland Fen	140
Lowland Heathland	2.5
Lowland Meadow	691
Lowland Mixed Deciduous	
Woodland	4620
Open Mosaics	185
Purple moor grass & rush	
pasture	0.8

Reedbed	33
Traditional Orchards	6
Wet woodland	172
Woodpasture & Parkland	202
Other Habitats	
Other Open Water	157
Scrub	295
Undetermined Grassland	1032
Undetermined Woodland	4805
Total BAP habitat	27527
Total Other habitats	6289
All habitats	33816

Species

This year we reached a landmark achievement of over a million species records in the NBRC database. In total, the centre currently now holds 1,072,173 verified & validated species records in Recorder 6.



Our Millionth Record a Painted Lady butterfly @David James

Our data sources include:

- expert county recorders and national recording schemes (including Butterfly Conservation, UK Caddis Scheme, Wild Otter Trust, Vincent Wildlife Trust, Natural History Societies etc.)
- ecologist reports and licence returns (including various local consultants, British Waterways, Freshwater Habitats Trust etc.)
- our organisational data sharing partners (including Wildlife Trust BCN, PTES, Environment Agency)
- historic paper records
- irecord *please note that whilst we have access we do not as yet incorporate these records routinely due to volume of records and current irecord internal checking procedures direct website submission is still the most efficient route.

We intend to publish our data sources with our data reports in 2020.

All received records are **validated** (checks on the "completeness", accuracy of a record) and, **verified** (providing confidence as to the accuracy of identification of what has been observed) in conjunction with local and national experts before incorporation into the NBRC Recorder6 database¹. In rare cases where verification is not possible, the records will either be omitted until they can be assured or, if required, they are flagged as unverified so that this can be taken into account in decision making until this can be corrected. This quality assurance process is imperative in delivering the reliable layers on which our data information services are based, and thereby the informed local ecological decision-making taken based on this.

In total 138,000+ records were added 2019-20 including;

- 63 datasets received in 2019 of which 75% of have been processed and incorporated into the database.
- 2489 records from the 2019 Local Wildlife Sites surveys
- ~12,000 records, as generated through our WILDside Project
- 20,000+ of the received butterfly records for 2018 & 2019 (a further 24,000 in process)
- 100,000+ of the huge plant dataset received in 2016, which the team continue to quality process and incorporate.

Through publishing the centre's unrecorded 1km 'gaps in the maps' as a cloud based online map, we enabled targeted recording and, in just one year, recording effort reduced these 'gaps' by over 100 squares in our database. This map will be updated for summer 2020 to aid Northamptonshire's citizen scientists in contributing to the database. We are always working towards the aim of improved biodiversity data completeness- historic, taxonomic and geographic.

Northamptonshire's county recorders support the NBRC through provision of full county datasets and annual updates for their taxon groups. The team plan to add a new county dataset per year, as well as maintaining annual updates of all full county datasets held. Along with existing data sharing relationships, in 2020-21 the team expect to continue to update a significant proportion of the full county plant dataset totalling over 450,000 records.

¹ historical records may not have all undertaken the full quality procedure as we now have in place for database incorporation.

Table 3 Species information updates in NBRC database (updated April 2020)

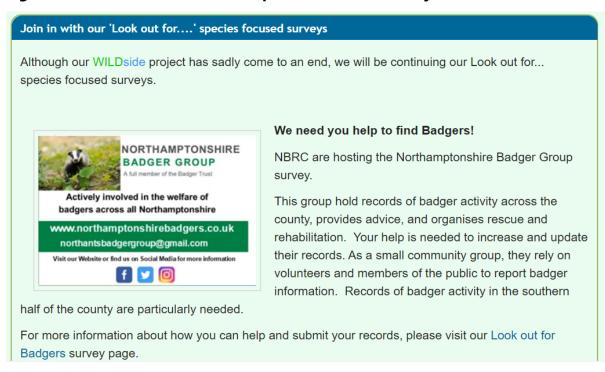
County Dataset	Current date of records in R6	Last time updated in Recorder 6	Planned Update
Bryophytes	December 2018	Spring 2019	Summer/Autumn 2020
Butterflies	November 2019	Spring 2020	In progress and ongoing in 2020/21 *large dataset
Diptera	November 2017	Winter 2018	Spring 2021
Moths	August 2017	Spring 2018	In progress, expect by Spring 2021
Water Bugs	December 2016	Spring 2017	Autumn/Winter 2020
Plants	October 2015	March 2020	In progress and ongoing in 2020/21 *large dataset
Dragonflies	November 2003	March 2004	Current dataset with county recorder
Birds	December 2017	Spring 2019	Updated records received and new county recorder in 2020. In progress
Hymenoptera	New County Re	corder as of 2019	Records undergoing verification
Amphibians & Reptiles	Period spanning 1905 - 2016	2018	NBRC held GCN data verified
Fungi		ne contacted for se access	When received
Lichens		ne contacted for se access	When received
Mammals	group, but the	y recorder for this re is currently no of records	Uncertain
Coleoptera	group, but the	y recorder for this re is currently no of records	Uncertain
Trichoptera		der for this group aset received.	In progress, expect complete by Spring 2021
Spiders	There is a county recorder for this group, but there is currently no exchange of records		Uncertain
Hemiptera	No county recorder for this group		Uncertain
Orthoptera	No county recorder for this group		Uncertain

2.3 Biological Recording & Engagement

Website, Newsletter & Social Media

The NBRC services pages were updated during the year to include the new drone aerial survey service. The online recording facility is a key feature of the website and available for signed up members to submit their records as powered by Indicia (BRC warehouse). From Apr 2019 – March 2020, this facility has generated 886 records. As part of the WILDside project the website was enhanced for recorders through: 'look out for...' online surveys for beefly (3rd year), swifts (2nd year), river mammals (2nd year), and badgers; a PDF version of the new WILDside recorders handbook; and an evaluation page including an embedded video of feedback from members of the engaged recording community.

Figure 1 Website 'look out for...' species focussed surveys



As the Drupal7 website was due for a significant update the team took the opportunity to review the existing website with our steering group alongside wider research into functionality, platform and themes used by other LERCs. The review unanimously agreed a key and desirable function of the existing website was our online recording capability, as has been further developed to enable our 'look out for ...' species surveys and overall we were positive about the existing site. Through Environment Agency funding as part of the 'look out for' pond habitat survey project we are starting the process of updating our website platform from Drupal 7 to 8. We will include identified enhancements to accessibility, responsiveness and develop the site with embedded mapping and video. We have also migrated our website to a new webhost, Clook, in order to overcome issues of access control.

The NBRC newsletter is a bi-annual recording publication, produced in Spring/Summer and Autumn/Winter. It contains centre updates and national recording news as well as reports from Northamptonshire's local recording community and county experts. The NBRC mailing list receive this by email/post and it is shared on the NBRC website, NBRC social media pages, through the Wildlife Trust BCN Monitoring and Research blog, and now also through the Northampton central library.

Figure 2 WILDside Facebook Recording Community



WILDside Recording Community

© Public group · 193 members



+ Invite

NBRC social media is active and growing. These online platforms are used as a space for recorders to share, learn and support each other in personal recording. The twitter account (@_Northants_BRC) is updated several times a week with the latest events, talks, finds and surveys and has over 600 followers. All social media has been handed over to the NBRC and the WILDside mailing list was notified of the transfer to NBRC communications if they wanted to opt-in. The WILDside Recording Community Facebook group continues as a self-supporting community as maintained and moderated by the centre with around 200 members.

WILDside Project

2019 was the final year of the National Lottery Heritage Fund supported WILDside project. This year the project focussed on the long-term development of the recording community, relationship building, gaining final evaluation feedback, application of lessons learnt and sharing the successes.

Engagement was continued this year through public events (Towcester Fun Day) and talks hosted by the Northamptonshire Natural History Society as well as arranging site survey access for recorders. In this final year two site Bioblitz' were arranged, in Yarwell Quarry and Abingdon Meadows (a return after 10 years). The project also arranged for

support the LWS surveys widening the taxa recorded as part of these to improve the invertebrate data alongside plant information as is traditionally reported.



Ryan Clark WILDside Project Coordinator training public in freshwater species identification at Towcester Fun Day event 2019 ©Nathalie Hueber

It was also during this final year several workshops were held that focussed on recording skills development including WILDside badged Wildlife Trust Introduction to Biological Recording and Train the Trainer, which gave support to local experts in passing on their skills. Additionally NBRC team, volunteers and county recorders benefitted from a bespoke QGIS course for recorders, covering the FSC TomBio tools. The aim of this is to provide support across the whole journey of a recorder – from first encounter to leader in the field.

The NBRC have built up and equipped a library of resources to support Northamptonshire recording as informed by recorder feedback of their needs. Equipment purchased through the project includes a modified leaf blower for suction sampling, sweep nets, camera traps, GPS units, stereo and compound microscopes with projection capabilities, reference guides to support identification and some teaching sets. This library will be accessible for access and loan, housed in Lings House and managed by the record centre team.

Support to online recording has also proved particularly successful, with a notable shift in how we receive incidental records and the volume received. Our NBRC website hosted seasonal species 'look out for...' surveys to generate records in underreported

groups, this year working collaboratively with the Wildlife Trust, Northamptonshire Badger Group and our county diptera recorder. A wildlife recording handbook was produced and a guide to making online submissions of records to the NBRC website. Using feedback mapping we trailled 'gaps in the maps', mapping the 1 km squares where we hold no records in our database and sharing these grid square locations with recorders to inform their recording activity. In 2020 this will be updated and made available as an interactive 'cloud based' map to support recorders in planning their recording on this survey.



Ryan Clark WILDside Project Coordinator presenting at the Northamptonshire Recorders Conference 2019 ©Nathalie Hueber

The project has been successful in increasing the environmental information held by the NBRC with 12,000 newly generated records across 2500 species generated directly from the project, including over 40 organised surveys (the majority of which were Local Wildlife Sites). As part of the lasting legacy, the WILDside Project has improved local relationships as well as wider promotion of the work of the records centre. This was celebrated with the first ever Northamptonshire recorders conference, held with speakers from the local expert community (Kevin Rowley, John Showers and Rachel Carter) as well as national projects (Jamie Wildman – Back from the Brink, Martin Harvey – Biological Records Centre). In late 2019, NBRC displayed a WILDside project stand at the National Biodiversity Network annual conference where feedback from

our external evaluation was shared highlighting the successful methods used to energise local recording activity.

Figure 3 WILDside Evaluation Report and Three County Recording Handbook





Evaluation Report

Enthusing and enabling the next generation of wildlife recorders across Northamptonshire

Wildlife Recording Handbook

How to record wildlife in Bedfordshire, Cambridgeshire and Northamptonshire













The project progress was monitored against outcome targets throughout, with adapted strategy on the basis of received feedback where applicable. This year the project underwent external assessment with final feedback collection. This formed the basis of the final published project evaluation, which details the methods, success against target and lessons learned for future projects.

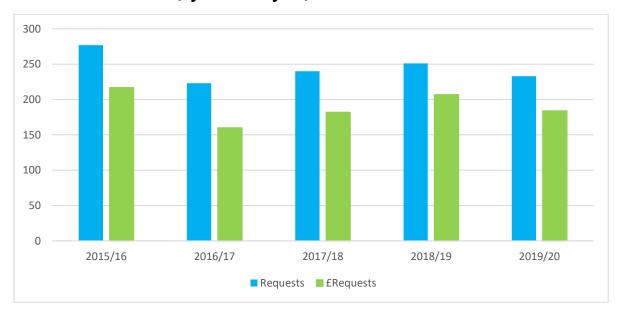
The record centre will continue collaboration with the Wildlife Trust research team in the design of the training workshops programme and supply the handbook as a resource. Support will continue to the online network and more online surveys launched. Further Northamptonshire Natural History Society talks will be organised as a welcome method of engagement, and through this, publications and bioblitz' the aim of greater local recorders use of the library will be targeted. It is envisaged that future conferences will be held to share skills and knowledge on species and habitats we are working together to protect and to celebrate the work of our county's naturalist citizen scientists.

2.4 Data Services

Information Requests

The team meet reporting requirements for paid requests averaging 5 days from response to completed report (incl. weekend days), and most requests processed and reports received a week prior to agreed deadlines. Use of the NBRC data service this year was down both in terms of commercial and non-commercial use of the service. To ensure we are meeting our running costs we have agreed an increase of our hourly rate with steering group approval. Our standard charges will continue to be calculated on the basis of the number of sites within a search area. We have found this is the most accurate way to estimate staff time per search without impacting the radius request, and therefore data used by consultants using our service (i.e. depending on the location a 2km search can cost the same as a 1km search). Our intention is to keep this pricing level stable for 3-5 years, as we have in the past, with interim reviews as needed.

Figure 4 Number of commercial and non-commercial data requests received by the NBRC 2014-2020 (by financial year)



Data Agreements

During 2019-20 the NBRC delivered the licenced data GIS layers and reports (habitat, species, sites as requested) to meet the terms of all existing SLA partners including renewed partnerships with Anglian Water, Environment Agency, South Northamptonshire District & Cherwell District Council and North Northamptonshire

Joint Development and Planning Unit. Over the next year we expect to renew our agreement with Thames Water and migrate our existing council SLA agreements to feed into the new unitary council system. These partnerships are important for the use of quality ecological decision making at county scale and accordingly we have a close working relationship. All SLA partners are represented within our steering committee, and guide NBRC strategic planning to ensure we are delivering user needs.

Table 4 Service Level Agreements in place with NBRC (from 2019 to 2022)

	2019-2020	2020-2021	2021-2022	
Environment Agency	Agreed until 2023			
	Received for service until Jan 2021, in			
Thames Water	discussion for a further 5 year agreement.			
Anglian Water	Agreed until 2025			
North Northamptonshire Joint Planning &	Agreed until April 2021 Review ne			
Delivery Unit	yea.		year*	
South Northamptonshire District & Cherwell	Agreed until April 2021 Review no			
District Council			year*	

^{*} NB: Note Northamptonshire is moving to a unitary council system

Drone Service

The new drone service launched for commercial bookings in April 2019, initially focussing on projects with existing partners. This allowed the team to develop professional application of the service on live projects with need for aerial monitoring - developing pilots experience of handling common issues safely and legally with



confidence (aerodromes, public access, proximity to roads or structures on site) and delivering the required products.

'Farming for the Future' project still from aerial video @Rachel Tate

The Wildlife Trust BCN Wider Countryside team requested the NBRC to supply imagery and footage in evidencing the work undertaken in their 3-year Farming for the Future project. This project will improve vital infrastructure for water quality and meadow and wetland habitats in the Nene Valley. A series of shallow ditches and scrapes were planned in six selected fields to create new wetland habitat for the



establishment of a range of fauna and flora, particularly for new nesting and breeding spaces for overwintering and breeding waders. The imagery and footage gained from NBRC drone survey would record the creation of the new habitat and show how it acts as a water store on land beyond the winter months. Through footage taken at the point of creation we were able to showcase the specialist rotary ditcher, a one-of-a-kind in the UK on loan from the RSPB, in action following a predetermined route creating this new habitat with cm precision.

Figure 5 Planned scrapes at Stoke Doyle

All six sites will be revisited over the course of 2020 to take aerial images of the scrapes acting as a water store and allow the team to see how the newly created habitat is shaping up. This, and the prior case study work for the Wildlife Trust reserves team in Bradlaugh fields and as part of our Bioblitz' will be added to the website as examples of what can be achieved for conservation with this new tool. Our drone service page has been updated with the booking forms for project requests.

2.5 Organisational Partnerships & Development

The NBRC works collaboratively with regional Record Centres within the East of England in regional data supply and shared practice. NBRC have been present at all regional meetings, is active in the forum and attended the 2019 ALERC conference; with all staff having attended at least one of the ALERC meetings through the year.

Locally, a skills-sharing day initiated by the NBRC last year with the other Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire hosted record centres (CPERC and BMRC) continued, this year, as hosted by CPERC. The full teams of NBRC, BMRC and CPERC met in the Cambourne head office to share our methodologies for fair charging. We intend to continue these regional development days, with a proposed upcoming discussion on habitat data.

This year, thanks to WILDside organisation, the NBRC held Northamptonshire's first Recorders Conference; for this event, marketing materials were created including banners, business cards, and updated leaflets. These were also shared at the NBN 2019 conference, where the NBRC shared the WILDside project through an 'end of project' display, sharing the lessons learnt through this project with the wider recording community. The final evaluation, as externally reviewed, is available on our website in order to share best practice in quality recording engagement. For a second year running, our WILDside Project Coordinator (and Hymenoptera County Recorder) was shortlisted by the NBN for Gilbert White Award for his personal terrestrial recording.

The NBRC works to NBN and ALERC best practice guidelines, as can be seen in our operational practices and documentation. We are now in a position to submit for ALERC accreditation during 2020-21.

Environment Agency Projects

The NBRC's Environment Agency funded Bigger Vision & River Monitoring Project is now in full swing, with delivery of professional aerial photography to support river restoration and management. Before and after orthomosaic images have been produced for a number of sites in order to show change from restoration works being undertaken.



Panoramic of Earls Barton @Rachel Tate & Nathalie Hueber

At the start of 2020, the Environment Agency also have supported the NBRC in the development of the 'Look out for ...Ponds' Project. This applies citizen science online survey as shown successfully during WILDside as applied to species records adapted to generate habitat information with the use of both traditional 'paper' and new mobile tools. This funding will support NBRC website update, development, promotion and management of the survey to improve our information on the distribution of ponds in the county. This information is vitally important for use in the new great crested newt district licencing scheme, where such habitat information will aid the accuracy of the modelling alongside our species records.

IT infrastructure

Updated staff computers were purchased in 2019 for all Data Officers, including a high spec model with graphic card capability for processing the drone images. As part of the legacy of the WILDside project, we now have our own server and updated volunteer computer, giving us increased data holdings capacity as well as improved speed of systems for the team and a 'hot seat' computer for use of our digitisation volunteers and county recorders. The new server gives 8GB RAM at 1.6 GHz (an increase of 6GB), improved data security and is backed up regularly.

The NBRC team continue to use MapInfo and Recorder 6 to manage and generate biological reports. We, along with the rest of the LERC community have invested in Recorder development and have access to the dictionary updates as a result. Use of QGIS has increased, with production of the notable layer, reporting results of species surveys and transfer of Wildlife Trust Bedfordshire, Cambridgeshire & Northamptonshire produced LWS layers. The team are adapting to work across both GIS platforms, and will continue to do so in 2020-21; looking at the use of QGIS in layer management and production of data reports.

3.1 Finances 2019-20

Financial Summary 2019-2020					
Reserves end March 2019*	£ 60,553				
Surplus/(deficit) end of March 2020**	-£ 20,207				
Projected carry forward into 2020-2021	£ 40,346				
Contingency budget for 6 months	£ 33,434				
Carry forward less contingency	£ 6,912				
Value of hosting arrangement with WT	£ 5,384				

^{*}includes final year EA Bigger Vision & Resilient River remainder

^{**}includes final WILDside NBRC match-fund contribution

	2016/17	2017/18	2018/19	2019/20	End of Project
WILDside committed NBRC match fund (hosting incl.)	£ 490	£9,333	£ 6,757	£7,582	£ 24,162
NBRC final match fund contribution	£ 490	£6,000	£ 3,424	£4,248	£ 14,162

The NBRC in 2015 committed £25,000 of match funding from the organisational reserves up to December 2019, with steering group approval, as part of the National Lottery Heritage funded WILDside project. The final (non-hosting) payment has now been made for this project totalling £14,162 and our reserves figure updated accordingly.

Income £ ²						
	2018	8/2019 Actual	201.	9/2020 Actual	2020	0/2021 Budget
Information Requests	£	32,540	£	28,449	£	33,350
SLAs	£	21,356	£	28,393	£	29,643
Project work	£	11,503	£	7,571	£	10,000
TOTAL	£	60,805	£	64,413	£	72,993

Income from data enquiries slowed significantly during winter this year, with a shortfall of over £5000 from expected income from this service. This follows a year with high service uptake, showing the need to account for fluctuation in establishing a

maintained rate. Maintained rates over several years' aids stability for our users, however to securely support centre operations NBRC hourly data service rates need to account for fluctuations such as this and inflation rises to NBRC infrastructure and running costs. Data service rates were last updated in 2016, and due to this years' shortfall, in our March 2020 meeting NBRC steering group reviewed and agreed updated charges from £120 per hour to £145 per hour, with a view to maintain pricing at this level.

All existing SLAs were continued or renewed in 2019-20. With North Northamptonshire Joint Development & Planning Unit the NBRC have a 2-year agreement. This was joined by a new partnership with South Northamptonshire Council, as was renewed for 2020-21. As councils in Northamptonshire prepare for unitary governance, we will liaise with them to ensure their needs are supported. The joint regional SLA with the Environment Agency has continued with a refresh of the terms across the East of England. In April, a new joint regional SLA was agreed with partners Anglian Water from 2020 until 2025. Discussion has begun with Thames Water to agree a further 5 year SLA. The NBRC will continue to work to meet the needs of both local and regional governance.

The Wildlife Trust BCN Wider Countryside team once again gained support for LWS surveys, as supported by NBRC Data Officer additional time. The drone service was also requested both as part of the Environment Agency Resilient River Funding and in delivery of footage and images in support of funded work by partners The Wildlife Trust BCN 'Farming for the Future' project. Now with a commercial service established, the team intend to showcase the applications of aerial imagery for ecological management and build our service throughout 2020. The team were contacted for BioBlitz community engagement and survey support in 2019 as part of the Tove Community Day and the Friends of Hunsbury Park community group as part of their lottery funded year. The NBRC have 10 years' experience of organising Bioblitz events, and now tooled up through WILDside can offer this service for landowners and communities. As of spring 2020, funding was gained from the Environment Agency for website development and a pilot habitat based survey, gaining current information on the counties ponds through citizen science.

Expenditure £ ²							
	2018/2019 Actual		2019/2020 Actual		2020	2020/2021 Budget	
Staff	£	61,327	£	64,432	£	67,589	
Equipment (assets)	£	510	£	233	£	400	
NBRC training	£	1,208	£	1,085	£	1,000	
NBRC travel	£	1,001	£	1,180	£	600	
NBRC volunteers/	£	16	£	166	£	100	
contractors							

ALERC, NBN, NFBR & GeoConservationUK membership	£ 510	£	515	£	550
IT Software, licences and website support	£ 491	£	311	£	1,500
Telephone, consumables & printing	£ 142	£	154	£	200
Drone service licences, insurance and equipment	(included above)	£	1,052	£	500
*NBRC total annual running expenditure (not including delivery of additional projects)	£ 65,205	£	69,128	£	72,439
**WILDside committed match fund (hosting removed)	£ 3,424	£	4,248	£	project complete
TOTAL	£ 68,629	£	73,376	£	72,439

²Due to COVID-19 the budget 2020-21 outlined here was amended in June 2020. Adjustments were made to expected income (removing expected project income from the bioblitz service/ a reduced drone survey season) and expenditure (reductions from staff furlough/travel/conferences and increased costs in some areas due to homeworking).

Salaries of staff are updated annually in line with inflation. During the year, project work required additional staff time, as funded through project work (LWS survey, WILDside project evaluation and commercial drone work). From January 2020, the centre manager now works 4 days a week bringing this better in line with the other Wildlife Trust BCN hosted record centres who have full time management. The team have benefited from a number of courses including online training via Datacamp, which continues until Dec 2020. In development of the website, staff training will aid the transition between Drupal 7 to 8, ensuring in house skills to manage this vital tool. The team will continue to develop sector knowledge through NBN, NFBR, and ALERC membership and undertake Wildlife Trust run courses in identification and survey skills as well as maintaining first aid training. Rates for organisational memberships were raised in the year and NBRC have invested in development of Recorder 6 for continued data-holdings management, along with the rest of the LERC community

WILDside benefitted the team and local recorders with equipment purchase thus expenditure on this is anticipated to be lower during 2020-21. Travel was a little higher than budgeted for 2019-20, however this included funded travel for delivery of drone work. For 2020-21 a consultant will be funded to deliver the updated website, this

investment in the website is funded through the aforementioned 'Look out for...Ponds' project.

The expected budget set out for 2020-21 should be largely balanced with sustained SLA funding confirmed and approved updated charges for data service applied. The aim of the charges set is to maintain sufficient operating buffer to future proof the centre with potential data enquiry fluctuating service as seen in 2019-20.

3.2 Future Plans

NBRC organisational paperwork has had a refresh, drafted where needed and the team are updating systems and practices accordingly with ALERC accreditation submission planned during the year. The approved NBRC Policy documentation will be shared on the website and internal procedure documentation maintained to meet these. The NBRC steering group committee are well informed of centre business by management, and meetings will continue three times a year in order to guide the sustainability and growth of the centre – covering priority planning, budgeting and strategic direction. Informal communication is also facilitated between these meetings. It has been decided to review NBRC risk planning at every meeting, by assessment of the disaster management plan, to ensure that it continues to meet centre needs.

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Figure 6 NBRC team 2020 aims brainstorm

In preparation of the team's annual overview work plan (GAANT) in January 2020 staff brainstormed the wider aspirational aims of the centre. This has been reflected in our team planning and in personal development plans broken down into the steps needed to achieve them. The team will repeat this process annually, to continue building and adapting the centre. One shared aim was an update to the NBRC website; this was explored further with the key features of success to incorporate in its development:

- 1. Develop recording functionality, download and incorporation of the records (standard regular process for record incorporation for Recorder6)
- 2. Responsive, professional and accessible design ensuring we meet the needs of all users (.use on multiple platforms and consideration of visual needs)
- 3. Simple and navigable information for the benefit of service users and recorders (use of multimedia and automation where possible).

During the year, staff will work with a consultant on the delivery of these aims in migrating and enhancing the website, bringing it in line with the updated marketing materials as produced for the WILDside Northamptonshire Recorders Conference.

A key area the team want to continue to build on following WILDside is the support to our local recording community and respond in line with the lessons learned from the project. Improved support for recorders across wide taxon coverage and at all stages on the recorder journey are key. Motivational feedback mapping and survey tools such as the successful 'Gaps in the Map' will be updated, developed and promoted to a range of groups. Newly established working partnerships for supply and use of data, and new ways of working in existing partnerships are important to maintain and continue. The links to the Northamptonshire Natural History Society and Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire in developing engaged naturalists, linking up these groups with experts and delivering training and materials to engage naturalists to take developments steps of generating a record, growing taxon knowledge and building the confidence to support others in a Northants network of biological recorders. Through this we have gained enhanced information for sites across the county, the majority designated.

The team aims to further support this by maintaining good progress with quality checking, inputting and maintaining our ever-growing database. The aim of the team is to complete updates and checks on all Local Wildlife Site citations held, to incorporate the held county recorder data sets (including making progress with the 400,000+plant records held) and keep up to date with all these datasets. The team work with the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire in the maintenance of habitat information. Development of wider information, outside of the assessed sites, would be beneficial for the county. It is recognised that these aims are aspirational for the centre over a number of years.

The services of the NBRC are expanding and maturing. Through funded development projects staff are equipped, trained, licenced and confident in delivering both drone project work recording bioblitz events. Promotion of these services will be broadened out during 2020-21 from existing partners for wider use as powerful tools for habitat management.













Up until the end of 2019 the



Project will be promoting and supporting wilidlife recording across Northamptonshire

Enthusing the next generation of wildlife recorders