BIODIVERSITY BASELINE STUDY – Engagement workshop report

for



Ву



March 2023

Status	Version	Date
Engagement workshop report	V2	12 April 2023
Engagement workshop report	V1	23 March 2023

Table of contents

Tabl	e of contents	2
Glos	sary	2
A.	Introduction	3
B.	Feedback to questions	5
1.	Key priorities for biodiversity in the city of Norwich	5
2.	Main threats to biodiversity in the city of Norwich	10
3.	Opportunities for biodiversity in the city of Norwich	11
4.	Trends in biodiversity in the city of Norwich	12
5.	Sources of data on biodiversity for the city of Norwich	14
C.	Key summary messages from the workshop delegates	15
D.	Next steps and lessons learnt	18
Appe	endix 1: Attendee list	20
Appe	endix 2: Additional responses to consultation	22
Appe	endix 3: Feedback on workshop	28
Appe	endix 4: Minutes from question-and-answer session	29
Appe	endix 5: Sources of data already held by the Norfolk Biodiversity Information Servi	се
		. 30

Glossary

Axiophytes - "worthy plants" - the 40% or so of species that arouse interest and praise from botanists when they are seen. They are indicators of habitat that is considered important for conservation, such as ancient woodlands, clear water and species-rich meadows. They are not the same as rare plants and provide a powerful technique for determining conservation priorities. Sites with many axiophytes are usually of greater importance than those with fewer; and changes in the number of axiophytes in a site over time can be used for monitoring the outcome of management practices (Botanical Society of Britain and Ireland).

BBS - Biodiversity Baseline Study

Guild - different species that share common functional attributes in terms of life history, foraging or feeding strategy or habitat requirements. (source: the Brecks Biodiversity Audit).

LNRS - Local Nature Recovery Strategy

NBIS - Norfolk Biodiversity Information Service

A. Introduction

This report presents the main findings from a workshop organised in Norwich on the 13th March 2023 for the study **Biodiversity Baseline Mapping** that Norfolk County Council is conducting on behalf of Norwich City Council.

This study is intended to help deliver the aims of Norwich City Council's Biodiversity Strategy, will help inform the production of a biodiversity net gain guidance/supplementary planning document and will have links to other relevant strategies such as the Local Nature Recovery Strategy (LNRS) and 2030 species recovery targets set out in the Environment Act 2021.

This report sets out the aims of the workshop, the agenda for the day, summarises the key messages from the workshop delegates, and makes recommendations of key actions for the Biodiversity Baseline Study (BBS).

The main objectives of the workshop were to:

- Present data and initial natural asset map (findings from Task 1 and 2, data gathering and analysis respectively)
- Ask for any additional relevant data (to address the gaps found in the literature)
- Ask for qualitative expert information on species, habitats and/or site trends, to represent species decline, recovery and future potential
- Ask for suggestions for character mapping areas/units
- Ask for suggestions of threats and opportunities to focus on
- Explore the priorities of different organisations and whether there are any activities or surveys on-going that could dovetail this project. This will ensure effective use of resource and consistency across similar projects

Delegates were selected from a pool of experts representing different relevant organisations (public sectors, NGOs and conservation groups, volunteer representatives, etc.) using contacts and knowledge from both project team and Norwich City Council. These were e-mailed an invitation to join the workshop through Eventbrite. A delegate pack was also sent prior to the workshop summarising the objectives, the format and means to access the venue. 33 delegates attended the workshop (excluding the project team). A full list of delegates and affiliations is provided in the Appendices to this workshop report.

Workshop Format

The format of the workshop included a series of presentations followed by a break out session. These presentations covered the following:

- The background and context for the study
- Study team presentation, objectives of the workshop and how the rest of the workshop was meant to operate.
- The findings thus far on the data sources used for the mapping and main gaps.

At the break-out sessions, delegates were asked to discuss five questions around three elements: species, habitats and land-use.

- 1. What are the key priorities for Norwich's biodiversity?
- 2. What are the major threats to achieving /meeting these priorities?
- 3. What are the major opportunities?
- 4. What trends do you or have you witnessed?
- 5. Have you undertaken surveys or recording that NBIS may not have the records/data for? Would you be able to share?

Delegates were allocated to a different predetermined group on entrance with a member of the project team, or the city council as facilitators to guide discussion and to retain focus on the objectives of the workshop. The groups were set up beforehand to include a varied representation of groups and interests. Groups were required to record the key points for their discussions in writing for each of the questions above. Participation was ensured by each delegate having access to post-it notes where they could write their answers and entice discussion among the group. There was also a map at each table where they were encouraged to draw specific sites of interest and identify character mapping areas. The following picture, Figure 1, depicts the table that delegates were asked to fill in and the approach to gathering the data.

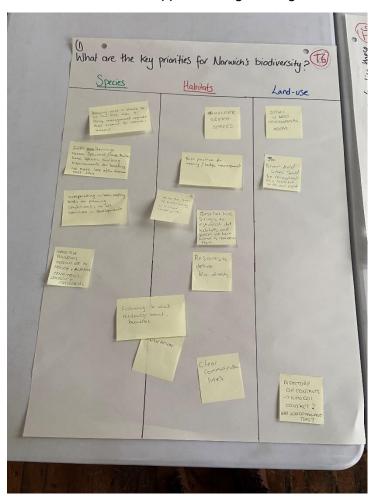


Figure 1. Table filled in by delegates.

The next section presents the findings from the different groups, a total of 6 groups, as well as the key messages from the plenary session.

B. Feedback to questions

This section presents the main discussion points by the groups by question. All answers from the groups (as given in post-it notes) have been transcribed and introduced into a software to create word clouds. Word clouds are visualisations of the words that had the highest frequency in the answers by the groups. They reflect the main points where the groups agree on priorities or key issues.

This section only captures the information received from the participants. The implications and critical analysis from this information is provided in the last section of this report (section C).

1. Key priorities for biodiversity in the city of Norwich



Figure 2. Priorities for biodiversity - What are the key priorities for Norwich biodiversity?

Collectively the different teams' discussions agreed on the importance of **management** as a key priority for both habitats and species; as illustrated in



, the word cloud made from transcripts of these discussions. Moreover, there was a common recognition that there is no one size fits all so that management should take account of nature and seasons. Other recurring themes were corridors, connectivity, woods, chalk rivers and bats (as shown above). Other key priorities highlighted by the groups included:

- Identifying indicator species, as it is not possible to survey all biodiversity
- Updating data and undertaking regular recording to record population changes
- Improving connectivity
- Human understanding and connection to nature: promoting behaviour change and education, e.g. for dog walkers.
- Allocating money and resources.
- The teams also identified **priorities for some key species**, which included plants, birds, aquatic organisms, pollinators and mammals.

The main points raised by delegates on species are replicated in Table 1 verbatim (with the summary presented in the bullets above). The main priorities for **habitats** and **land use** are replicated in Table 2 and Table 3 respectively. Delegates were also invited to draw on maps some of these priority sites (refer to Map 1 and 2).

Table 1. Priorities for Species in Norwich during break-out groups (as given in post-it notes)

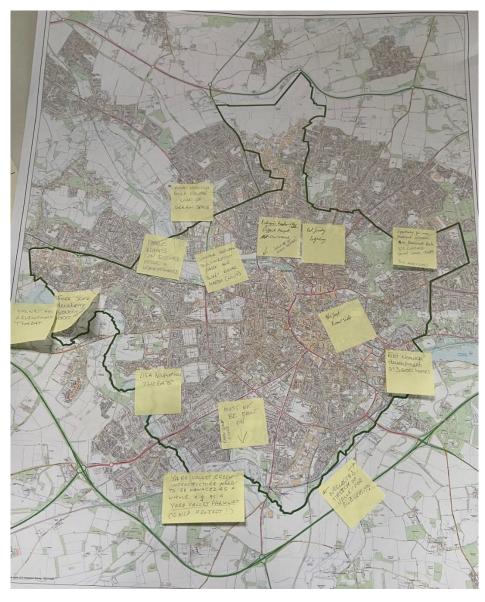
Plants and fungi	Birds	Aquatic organisms	Invertebrates / pollinators	Mammals
 Trees: should be managed for biodiversity not just H&S. Tree planting needs to be targeted – right tree right place. Street trees should be planted in new developments. Axiophytes and native plant species which generally underpin biodiversity. Fungi like Earth tongue, waxcaps, pink gills and spindles in Earlham and Rosary cemeteries. These are rare species and require specific conditions. Meadow Saxifrage in cemeteries. Invasive species such as Himalayan Balsam, crassula, Acaena spp., lovegrasses, and threecornered garlic which pose a threat. Bryophytes and lichens 	 Swifts, house martins, starlings, house sparrows and black redstarts all have specific building requirements for breeding. Need to preserve existing nest sites The built environment is key, so need to implement nature sensitive planning, building and development. Swift and bat boxes should be put in council buildings 	 Beavers Fish, aquatic invertebrates and macrophytes Loss of shallow-rooted wetland plants due to water abstraction 	 Ground nesting pollinators Bee Orchids Silver-wash White Admiral butterfly in Lion Wood, Heigham Park, Spitalfields, Mousehold heath White letter hairstreak in Danby Wood, Old Library wood, Mousehold heath, County Hall, Sweetbrier industrial estate Large scabious mining bee Leaving deadwood to provide habitat 	 Bat Behaviour: Mating behaviour needs more research, e.g. swarming of pipistrelles around high-rises. Targeted surveying is needed to identify colony routes. Roost sites need support as are key habitat indicators, e.g. around urban fringe and parkland, Riverside. Street lighting and vandalism of nest sites can pose a threat Hedgehogs (concerns on best practice and accidently harming hedgehogs by strimming/ clearing dense vegetation without first checking for presence).

Table 2. Priorities for different habitat types identified in discussions identified during break-out groups (as given in post-it notes)

Habitat/Land use Type	Sites Identified (refer to maps below)	Comments
Chalk Caves	Danby Caves, Kett's Hill	Underground Structures need to be protected. Important for Bats
Chalk ridges		Increasing woodland on chalk ridges.
Brownfields		Should be recognised as habitat sites in their own right; Preserving sandy soil areas for Ground Nesting Bees
Heathland	Mousehold Heath; Relict Heathland in Sprowston Industrial Estate	Need to better protect heathlands from recreational pressure; Heathland management
Woodland	Old Library Wood; Danby Wood; Lion Wood; Coopers Wood	Coopers Wood is an important site for Beetles; Increasing canopy cover to improve connectivity, sympathetic tree management, e.g. pollard/coppice rather than felling.
Rivers and Streams	Yare Valley; Wensum Chalk Stream SAC	Wensum chalk Stream Flora and Fauna important; South East of Yare Valley neglected; Reducing chemical use and release in waterways
Ghost Ponds		Restoring ghost ponds
Wetland	Sweet Briar Marsh	Rare plants found in Grassland near Sweet Briar Marsh
Grassland	Milepit Grassland	Reduce mowing, consider site and species specific management, timing also being important.
Parks and gardens	Eaton Park; Heigham Park; Sloughbottom Park; Anderson Meadow; Spitalfields Park	Better management needed in Slough Bottom Park and Anderson Meadow Look at impacts from recreational use and education; Domestic gardens: as new builds often have smaller gardens
Verges and Roadside and Railside Green Space	Railside near Hall Road; Mansfield Lane/A146	Common Lizard found on Railside Verge near Hall Roads; Bank on section of Mansfield Lane and A146 has Pyramidal Orchids; Roadside verges can be managed differently for different species.
Allotments; Churchyards and Cemeteries	Earlham Cemetery, Rosary Cemetery	Earlham Cemetery has 10-11 Species of Bats; Churchyard of St.Andrews has roosting Sparrow Hawk
Built Environment	Lakenham Mill; UEA Landholdings; East Norwich Development Areas; Prison Land	Stonework on city walls, graveyards etc. important for Lichens; Daubenton Bats found in Lakenham Mill. Historic Buildings important for bats. Urban Nesting Bird provisions should be incorporated into building plans

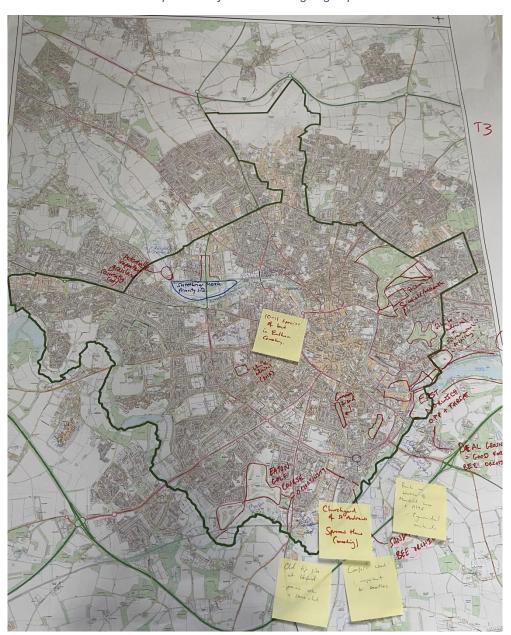
Table 3. Priorities for land-use types identified in discussions identified during break-out groups (as given in post-it notes)

Land use Type	Comments
Nature corridors	Need a holistic approach to existing green corridors e.g. Yare Valley. Opportunity for improving Anderson's meadow green link through better management
Green spaces	Wilding green spaces and parks, churchyards, golf courses, allotments
New Developments	Ensure Nature is Built Into Designs
SUDs	Better SUD's management
City Grounds	Review City Council grounds maintenance to create more diversity
Private Land	Access Private Land to build up a better Database.



Map 1. Priority sites according to group 2

Map 2. Priority sites according to group 3



2. Main threats to biodiversity in the city of Norwich

The following word cloud depicts the main points raised during the discussion on threats to biodiversity in Norwich. Developments and climate change were identified as main threats. Mostly, threats applied both to species and habitats. In terms of land-use, identified threats included new development inside Norwich. Developments outside the city were seen to be also affecting Norwich biodiversity negatively; the main reason provided by delegates being that the planning system does not seem to take account of *corridors* (the specific comment was that *'corridors are not incorporated into the planning system)'*.

Specific threats included salinisation and tidal surges in wetlands, resulting in impacts in chalk streams which are rich in biodiversity and the release of CO². More generally, replacing natural with manmade habitats was also identified as a threat, an example being AstroTurf and hard-surface landscaping.

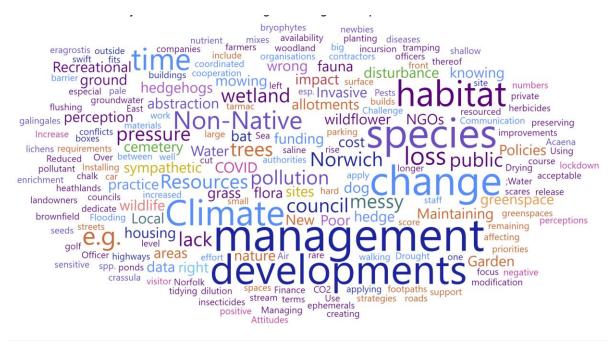


Figure 3: Main threats to biodiversity – What are the major threats to achieving/meeting these priorities?

Additional threats identified that the project team would like to highlight from the breakout groups are:

- Invasive non-native species
- Reduction in connectivity, increased fragmentation of habitats.
- Lack of public education and connection with nature: individuals isolated from species
- **Increase in recreational pressure**. Problems associated with dog-walkers, littering and public perception of 'messy' habitats.
- **Inappropriate management:** Sympathetic management often poorly put into practice, e.g. strimming happening at the wrong time of year.
- **Pollution**: Pesticide use by private companies and landowners. Impact of air pollution on bryophytes. Water pollution and eutrophication.
- Water availability and abstraction, drought and flooding.
- Lack of resources and cost implications: including applications for funding which
 is deemed to be very time consuming
- Lack of coordination between organisations, not taking expert advice, rushing to deliver habitat creation without strategic approach, not knowing where to send data

3. Opportunities for biodiversity in the city of Norwich

A recurring theme when looking at biodiversity opportunity going forward was better management and linkage of existing green spaces especially between similar habitat types (e.g. fragmented heathlands). It was also highlighted that management should be habitat specific, with the right species in the right habitat when looking at planting schemes. There was also a focus on promoting Sustainable Drainage Systems (SuDS) and creating new wetland particularly in designing a wetland fringe along River Yare and Wensum where bankside habitat is absent.

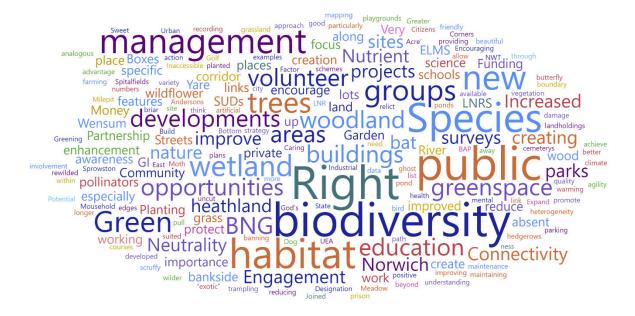


Figure 4 Opportunities for biodiversity – What are the major opportunities?

Additional opportunities identified that we would like to highlight from the break-out groups are:

- Education, Public Engagement and Citizen Science improve education and public
 perception that 'messy' habitats mean more biodiverse. Promote community
 volunteer groups and projects such as the Norfolk Wildlife Trust project at Sweet
 Briar, encourage surveys in gardens/public land and engage with mental health
 groups to advocate for volunteering in nature.
- Engagement in **Management Schemes** such as 'Caring for God's Acre' (https://www.caringforgodsacre.org.uk/)
- Funding opportunities by creating a charitable trust or through corporate sponsorship of sites and 'species champions'. Additional funding opportunities may come from environmental schemes such as Environmental Land Management (ELM), Biodiversity Net Gain (BNG), Nutrient Neutrality (NN), Local Nature Recovery Strategy (LNRS) and Green Infrastructure (GI) Strategies
- Focus on Species specific focus groups and features such as installation of bat boxes on buildings and trees, bird boxes, pollinators, reptile and amphibian hibernacula
- Street Trees and Hedgerow creation and management
- Golf Courses, Prison Land, Road Verges, UEA Landholdings, Corners of Parks and Cemeteries were specifically identified as potential areas for improvement for biodiversity, including re-wilding.
- Monitoring of sites to ascertain whether interventions are working.

4. Trends in biodiversity in the city of Norwich

There was an opportunity to discuss the observed trends by the delegates which included several species experts, conservation professionals and keen amateur naturalists. There were few positive trends and some declining trends in native biodiversity observed in

Norwich. Most of these trends are related, perhaps not unexpectedly, to the main threats identified above, namely climate change and increased development. Among the few positive trends mentioned was the use of more nature-based solutions in new developments, such as swales, and increased awareness and involvement by Norwich communities. It needs to be emphasised that these are observed trends and not based on quantified surveys so these observations should be validated by surveys where possible.

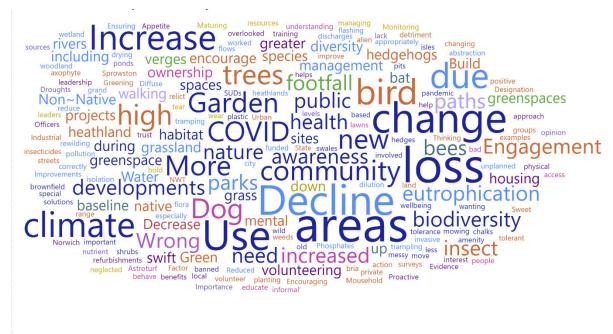


Figure 5 Trends on biodiversity – What trends do you or have witnessed?

The detailed list of trends highlighted by delegates are summarised in Table 4 below.

Table 4. Trends Highlighted by delegates

	Species Trends	Habitat and Land-use Trends
Positive		 Improvements in city park managements, including reduced mowing. Use of more nature-based solutions in new developments (e.g. swales) Increased awareness and community involvement, shift towards tolerance of untidy parks/gardens. Awareness of wellbeing benefits from volunteering.
Negative	 General decrease in garden/small birds Increase in species such as Little Egret and parakeets 	 Lots of new homes and residential developments Increased Astroturf use More offsite mitigation for developments (e.g. trees planted in unsuitable areas)

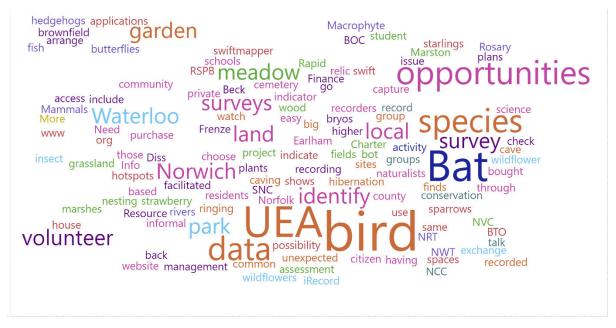
- Increase in non-native species and climate migrants, such as Ivy bees, alien street weeds, deer, at expense of native species
- Decrease in insects, due to greater insecticide use
- Microplastics in fish, birds and insects
- Foraging on parasiteheavy flukes etc

- Increased public use of greenspaces: path widening, more dog walking
- Decline in heathland, woodland and grassland diversity
- Eutrophication of waterways, reduced dilution of pollutants, unplanned discharges
- Reduced flow of waterways, continued drying of wetlands
- Loss of informal green space
- Maturing and wear and tear of sites

5. Sources of data on biodiversity for the city of Norwich

Task 1 of this project collated existing sources of species, site, habitat and land use data in Norwich (see Appendix 4) and was followed in task 2 by analysis to identify gaps (discussed in greater detail in our progress report). The workshop provided an opportunity to identify additional sources of data, with several new data sources being suggested.

Figure 6. Surveys on biodiversity – Have you undertaken surveys or recording that NBIS may not have the records data for?



After comparison of our existing data sources provided as part of the gaps analysis and summarised for species in Appendix 4 the suggest the additional sources from delegates that we will seek to include are:

- RSPB Data including Big Garden Bird Watch
- BTO Data (datasets available via NBN already include with permission)
- Swift mapper

- Norfolk Rivers Trust
- Norfolk Wildlife Trust
- UEA data including UEA Bird Ringing Group, UEA Strawberry Fields Records, Charter Wood Bird Nesting project by UEA Student
- South Norfolk Council and Broadland District Council may have additional data
- Volunteer Group Records
- Individual recorder records
- iRecord Data
- Bat Cave Data
- Earlham Cemetery Records (accessible through their website)
- Rosary Cemetery Bird, butterfly and hedgehog records
- Norwich Naturalists and County Recorders may have additional Records
- Frenze Beck Nature Reserve, Diss
- NVC Survey for Marston Marshes
- Waterloo Park Insect, Wildflower and Bird Records

C. Key summary messages from the workshop delegates

The group had an opportunity to summarise the main key messages or takeaways from the discussion and the following figure shows the findings. Recurring themes included management, connectivity and resource allocation. In particular:

- Need for better management, with a more holistic approach where biodiversity is embedded into the planning system to increasing connectivity beyond Norwich City
- Building up the knowledge, with more resource allocation and collaborative work including working with volunteers.

With specific regard to the baseline, it was noted by one of the teams that robust baseline dataset needs to be less than 10 years old and continually monitored. It was mentioned that key Indicator Species are an important tool in monitoring changes in biodiversity as it is not possible to survey all species. Currently, we do not have a definitive list of indicator species for Norwich and identification of key indicator species will be a part of the next steps of the study, as part of the protocol. The identification of priority species will need to be a combination of local knowledge and expertise as well as drawing on national indicator lists.



Figure 7. Key points summarised at the plenary session

The following table (Table 5) sets out the main take-aways by the different groups.

Table 5. Key messages by the different groups

TEAM 1	TEAM 2	TEAM 3	TEAM 4	TEAM 5	TEAM 6
Robust baseline	Make use of local	1.Managing existing	1.Species and habitat	1.Joined up approach /	1. Bringing nature back
dataset that needs	amateur groups	green spaces (verges,	protection particularly	strategic approach to	into the 'whole' of
to be less than 10	2. Maintain and	cemeteries, parks),	sp./hb that are	nature recovery.	the city by identifying
years old and	enhance existing	which is difficult due to:	characteristics to the	2.Maximising	the opportunities all
continually	green space. Look	lack of resource; lack	city	opportunities for	land has
monitored. Key	for opportunities for	of knowledge/ skill;	2.Improving public	existing resources e.g.	2. Encouraging
Indicator Species	new green space to	lack of public	awareness,	parks / open spaces	community
are an important	manage pressure	understanding of the	involvement and	(plan connectivity)	participation and
component.	from existing sites -	need not to mow	education	verge management.	using networking to
2. Improving	balance and assess	2.Highlight the	3.Clear policies and	Opportunities to join up	take ownership of
communication	nature.	significance of	strategies that have	existing pockets to get	their wild spaces
between groups and	Review current	waterways and	biodiversity built into	an even spread of	and then providing
joining up beyond	maintenance	adjacent habitat	them, particularly in the	habitats	resources to enable
Norwich. Supporting	regimes to enhance	3.Need for a how to	area of planning	3.Water related issues	this.
local specialists and	biodiversity e.g.	best practise guide for	applications and	and opportunities (NN/	3. Educating -
capturing local	BNG regimes and	businesses etc. on	strategic planning	drought/ flooding/	changing public
knowledge.	review fire quality	managing for wildlife	4.Education in all	NSIS/ connectivity/	behaviour e.g. dogs
3. Intelligent	4. Presentation,		shapes and forms.	movement of species)	disturbing wildlife
management	Perception and				4. Resources – having
needed: move away	communication				the resources to
from one-size-fits-all;	engagement				deliver biodiversity
managing for key					change.
species; Species					
specific					
management					
determined through					
local knowledge					
4. Enhancing					
connectivity for Norwich and					
beyond.					
beyona.					
	<u></u>				

D. Next steps and lessons learnt

The project team consider that the workshop has met the engagement objectives by providing valuable additional sources of data but equally some specific discussions on species and key habitats. The project team will critically assess the information received and make recommendations for the study. Other information provided in e-mail by those that were not able to attend is provided in Appendix 2 to this report.

The next steps of the project will seek to further expand the list provided by delegates by means of targeted consultation. For sources of data that are already held by NBIS, but are also mentioned on this list, we follow up with delegates and/or the data providers mentioned will be required to identify new data.

Some recommended actions for the project team can arise from the discussions on the different questions.

Key priorities for Biodiversity

- Look to refine and develop our initial approach to identify a group of key species indicators that can be used to monitor biodiversity change because it will not be possible to monitor every species/site. Taking on board feedback during the workshop (see table 2) the project team will consider the most appropriate scale for this and how the Norwich City baseline study will fit with Norfolk wide priorities.
- The project team will consider the inclusion of the key species priorities identified
 by delegates as part of the development of a monitoring and survey protocol. We
 will also consider if and where the identification of species guilds (those species that
 share common functional attributes) may be appropriate. If so, this would likely be
 as part of future recommended work.
- Conduct further analysis of axiophyte data with a view to developing approaches to provide evidence of site designation, look to identify new important sites at a landscape scale, monitor site condition and provide guidance on prioritising resources.
- We will follow up on the **specific sites** mentioned by delegates and look to include these in future asset and opportunity maps, survey and monitoring protocols (as appropriate) and our final recommendations.
- We will look to include the **habitat types** identified in the workshop within the biodiversity character areas we will be producing as part of this project. Wetland habitats and their connectivity was one key theme to emerge from the workshop.
- We will look to provide targeted advice for the **specific land uses** identified by the workshop (in Table 2) .

Regarding the introduction of beavers, and notwithstanding the importance of this species for the provision of biodiversity services, we feel that assessing the feasibility of this proposal is outside of the scope of this project.

Main Threats to Biodiversity in Norwich

- There are implications from the above for the monitoring and survey protocol in terms
 of needing to monitoring existing Invasive Non-Native Species / the arrival of new
 species but also assess the impacts from management
- The project team will consider how the other threats may affect biodiversity (species, habitats and land-use) and scale of impact (e.g. some habitats less resilient to

climate change and/or more greatly affected by development that others) thus with implications for the survey and the monitoring protocol.

Opportunities for Biodiversity in Norwich

The project team will include recommended actions for the survey and monitoring protocol around the following themes (where appropriate) which emerged from the workshop:

- Education and engagement (e.g. citizens science, volunteers and other collaborations, etc.)
- We will look to provide targeted conservation advice and guidelines as part of our recommendations to help ensure positive outcomes through the planning service and site management
- Identification of specific actions for species, sites, habitats and land use types for biodiversity enhancement. This is likely to include species specific recommendations (e.g. bat boxes, Swift boxes) and habitat management approaches.
- Monitoring long term change (including frequency of surveys and monitoring protocol).

Trends in Biodiversity in Norwich

The project team will take on board the biodiversity trends, both positive and negative
in developing the monitoring and survey framework to ensure that future biodiversity
changes can be quantified more easily and link these to the monitoring protocol.

Sources of data on biodiversity

- NBIS will seek to obtain the new data sources identified and assess validity prior to inclusion in the BBS.
- We will seek to further expand the list of data sources by means of targeted consultation, including management plans.

The project team also take on board the feedback regarding the need to ensure this project is connected to the wider landscape and will look at ways of doing this within this project and similar baseline assessments (South Norfolk and Broadland).

<u>Implications for the monitoring and survey protocol:</u>

There are implications that can be derived from the above for the monitoring and survey protocol in terms of, e.g.

- Need to monitoring existing Invasive Non-Native Species;
- Need to monitor for the arrival of new species.
- Monitoring performance from management on biodiversity (including access for recreational purposes)

The team will also assess the feasibility and appropriateness of the **targeted biodiversity surveys** mentioned in the workshop including:

Bat Behaviour: NBIS already holds a significant amount of data on bat distributions
from the Norwich and Norfolk bat surveys. Less information is available however on
some key behaviours important for determining the best conservation advice and
management approaches. This could be a future recommendation, to identify roost
sites and offer additional protection to some key species. Consideration needs to be

given to whether this is outside the scope of this study or a piece of work that NBIS would be in a position to commission.

- Invertebrates and pollinators in key sites
- Churchyard and cemetery surveys of fungi focusing on Earth tongues, spindles, waxcaps and pink gills

Other implications can be extrapolated but may be less related to the protocol and other related strategies, e.g. need to improve cooperative working, improve education, water resources. etc.

Workshop summary

The overall feedback from the workshop was quite positive and people were actively engaged in the discussions. More detail on the responses provided to the evaluation form is given in Appendix 3. However, there were some specific items that were highlighted where the team could improve on, based on the feedback received:

- a. It was felt that more discussion time was needed by a few participants, with very little time to network. Additionally, points were raised where additional explanation would have been beneficial to add context, i.e. the maps. A possibility is to increase the time for the workshop; at the time it was considered that a full day workshop may not have been feasible due to other commitments. The team will follow up with further consultation on specific points raised; additionally, the list of delegates can be made public to participants so they can make further contact if wanted (permission was asked at the venue to do this but confirmation in writing will be sought in our next steps when the workshop brief is sent out to delegates).
- b. Acoustics and presentations: the team did not have a chance to test the projection and sound ahead of the workshop. The team will feedback this to the venue.

We also intend to follow up 1-1 with each group via video call or in person where necessary or where no members of their group/org attended the workshop (e.g. Norfolk Wildlife Trust, Diocese of Norwich, UEA).

We have also started discussions with Norfolk and Norwich Naturalists' Society (NNNS) to look at having a mini-version of the workshop for species experts at a date and location to be agreed. This is a wider piece of engagement work being conducted by NBIS and is outside the scope of Norwich City Council's Biodiversity Baseline Study.

Appendix 1: Attendee list

The following is the attendee list and affiliation. Despite our best attempts, some key organisation like the Norfolk Wildlife Trust, the University of East Anglia and the Diocese could not attend. We will follow up on these groups through bespoke consultation.

First Name	Surname	Organisation Registere	
Personal Data		Friends of Earlham Cemetery Y	
		Friends of Earlham Cemetery Y	
		Rosary Cemetery Y	
		Norfolk Green Care Network	
Edward	Bolton	Norwich City Council Tree officer Y	

Personal Data		RSPB	Υ
		Norfolk and Norwich Naturalist Society	 Ү
		Norwich Environmental Weekender	 Ү
		Norfolk Wildlife Trust	 N
Matthew	Davies	Norwich Fringe Project	Y
Personal Data	Davies	Yare Valley Society	
		Norwich City Council Development	<u>'</u>
Lara	Emerson	Management	N
Personal Data	•	Friends of the Earth Norwich Local Group	Υ
		Norfolk and Norwich Naturalist Society	Υ
		Diocese - Head Gardner	N
		Norfolk Rivers Trust	Υ
Lara	Hall	Norwich City Council Landscape	Υ
Personal Data		Norwich Bat Group	Υ
		Friends of Rosary Cemetery	Υ
		Friends of Waterloo Park	Υ
		The Landscape Partnership	Υ
		Flagship Housing Group	Υ
		Friends of Earlham Cemetery	Υ
		Friends of Eaton Park	Υ
Helen	Sibley	South Norfolk and Broadland District	
Personal Data	Cibicy	Council	Υ
i cisonal bata		Norwich Swift Network	Y
Ben Personal Data	Spratling	Norwich City	Υ
i Gisonal Data		Friends of Earlham and Rotary cemetery	Y
		Norwich Society	Y
		Friends of Strawberry Field, Easton	Υ
		Friends of Kett's Heights	Y
Andrew Personal Data	Turnbull	Norwich City Council Housing/Property	Y
-		Natural England	Y
_		Mousehold Heath	Υ
Susan	Moore	Norwich City Council – Parks and Open Spaces Warden	Υ
Phil	Hunt	Environmental Strategy	<u>т</u> Ү
Project team	riunt	Environmental otrategy	ı
Judith	Davison	Norwich City Council	Y
Charlotte	Rivett	Norwich City Council	Y
Nicola	Dixon	Project Team - Norfolk County Council	
Sam	Neal	Project Team - Norfolk County Council	<u>'</u> Ү
Lizzy	Oddy	Project Team - Norfolk County Council	<u> </u>
Rocio	Salado	Project Team - Norfolk County Council	
NUCIU	Egido	Floject ream - Norion County Council	Υ
Sam	Demmen- Sewell	Project Team - Norfolk County Council	Υ
James	Fisher	Project Team - Norfolk County Council	Υ
Daniel	Voisey	Project Team - Norfolk County Council	Υ
Emily	Williams	Project Team - Norfolk County Council	Υ
Katerina	Laing	Project Team - Norfolk County Council	Υ

Appendix 2: Additional responses to consultation

Included:

- Friends of Eaton Park
- Yare Valley Society
- Diocese of Norwich
- RSPB

Friends of Eaton Park

Together with UEA, the Yare Valley and the gardens, large and small of NR2, Eaton Park forms part of a significant green corridor/zone for wildlife on this side of the city.

In Eaton Park the Friends have encourage biodiversity and an interest in and engagement with it in various ways. In italics are areas **where we need help** and there is potential.

- Creation of three of the park's four meadows including the 1.5 acre North Park Meadow
- Planting of bulbs to create large areas of 'conservation cut' where mowing is less frequent
- Bramble removal to encourage wildflowers in Bluebell Wood
- Coppicing, thinning and planting of whips in glades to create shrubby undergrowth in the newer wooded area North Park Wood
- Installation of bird and bat boxes
- Surveying wildflowers and recording birds this is an area we would like more guidance / training in to ensure we are approaching it correctly and for our data to contribute to other data sets
- We are keen to connect with Norfolk Bat Group. Eaton Park is clearly good for bats they are quite easy to see at dusk for much of the year – the ponds, meadows and trees seem to work well for them
- We are out of our depth ref insects, spiders etc North Park Meadow is home to a significant colony of wasp spiders we think there's quite a lot going on here
- Fungi do well not just in Bluebell Wood but across the park but we haven't recorded them yet.

As part of this work we contributed to a plan for Bluebell Wood written by Norwich City Council and Norwich Fringe, and we instigated and wrote a plan for North Park Wood and meadow with help from the City Council (Paul Holley) and NWT (Aaron Brown). I have just co-written Eaton Park's new Management Plan 2023-28 with the vision:

For people, for nature, for sustainability

- A place for pleasure, leisure and recreation
- A haven for people and wildlife
- An engine for individual and community wellbeing
- A beacon for sustainability

One of our aims is: to improve biodiversity. Let me know if it would be useful to see a copy of this plan.

The Friends have been championing nature since 2008, and in 2011 won Norfolk Biodiversity Partnership's 'Community Biodiversity Award'. I was surprised to see that

we weren't list in the city's new biodiversity plan. If you're able to, please could you get us added – it's odd that we weren't included as we have been doing so much in this area for so long.

I'm really keen for Eaton Park to be part of this work. It's an 80 acre site with significant woodlands, hedgerows and meadows. There's also a community of people interested in supporting biodiversity while the Friends is keen to use the park to inspire and empower people to do good things for biodiversity in their own garden.

In short it is very important to us and we relish the idea of contributing to a more joined up approach to biodiversity in the city, with the chance to contribute to knowledge and thinking, and to benefit from the knowledge and help of others.

I look forward to hearing from you and will be happy to talk or meet with you if this will help. Apologies again for not being able to make your actual event.

Vb,

Friends of Eaton Park, Norwich

Yare Valley Society: Major threats to the Yare valley south and west of Norwich.

Summary.

The chalk river of the mid Yare valley is threatened with residential development for hundreds of houses in some dozen sites, recent applications include 2022/1547 and 22/01567/F. Many of the proposed residential developments are greenfield sites with the loss of food producing agricultural land and unlikely to be a mains sewage system. These developments would adversely affect biodiversity including that of species in drastic decline in the UK.

The Bawburgh-Colney lakes and woodlands and the associated grasslands and riverside meadows make that area probably the most important part of the middle Yare environmentally in terms of landscape and variety of habitats and biodiversity.

A strong case can be made for increasing protection by making the area a SAC/ SSSI.

Background

The importance of river valleys nationally are recognised because of their role in the landscape, green spaces, biodiversity, mitigation of flooding, climate change and wellbeing of local communities.

Unfortunately, developers are constantly brushing aside local protective environmental policies for communities in the Yare Valley, including Norwich City, Trowse with Newton, Bixley, Caistor St. Edmund, Swardeston, Keswick and Intwood, East Carleton, Mulbarton, Bracon Ash, Cringleford, Colney, Little Melton, Hethersett, Ketteringham, Great Melton, Bawburgh, Marlingford and Colton, Easton, Barford. Hundreds Of new homes are proposed in this part of the Yare valley in a dozen sites in the next 15 years. Planners appear to have no holistic views of development in the Yare Valley meaning developers can operate a piecemeal approach for residential development paying little concern to the environment and biodiversity. Two recent examples of this piecemeal approach to development in the Yare valley are 22/01567/F lodged with Norwich City Planners and 2022/1547 with South Norfolk.

<u>22/01567/F application:</u> This application occupies a wedge of land between Bluebell Road and the river Yare.

Personal Data , the Chair of the Yare Society responded that McCarthy and Stone, 22/01567/F application is the latest version of Phase 3 application on Bluebell Road and are proposing to build 97 dwellings in Phase 3 alone. These will be added to those of Phase 1 (61) and Phase 2 (50) resulting in a total of 208, approaching double the number of 120 envisaged in the GNLP. These high densities are a serious breach of the safeguards of Policy R42, and can be expected to have a detrimental effect on the environment, both visually and ecologically. Norwich planners were also concerned about this development and this application has been withdrawn.

2022/1547

Land at Colney Hall was offered to the emerging Greater Norwich Development Plan team that identified the area as GNDP 0253 for possible residential and research purposes. A Housing and Economic Land Availability Assessment (HELAA) was carried out where the site performed poorly because of lack of facilities serving the site. The county Ecologist recommended that the site was unsuitable for residential development.

It was with surprise and concern that it was learnt that the landowner had offered land to Castlemeadow Care and the University of East Anglia on much the same site as offered to the GNLP team. In August 2022 an application was made to South Norfolk planners,2022/1547 | Outline application for an integrated retirement living community of up to 210 extra care units (C2 use class) with associated communal facilities, a 20 bed care home (C2 use class), an Innovation Centre to include; academic spaces (F1(a) use class), flexible office/ research and development spaces (E(g)(i) useclass) and administration offices (E(g)(ii) use class) and 20No. 6 bed student resident flats (C2/C4 use class) and all matters reserved except for access.

The site has no electricity, gas, water or sewage facilities serving proposed development. The site is surrounded on three sides by the river Yare. The proposed residences are half a mile from the B1108, the nearest public highway. Colney Hall is inside the Southern Bypass Protection Zone designed to protect the area from further development. Colney Hall is outside the adopted South Norfolk development plan for Colney village 2015, see attachment.

The constraints identified by the HELAA for GNLP 0253 of poor access, and absence of gas, electricity, water and sewage facilities remain. The attempts to address these in the outline application have raised questions by consultees. Particular concerns are the SUDS disposal of treated foul water into the river Yare and road design in the Design and Access statement for enlarged and extended roads through the main development and the parkland., a large car park in the historic parkland near the traffic light controlled entrance. The applicants arboricultural consultant point out the felling of nearly 400 mature trees will be required to develop the site.

Preliminary Ecological Assessments (PEA)

Preliminary Ecological Assessments (PEA) has been submitted for both 2022/1547 and 22/01567/F applications

PEAs are not suitable for submission with planning applications and should not be regarded as providing sufficient information for a planning decision. Best practice guidance by the Chartered Institute of Ecology and Environmental Management also notes that 'under normal circumstances it is not appropriate to submit a [PEA] in support

of a planning application because the scope of a [PEA] is unlikely to fully meet planning authority requirements in respect of biodiversity policy.

Annual average daily traffic flow (AADT)

Annual average daily traffic flow (AADT or AADF) is the total volume of vehicle traffic on a highway or road for a year divided by 365 days. AADT is a useful and simple measurement of how busy a road is.

No AADTs has been submitted for either 2022/1547 and 22/01567/F application

Conclusion

The 2022/1547 site is totally unsuitable for residential development and 22/01567/F housing numbers should be reduced to those previously agreed if a revised application is submitted

The ecological importance of the Yare Valley south and west of Norwich

Only 200 chalk rivers are known globally, 85% of which are found in the UK in southern and eastern England. The River Yare rises to the south of Dereham, near to Shipdham. It flows eastwards through the chalk and is joined by the River Tiffey just before Bawburgh. The river continues its journey across the southern fringes of Norwich before it is joined by the River Wensum at Whitlingham in Trowse. Around Norwich the wards of Bowthorpe, University, Eaton, Townclose, Lakenham and Thorpe Hamlet border the Yare

Although it is not listed as a chalk river, this part of the Yare has many of the characteristics of a chalk river and the species of the wild life illustrates this. The Yare is similar to another chalk river, the Wensum, north of Norwich with its chain of flooded gravel pits. The Wensum there is strongly protected by being listed as SAC and SSSI. However, the Yare Valley south and west of Norwich is much less protected.

Birds and bats are good indicators of biodiversity.

Birds

Desktop and previous ecological studies and the Preliminary Ecological Appraisals that accompanied the two applications recorded about 100 bird species. A total of 16 species were considered noteworthy because of their conservation status. Six species were on the Red Data list and ten on the Amber list. Ten of the 16 species are also UK Biodiversity Action Plan (BAP) species. Over-wintering species numbered over 40; 8 on the Red Data list, 9 on the Amber list; 8 were BAP species. Thirty species of birds were listed as Schedule 1 species under the Wildlife and Countryside Act 1981, as amended. The Yare is an important route for migratory species around Norwich and one of the largest heronries in Norfolk is in Colney wood close to the proposed development and would be seriously disturbed or abandoned.

Bats

Natural England stated in their response to the Colney Wood Care Village plans that this development has the potential to affect bat populations using the site for roosting and foraging, including those of the nearby Eaton Chalk Pit SSSI. Further information is required by Natural England to demonstrate that bats will not be adversely affected by this development.

Recents studies have identified at least ten and possibly thirteen species are present in this part of the Yare valley including the rare barbastelle. Five bat species are species of principal importance, (SPI): Soprano pipistrelle; Brown long-eared; Noctule,

Bechstein's, and Barbastelle.

Barbastelle is also nationally rare and an Annex II species.

Barbastelle

Brown long-eared bat

Common pipistrelle

Daubenton's bat

Leisler's bat

Nathusius' pipistrelle

Natterer's bat

Noctule

Serotine

Soprano pipistrelle

Whiskered bat

Brandt's bat

Bechstein's bat

The Grotto and tunnel in Colney Hall park needs to be examined for bats.

Other wildlife species of importance

Mammals

Otter, badger, roe, muntjac, hedgehogs and water voles

Reptiles

Common Grass snake

Amphibians

Common frog

Common toad

Chapel Break Road in Bowthorpe was built through the migratory route of the toads and frogs, meaning that each spring the amphibians cross the roads in large numbers. In the last few years there has been an 80 per cent reduction in the population of the toads and frogs and toad crossing sign has been erected there

Fish

The European Eel is included in Section 41 (England) and Section 42 (Wales) of the NERC Act and is included in the Scottish Biodiversity List. It is also listed as critically endangered on the IUCN Red List.

The website for Bawburgh Fisheries lists a local eel population. In recent historic times eels were trapped in Yare at Colney and sold to Holland.

The bullhead, a species of concern, has been recorded in the Yare Valley at Colney

Landscape

Colney occupies a key position in the Middle Yare environment. The B1108 is a gateway to Norwich and is heavily used by traffic to and from the city, research park, UEA, hospitals and other local businesses. The rural landscape of the village is maintained by the presence of Hall Farm with a small herd of cattle, the woodlands around the old RAF Bawburgh and Colney Hall and its historic park land and Colney marshes. The proposed 2022/1547 development is bounded on three sides by the river Yare and the Bawburgh-Colney lakes. This part of the Yare valley its river and the associated woodlands, grasslands, meadows and lakes make the area probably the most important

part of the middle Yare environmentally in terms of its variety of habitats, biodiversity and landscape.

History

The Bawburgh-Colney Woods have an important history.

At the height of the Cold War RAF Bawburgh was one of six Sector Operations Centres around the UK, built in the 1950s as part of the Rotor Programme to modernise the UK's radar defences. The locally known "bungalow" and e tall communications tower are the above ground evidence of the existence of this installation. Under the bungalow is a shaft housing rooms at different levels. In 1968 it became the regional seat of government site which would have been used in the event of a nuclear strike. It was closed in 1992 and is now privately owned.

Norfolk County Council's Historic Environment officer pointed out that the proposed development site lies within Colney Park, an 18th century landscape park built in 1792 and extensively remodelled in the 19th century.

There is much evidence of archaeological activity in this area of the Yare Valley, including earthwork of possible ridge and furrowagriculture to the south, while metal detecting in the field to the southeast of the hall between 1988 and 2017 has produced alarge number of prehistoric flints, Roman, Early Anglo-Saxon and medieval pottery, Roman tile, and metal finds including Iron Age, Roman and medieval coins, Iron Age, Roman and Early Anglo-Saxon brooches as well as an Early Saxon girdle hanger, wrist claspsand other artefacts, suggesting Roman activity and possibly an Early Anglo-Saxon cemetery. There have been many finds of flint artefacts on the sides of the valley suggesting prehistoric activity. Consequently there is potential that heritage assets with archaeological interest (buried archaeological remains) will be present at Colney Hall and that their significance will be affected by the proposed development.

Diocese of Norwich

In 2021, we were fortunate enough for the NWT to conduct a baseline wildlife survey at the Bishop's House Garden, the aim of which was to establish where we are doing well in terms of biodiversity and our wider impact on the environment, and where we should focus our effort for improvement. The year of surveying (from summer to summer) culminated in a 'bioblitz' day run by the NWT, at which visitors from the local community were encouraged to help survey the garden. I have subsequently written a report on the survey, coupled with a detailed plan on changes that have been, and that will be, made to the garden (attached - if the format is a bit jumbled, please let me know and I will send from a computer).

Please let me know if we could be of any use to the project. I'm always happy to discuss our experience at the Bishop's House Garden and the sort of things we are thinking about going forward.

RSPB

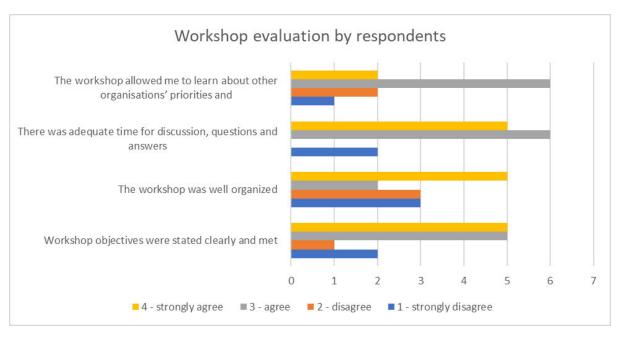
Provided some feedback on bees and wasp and two attachments – (provided now in progress report)

• Thoughts on key habitats/areas with threats and opportunities.

 A spreadsheet with a summary of solitary bee records and locations from my database (excluding old records of species now long gone from Norfolk) with some species of particular importance highlighted. The available RDB listing is very out of date so this is only loosely based on that. I have not had time to collate wasp records but could do this is it was helpful.

Appendix 3: Feedback on workshop

The following figure shows some of the responses to the evaluation feedback form attached to the end of the delegate pack. It needs to be noted that only 13 evaluation forms were submitted so these results should be interpreted with caution. Yet, they are important to draw lessons.



Some specific comments were also added:

Slides could have been bigger on the screen

Data presentation limited and not much sharing of data? Down to who attended?

Poor audio-visuals

Interesting discussion but quite general

Unclear what the main goal was

Well structured, maybe more mixing could have been encouraged

Would have liked more opportunity to mix

Unclear direction. Why was the council asking us?

Didn't understand what the next step would be

Acoustic and lighting aspects of the venue meant it was not ideal

The public don't care. You need to get to them better

This will never work. Not enough money and the general public don't care.

Could have had a little longer but it did focus the mind

Not a lot of time to do this [networking] but at least contacts face to face were made

Very enjoyable and productive session. Thanks very much!

Appendix 4: Minutes from question-and-answer session

QUESTION 1: How will the Biodiversity Baseline Work link with data and projects across borders?

ANSWER 1: A lot of the species records are within 10km grid square or overlap more than 5km outside of the Greater Norwich Boundary, so there is no sudden drop off at the boundary line. Going forward, we plan to have a lot of communication amongst all the Norfolk Districts. And at a wider scale will link in with the LNRS which will be implemented across Norfolk and Suffolk.

QUESTION 2: It's important to highlight the importance of species richness. What is the resolution used for the species richness maps?

ANSWER 2: The maps showed the number of species recorded with a 100m/1km?? Grid Square. The limiting factor in providing a smaller resolution is the resolution of the records themselves. Many of the records are within 10km or 1km grid square so it is difficult to accurately represent this at a smaller scale.

QUESTION 3: What organisations were invited to the workshop and will be involved in advising the Biodiversity Baseline Study?

ANSWER 3: When designing the attendance list a lot of importance was placed on making sure local groups such as 'Friends of Eaton Cemetery' were invited. But it was also important in getting a full representative view from various nature organisations such as Norfolk Wildlife Trust, Norfolk Rivers Trust, Bat Groups, Natural England etc.. Unfortunately, not everyone was able to attend but there is scope for further collaboration down the line and Online Surveys will ensure that there is a range in representation.

QUESTION 4: Have you factored in that there may be recording bias in the data from Naturalist and experts? Have you looked at data from UEA?

ANSWER 4: We acknowledge that there are biases in the data that is often a representation of where people live or visit. We therefore need to think about recording gaps and appropriate methods to mitigate those. UEA have a lot of sources of data that we may be able to access but, as this project is not at a scale of Biodiversity Audit, we currently don't have the resources to digitise and find every record.

QUESTION 5: Are Norfolk Wildlife Trust Involved in the Project? Do you have access to a lot of their data?

ANSWER 5: Norfolk Wildlife Trust will be involved, unfortunately their representative had to cancel their attendance today but there is scope for involvement further down the line in the project. In regard to any the data they may have, we would need to work on some

data exchanges for access. There may also be a large amount kept on site at Reserves which may not be easy or simple to collate.

QUESTION 6: You mention that local elections are factored into your timescale, but the Biodiversity Baseline is not political its existential and therefore shouldn't be impacted by local elections?

ANSWER 6: The Biodiversity Baseline Study itself is not political, but publishing anything within the election period could skew the democratic election process.

QUESTION 7: What is the planned management of Trees? A lot of emphasis is placed on tree coverage and the planting of trees but this is not always a good thing for Grassland and Heathland Habitats and their Management.

ANSWER 7: Education would be important in this respect as its important to highlight that 'messy' habitats are important and that clearance of trees in some habitats is vital. Deciding on the management of the sites, will come down to the use of site, who it benefits and if it's a finite source. Due to scope of study focus may need to be in Broad Character Areas.

QUESTION 8: Follow up on Tree Management question, we need to look at making sure Street Trees are replaced as an important source of connectivity.

ANSWER 8: We can look at Street Trees and indeed some other habitats as stepping stones as well as corridors. Using them as stepping stones negates the need for a whole line of trees when connecting habitats.

Appendix 5: Sources of data already held by the Norfolk Biodiversity Information Service

Dataset Number	Dataset Name	Acknowledgement
D0002/001/01	Norfolk Moths Records - norfolkmoths.co.uk - Macro Moth records from Norfolk Moths - norfolkmoths.co.uk	Norfolk Moths - norfolkmoths.co.uk
D0002/002/01	Norfolk Moths Records - norfolkmoths.co.uk - Micro Moth records from Norfolk Moths - norfolkmoths.co.uk	Norfolk Moths - norfolkmoths.co.uk
D0004/001/01	Norfolk Bat Survey and Norwich Bat Project - Norfolk Bat Survey	Data collected using the Norfolk Bat Survey methodology
D0004/002/01	Norfolk Bat Survey and Norwich Bat Project - Norwich Bat Project	Data collected using the Norfolk Bat Survey methodology
D0079/001/01	Norfolk Bird Records from County Recorders - Bird Recorder 2007	
D0079/002/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2007	
D0079/003/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2008	
D0079/004/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2009	
D0079/005/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2010	
D0079/006/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2011	
D0079/007/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2012	
D0079/008/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2013	

r	T .	
D0079/009/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2014	
D0079/010/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2015	
D0079/011/01	Norfolk Bird Records from County Recorders - Norfolk Birds 2016	
D0096/001/01	Collated records from the Broads	
D0100/001/01	Bryophyte records	
D0113/001/01	Alien Fish data	
D0120/001/01	Collated Clinopodium acinos records for Norfolk from 1985-2007	
D0146/001/01	Durrant Orthoptera Archive	
D0147/001/01	BAP and Invasive Survey	
D0149/001/01	Crayfish Records and associated species	
D0157/001/01	Fish Data	
D0158/001/01	Otter Records	
D0166/001/01	Earlham Cemetery Insect Records	
D0176/001/01	Hemiptera Records	
D0183/001/01	Hoverfly and Beetle Records	
D0193/001/01	Norfolk Flora Data	The Norfolk Flora Data from the County and BSBI Recorders for VC27 and VC28.
D0202/001/01	Invertebrate Survey Records	
D0235/001/01	Mousehold Heath and St James Hill Norwich	
D0243/001/01	Natural Connections Mistletoe Survey	
D0244/001/01	Natural England Bat Roost Records	
D0245/001/01	NBIS Fungi survey 2010	
D0246/001/01	NBIS Glow Worm Survey	
D0247/001/01	NBN - Norfolk Earthworm Records	
D0255/001/01	Barbastelle Records from bat detector recordings	
D0266/001/01	Bryology records	
D0275/001/01	Norfolk Mammal Records	
D0277/001/01	Norfolk Non-native Species Initiative Records	
D0280/001/01	Norfolk Species Surveillance Network	
D0281/001/01	Norfolk Water Vole Survey 1997	
D0285/001/01	Garden Survey	
D0287/001/01	Norfolk Wildlife Trust Public Survey	
D0288/001/01	Wildlife Invaders Survey	
D0289/001/01	Norwich Castle Museum Ant Records	
D0292/001/01	Thorpe Marshes Wildlife Report	
D0299/002/01	Bats in churches - Bats in Churches	
D0302/001/01	Plantation Garden ID Workshop	
D0318/001/01	Reptile Records	
D0323/001/01	Norfolk Roadside Nature Reserve Survey Plant Records	
D0326/001/01	Swift nests and swift screaming parties survey in the UK	RSPB Swift Data

D0328/001/01	Sandy Stiltball Survey	
D0344/001/01	Diptera records	
D0344/001/01	·	
D0387/001/01	Toadwatch project UEA Bat Records	
D0394/001/01		
D0394/001/01	River Wensum Mink Trapping Records Records from Ecological Consultants - Records from	
D0407/001/01	Ecological consultants	
D0408/001/01	Casual records - Casual records	
D0409/003/01	Records from Norfolk Biological Records Centre - Birds	
D0409/004/01	Records from Norfolk Biological Records Centre - Butterfly	
D0409/005/01	Records from Norfolk Biological Records Centre - Fungi	
D0409/006/01	Records from Norfolk Biological Records Centre - Herptiles	
D0409/007/01	Records from Norfolk Biological Records Centre - Mammal Data	
D0409/008/01	Records from Norfolk Biological Records Centre - Mammals 2	
D0409/011/01	Records from Norfolk Biological Records Centre - Spiders	
D0409/013/01	Records from Norfolk Biological Records Centre - Casual Records 2	
D0409/014/01	Records from Norfolk Biological Records Centre - Beetles	
D0409/015/01	Records from Norfolk Biological Records Centre - Mayflies	
D0409/017/01	Records from Norfolk Biological Records Centre - Casual Records 4	
D0409/019/01	Records from Norfolk Biological Records Centre - records from University of Birmingham	
D0409/020/01	Records from Norfolk Biological Records Centre - Orthoptera and bee records	
D0410/001/01	NBN Birds (BTO+partners) 2006 - 2010 - Birds (BTO+partners) 2006 - 2010	NBN Atlas occurrence download at https://nbnatlas.org accessed on 26/02/2021.Records provided by BTO, accessed through NBN Atlas website. Data provided under the LERC use of BTO data via the NBN Atlas data sharing agreement (Version 3.1). For more information: https://registry.nbnatlas.org/public/show/dr2380 NBN Atlas occurrence download at https://nbnatlas.org accessed on 26/02/2021.Records provided by BTO, accessed through NBN Atlas website. Data provided under the LERC use
D0411/001/01	NBN Birds (BTO+partners) 2011 - 2015 - Birds (BTO+partners) 2011 - 2015	of BTO data via the NBN Atlas data sharing agreement (Version 3.1). For more information: https://registry.nbnatlas.org/public/show/dr2381
D0412/001/01	NBN Birds (BTO+partners) 2016 - 2019	NBN Atlas occurrence download at https://nbnatlas.org accessed on 26/02/2021.Records provided by BTO, accessed through NBN Atlas. Data provided under the LERC use of BTO data via the NBN Atlas data sharing agreement (Version 3.1). For more information: https://registry.nbnatlas.org/public/show/dr2382
D0413/001/01	NBN Birds (BTO+partners) to 2005 - Birds (BTO+partners) to 2005	NBN Atlas occurrence download at https://nbnatlas.org accessed on 26/02/2021.Records provided by BTO, accessed through NBN Atlas website. Data provided under the LERC use of BTO data via the NBN Atlas data sharing agreement (Version 3.1). For more information: https://registry.nbnatlas.org/public/show/dr528
D0423/001/01	Casual Mammal Records 2017-2020 - Casual Mammal Records 2017-2019	

D0423/002/01	Casual Mammal Records 2017-2020 - Casual Mammals 2019 and 2020	
D0446/001/01	NBN Bat Conservation Trust Field Survey - Field Survey	For Metadata go to https://registry.nbnatlas.org/public/showDataResource/dr919
D0447/001/01	NBN Bat Conservation Trust Hibernation Survey - Hibernation Survey	For Metadata go to https://registry.nbnatlas.org/public/showDataResource/dr945
D0450/001/01	NBN Bat Conservation Trust Waterway Survey - Waterway Survey	For Metadata go to https://registry.nbnatlas.org/public/showDataResource/dr878
D0452/001/01	iRecord Lacewings - irecord lacewings 2014-2020	Data downloaded from iRecord
D0453/001/01	Norfolk Fungus Records - Norfolk Fungus Records 1990- 2020	
D0454/001/01	NBN BTO Birds (BTO/JNCC/RSPB partnership) - Birds (BTO/JNCC/RSPB partnership)	NBN Atlas occurrence download at https://nbnatlas.org accessed on 26/02/2021.Records provided by BTO, accessed through NBN Atlas website.Data provided under the LERC use of BTO data via the NBN Atlas data sharing agreement (Version 3.1). For more information: https://registry.nbnatlas.org/public/show/dr2370
D0461/001/01	Norfolk Axiophyte records - TG10, TG11,TG20,TG21	Norfolk Flora Project 2000-2024
D0462/001/01	Norfolk S41 plant records - East Norfolk S41 Jan 2000- Feb 2023	Norfolk Flora project 2000 to 2024