Produced by The Warborough and Shillingford Neighbourhood Plan team

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1. Introduction

The UK Government's 2021 report on UK Biodiversity Indicators states that "Biodiversity is the variety of all life on Earth. It includes all species of animals and plants, and the natural systems that support them. Biodiversity matters because it supports the vital benefits we get from the natural environment. It contributes to our economy, our health and wellbeing, and it enriches our lives." ¹

Biodiversity loss affects the whole of the UK including small rural parishes like ours. In June 2021, the UK Government published a report from the Environmental Committee of the House of Commons called "Biodiversity in the UK: bloom or bust?". This report states that the UK is "one of the most nature-depleted countries in the world" and that "since the 1970's 41% of all species surveyed have declined, while 15% of species within the UK are said to be threatened with extinction". ²

If we are to reverse the declining trend, action will be needed everywhere, and at all levels of government and in all communities.

This document aims to provide a strategy to protect and enhance green infrastructure in the parish of Warborough and Shillingford. It provides guidance for efforts to conserve and enhance our natural assets to improve biodiversity, to benefit both nature and people.

Warborough and Shillingford Neighbourhood Plan Policy ENV1 outlines the ways that new development should protect and enhance biodiversity and the natural environment. This strategy is intended to guide the way in which this can be achieved, as well as identifying opportunities in the wider landscape of the parish beyond our built environment.

The document is intended to provide a framework within which more detailed plans for nature recovery can be developed and is not intended to be prescriptive. An Opportunity Report provided by The Oxfordshire Nature Project ³ supports this, along with data from the Thames Valley Environmental Records Centre⁴, to ensure that our work is informed by expert advice and current good practice.

2. Background

2.1. National Level

The connected problems of climate change and biodiversity loss are now very well documented. Biodiversity is essential for the processes that support all life on Earth, including humans⁵. Research by the Natural History Museum indicates that the UK is one of the most nature-depleted countries in the world, with half of its natural biodiversity lost since the Industrial Revolution. The most recent State of Nature report, published in 2023, collates the best available data on the UK's biodiversity. It suggests that the decline is continuing with a 19% decline in the species studied in the UK since the

https://royalsociety.org/news-resources/projects/biodiversity/#:~:text=Biodiversity

¹ https://www.gov.uk/government/statistics/biodiversity-indicators-for-the-uk

² https://publications.parliament.uk/pa/cm5802/cmselect/cmenvaud/136/136-report.html

³ Warborough and Shillingford Treescapes Report 2022

⁴ TVERC Biodiversity Report 2024

TVERCE Bloatversity Report 2024

1970s and that many important species are much reduced in numbers⁶. There is now an increasing focus on the opportunities that we must halt and reverse this decline.

A 25 Year Environment Plan was published in 2018 by the UK Government, which includes a commitment to develop a Nature Recovery Network to protect and restore wildlife, and conserve and enhance the natural beauty of our landscapes⁷.

The Environment Act 2021 provides the legislative framework to achieve this commitment, through the introduction of legally binding targets to increase biodiversity and halt the decline in species by 2036. Biodiversity Net Gain (BNG) became mandatory from February 2024 and means that developers must achieve a 10% increase in biodiversity, ensuring that habitats for wildlife are left in a measurably better state than they were before the development (DEFRA Guidance. Understanding Biodiversity Net Gain. Updated February 2024)8. Environmental Land Management Schemes are intended to support the rural economy, while achieving the goals of the 25 Year Environment Plan and a commitment to net zero carbon emissions by 2050. (DEFRA Future of Farming in England. Updated January 2024)9. ELM schemes include Sustainable Farming Incentives and Countryside Stewardship which aim to support environmental maintenance and improvement alongside food production.

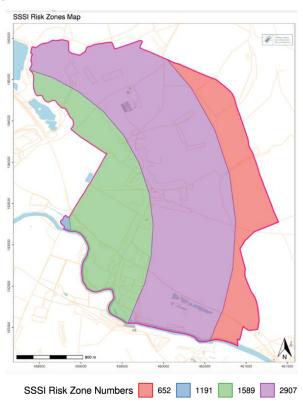


Figure 1 Site of Special Scientific Interest Risk Zone Numbers
Map

Little Wittenham Wood, within the adjoining Wessex Downs Area of Outstanding natural Beauty, is identified as a Site of Special Scientific Interest (SSSI) due to providing habitats for many protected species such as the Great Crested Newt and the Firecrest¹⁰. To protect this area Natural England have developed Impact Risk Zones (IRZ) for the surrounding areas. These IRZs reflect particular sensitivities within these areas and indicate the types of development which may have adverse impacts on the

⁶ https://stateofnature.org.uk

⁷ https://www.gov.uk/government/publications/25-year-environment-plan

⁸ https://www.legislation.gov.uk/ukpga/2021/30/schedule/14/enacted

⁹ https://www.gov.uk/government/publications/agricultural-transition-plan-2021-to-2024/agricultural-transition-plan-update-january-

^{2024#:~:}text=We%20are%20phasing%20out%20inefficient,to%20farmers%20and%20land%20managers.

¹⁰ https://earthtrust.org.uk/visit/little-wittenham-wood/

SSSIs¹¹. Local Planning Authorities (LPAs) must consult with Natural England before granting planning permission on development that is likely to affect an SSSI.

There are four IRZs identified within the Parish of Warborough and Shillingford; Zone Numbers 652, 1191, 1589 and 2907, highlighted in Figure 1. These zones protect the SSSI Little Wittenham Wood by restricting certain developments based on characteristics such as water supply and waste management 12. For more information see SSSI IRZs.

3. County/District Level

To respond to the urgency of the situation, South Oxfordshire District Council declared a Climate Emergency in 2019 and an Ecological Emergency in February 2021¹³. The council has stated an aim to become carbon neutral district by 2030. The announcement acknowledged that this would require the development of a Local Nature Recovery Strategy and Nature Recovery Networks (NRN). In addition, the Council's Local Plan, adopted in 2020, "only permits development where it protects trees, habitats and the landscape." The Council will update this plan in line with the requirements of the Environment Act 2021, aiming to include "ambitious new targets for Biodiversity Net Gain".

The Oxfordshire Wildlife and Landscape Study (OWLS) has existed since 2004 and is a survey of landscape character and biodiversity across the county. It was jointly sponsored by Oxfordshire County Council, Natural England and The Earth Trust. The high-level summary of our parish notes includes the presence of Terrace Farmland and Vale Farmland, with an area of River Meadowlands next to the River Thames. This latter site consists of a small area of wet willow woodland and a small wet hay meadow. Both habitats are national priorities for nature conservation. Wet woodland is particularly rare in Oxfordshire. The main importance of the site is the large population of Lodden Lily. This rare plant is found mainly in wet sites along the Thames in Oxfordshire and Berkshire and the River Lodden in Berkshire, which gives the plant its name. Other wildflowers found here include marsh marigold, which is found in the woodland and meadow, meadow-rue and the colourful blue flowered meadow crane's-bill.

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¹¹ https://www.gov.uk/guidance/sites-of-special-scientific-interest-public-body-responsibilities

¹² https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::sssi-impact-risk-zones-england/explore?location=51.644671%2C-1.121636%2C14.05

¹³ https://www.southoxon.gov.uk/climate-emergency/ecological-emergency-declared-by-south-oxfordshire-district-council/#:~:text=

3.1. Local Nature Conservation Organisations

3.1.1. Nature Recovery Network

Work on a county-level Nature Recovery Network (NRN) is currently under way. A draft network map, Figure 2, has been developed by a partnership of local nature conservation organisations¹⁴ including Thames Valley Environmental Records Centre (TVERC), Wild Oxfordshire and The Berks, Bucks and Oxon Wildlife Trust (BBOWT), overseen by Oxfordshire's Biodiversity Advisory Group (BAG)¹⁵.

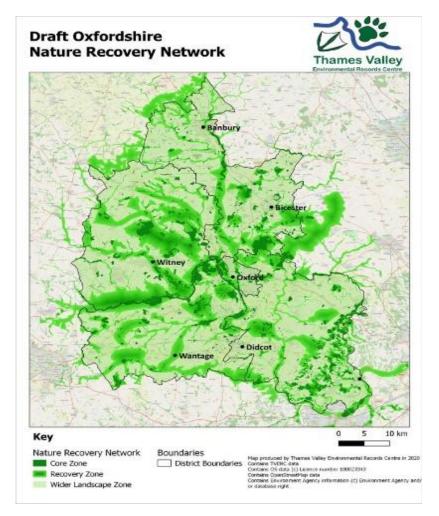


Figure 2 TVERC's Oxfordshire NRN

¹⁴ https://www.nhm.ac.uk/discover/news/2020/september/uk-has-led-the-world-in-destroying-the-natural-

The BBOWT NRN ¹⁶ (Figure 3) shows that much of the parish is either a *core zone (dark purple)*: already of high value for wildlife, including designated sites for nature conservation and BBOWT nature reserves, or a recovery zone (lighter purple): buffers the core zone, and includes the best places to restore and create new habitats and improve connectivity across the landscape.

The NRN aims to identify opportunities for recovering or enhancing biodiversity, prioritising efforts

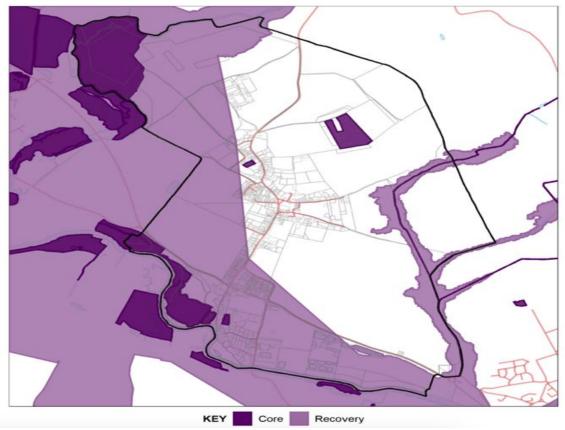


Figure 3 BBOWT NRN The Core and Recovery NRN areas within this Parish

where they will have greatest effect, while understanding that all areas including agricultural and urban landscapes can make important contributions to nature's recovery.

The NRN links areas high in biodiversity such as Local Wildlife Sites listed by Thames Valley Environmental Records Centre¹⁷. This includes two areas within our parish: Shillingford Boathouse Carr and Clays Orchard. Our neighbouring parishes of Brightwell cum Sotwell and Dorchester contain a further eight Local Wildlife Sites - an important consideration, given the need to provide environmental networks and wildlife corridors to enable species to thrive.

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¹⁷ tverc.org

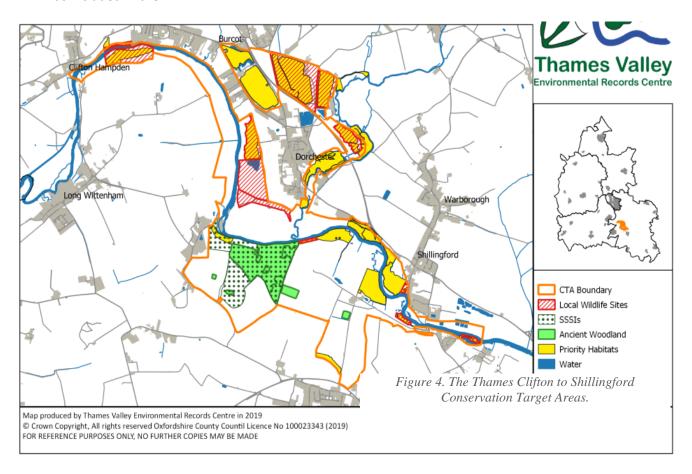
Within the NRN are the Conservation Target Areas (CTA) (Figure 4). These identify some of the most important areas for wildlife conservation in Oxfordshire, where targeted action is likely to have the greatest benefit. The Thames Clifton to Shillingford CTA lies partly within our parish and includes some important lowland meadow and wet woodland areas.

3.1.2. Oxfordshire Nature Project/Treescapes

The Treescape Opportunity Project, now known as The Oxfordshire Nature Project helps parishes and communities develop plans for nature recovery. Their report on Warborough and Shillingford was published in 2022 and includes an overview of our area and opportunities for improvement. Although the summary report is no longer available online it has been used extensively in the drafting of this report. There is more information available on tverc.org

The Treescape report shows a total of 76% of the parish as included in the NRN





Agricultural land grades are used in the report "to identify the more productive land that should be kept for food production" and show that 62% of the agricultural land in our parish is graded at levels 1 and 2, (grade 1 is the highest grade land and grade 5 the lowest).

Importantly, the report also indicates areas not suited to improvements, for example heritage sites and locally registered wildlife sites, and these are mapped in Figure 5.

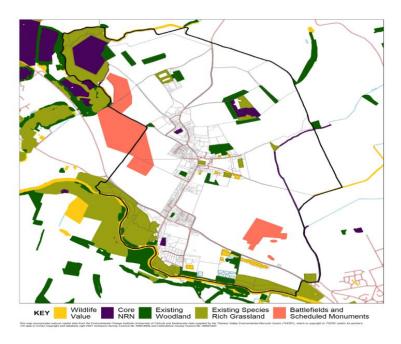


Figure 5 Exemptions to Treescapes Improvement

3.2. Parish Level

3.2.1. Methodology- Our Local Approach

A local parish-level approach to biodiversity has value because:

- Priorities identified at national, or county level may overlook smaller areas or opportunities that have very local significance
- Local knowledge can enable opportunities for improvement to be identified at a more detailed level than can be accomplished as part of national/county databases
- A broader range of activities to improve biodiversity may be possible locally, that may not otherwise be prioritised at a county or wider area.

Priorities reflected in our local landscape assessment can be included in our strategy. In particular, this includes the value placed on open countryside and long views in and around our parish.

Our overall approach is focused on the following activities:

- Record: We are aiming to develop our knowledge and monitoring of our own natural
 environment as part of the work of the Warborough and Shillingford Nature Group, in
 partnership with the Benson Nature Group, TVERC and Wild Oxfordshire. Section 4 of this
 document explores 8 geographical regions of our parish in the context of these reports and
 identifies opportunities for protecting and enhancing our biodiversity assets
- **Protect**: Given the serious loss of biodiversity across the UK in recent years, it is vital that we protect what we have

- Engage: Working with local people, farmers and landowners, and our local school will be crucial
 to our success. There is already a great deal of knowledge and expertise that can be shared, and
 greater progress made as a result
- **Enhance**: We want to achieve a significant, measurable improvement in biodiversity locally. This means more, bigger and more joined up areas for nature.

Although this strategy is centred on Warborough and Shillingford, we expect that further work will be done in cooperation with adjoining parishes particularly as progress is made towards the county-wide Nature Recovery Strategy.

3.2.2. Biodiversity rich areas

National and County level work to address biodiversity loss needs to be complemented by local action. An important part of this is the engagement of residents and landowners so that more detailed local knowledge can be applied. This is supported by the 2021 issue of the National Planning Policy Framework (NPPF, para 179) which requires plans to "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks" to protect and enhance biodiversity and geodiversity.

In additional to Nation, County and Local biodiversity initiatives, the Warborough and Shillingford Nature Group has recently been established and several biodiversity sites have been identified. These are detailed in Appendix A, and included in the map of Environmental Designations in the Parish below in **Error! Reference source not found.**.



Figure 6 Ducks in the Ditch

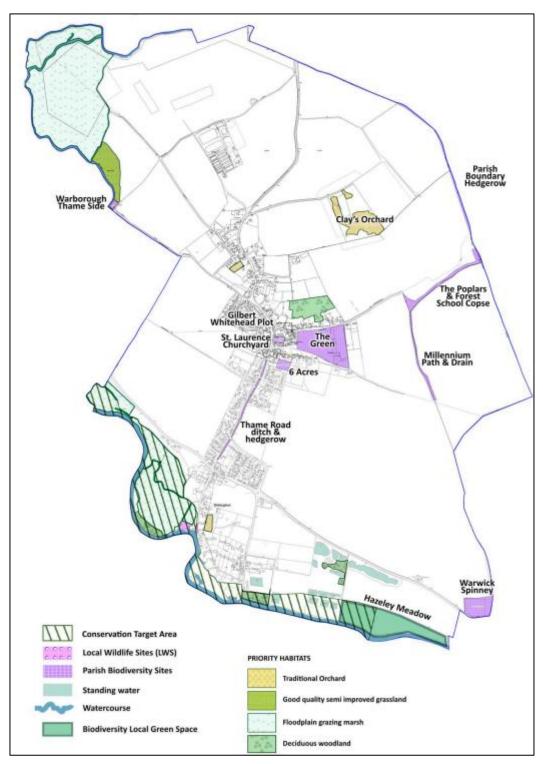


Figure 7 Environmental Designations in the Parish

3.2.3. Tree and hedge planting

Trees are beneficial in our Parish because they offer wildlife havens *and* flood defences as outlined in Figure 8 - and within our built environment, trees reduce surface water run off by 80% compared to asphalt.

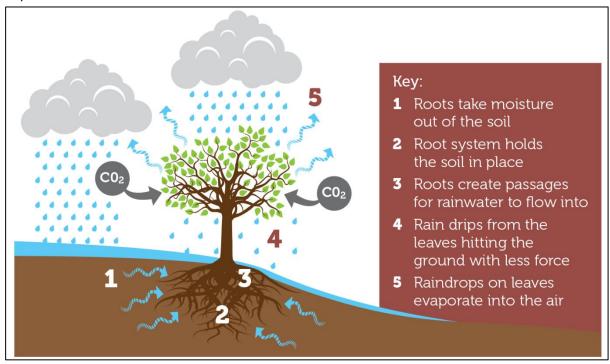


Figure 8 Trees are the first line of natural defense against flooding (image from Heart of England Forest)

In rural areas, trees and hedges and changes in cropping have increased run-off from fields¹⁸. However, Warborough and Shillingford volunteers, ably assisted by Green Gym Wallingford, have been planting trees and hedges in the parish over recent years to enhance the existing network including:

- Native trees planted at the northeast corner of the green, which will enhance wildlife habitat and aid with drainage
- Planting of coppice trees at the southern end of the allotment site, which will provide improved
 wildlife habitat, enhancing the link between the allotment site and the land immediately behind it,
 which is an important, undisturbed area for wildlife
- Development of a native hedge, with regularly spaced trees, to link the lagoon and existing woodland within Warborough. This has been an excellent example of partnership working between local volunteers and the landowner, which will create a significant environmental benefit for both our parish, and that of Dorchester on Thames, within which the lagoon is situated.
- The Arboricultural Report for Warborough Parish (July 2023) identifies and assesses tree species
 across several areas in the parish. Key tree species include Sycamore, Lime, Ash, Norway Maple,
 Oak, and Beech, among others. Trees were inspected for health and safety, with many
 recommendations for pruning, ivy removal, and occasional felling due to disease or structural
 instability. Specific trees, such as Red Horse Chestnut and Elm, were recommended for removal,

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¹⁸Can trees and woods help reduce flooding? - Woodland Trust

while others require periodic inspections to monitor health and structural integrity. WPC had dedicated significant efforts and funds to address these matters in 2024/25.

3.2.4. Farming

Two large farms are present within our Parish, with local farm managers who live locally and who have engaged in the drafting of this document. Several exist to protect biodiversity within the farmland, such as Entry-Level Plus Higher-Level Stewardship and transition to Sustainable Farming Incentives. Other schemes to boost biodiversity include:

- Planting of 20 acres of woodland
- Planting wildflowers around fields borders in the east of the Parish
- Introduction of scrapes to encourage waders in the River Thame
- Pollarding of willow trees along the River Thame
- Maintenance of existing hedgerows and trees
- Planting of a legume fallow to encourage pollinators
- 60 acres of winter stubble, providing habitats for species and food for birds.

3.2.5. Monitoring

Monitoring in the Parish itself is in its infancy, although nature groups from surrounding parishes have supplied data which has provided templates for new local group and has been included in this review where relevant.

Parish Council responsibilities for maintaining trees, verges and ditches on parish land, make an important contribution. A parish councillor is designated with specific responsibility for biodiversity and the natural environment. The PC support village schemes for new planting, as well as annual maintenance of these biodiversity assets.

Along with our designated Local Green Spaces, waterways, CTA, hedgerows, and small areas of woodland, these form a connecting network, enhancing biodiversity, and promoting a sustainable environment for people and nature.

4. Our assets - what we value

4.1. Our Rural Village Character

The Steering Group commissioned Bluestone Planning to undertake a Character Appraisal to ascertain the special interest, character and appearance to highlight the local distinctiveness and identity of the Parish.

As a factual and objective analysis, one of its objectives was to define those physical elements that contribute to its special characteristics including open space, trees, hedgerows and watercourses both within and on the edge of the settled areas.

The parish is considered to have 6 settlement character areas alongside the remaining opening countryside beyond. These, mapped below in Figure 10, are:

- CA1 Thame Road.
- CA2 Rural/Countryside Properties.
- CA3 The Green.

- CA4 Modern Cul-De-Sac and Infill.
- CA5 Shillingford.
- CA6 Shillingford Bridge Approach.



Figure 9 Character Areas within the parish, Bluestone Planning

CA1 - Thame Road is focussed on the historic north-south route through Warborough. Properties are often set in large plots with good sized front gardens and a range of different sized gaps between buildings. The gaps grow increasingly larger between buildings as you travel to the outer edge of the settlement. The size of gardens and gaps between buildings gives greater opportunities for wildlife to utilise such spaces and allows for less conflict in terms of human interaction.

Green spaces are common, with wide planted verges and mature / veteran trees a common characteristic throughout.

The area also contains the St Laurence Churchyard which has native hedgerows and mature lime, oak and yew trees alongside its managed grassland.

The Thame Road ditch and native hedgerow (containing Blackthorn, Hawthorn and Elder), is a particularly important feature, with the watercourse flowing southwards towards Shillingford and the River Thames beyond. These spaces form an important north-south wildlife corridor through the village which should be maintained and enhanced where possible.

St Laurence Churchyard and The Thame Road ditch and Hedgerow have been proposed as a Parish Biodiversity site.

CA2 - The Rural/Countryside Properties character area comprises the largely agricultural cottages and farmhouse properties interspersed with agricultural barns and associated / conversions. In this area the buildings are much more defined by their interaction with the open countryside, often with blurred boundaries between formal gardens and agricultural land.

A common problem in this location are property boundaries and the removal of native planting and replacement with sub-urban fencing. The loss of hedgerow habitats is a key issue here which should be addressed.

CA3 - The Green Character Area, is as the name suggests focussed around the key historic green open space. Originally it was Common land in the form of pasture prior to enclosure as highlighted on the plan below which is a modernised plan from around 1606. The substantial area of maintained grass is not only a key visual amenity for residents, but also wildlife.

The space is bordered to the north and south by deep ditches which provide essential drainage, but are also populated by native planting. Given the low lying position, the ditches contain water for a considerable period throughout the year and offer excellent, well connected habitat space to the open countryside.

The dwellings which face onto The Green are generally enclosed by native hedges or combined hedgerow formal boundaries which contribute both to the character of the area, but also to the diversity of habitats in the area.

The Green also contains a large number of veteran trees around its edges within the public realm as well as those sited in the front gardens of dwellings.

The Green has been proposed as a Parish Biodiversity site, along with the adjacent Gilbert Whitehead Plot and the land to the north of the Six Acres development as highlighted below.

It is important that the key identified features are retained, and further consideration given to wildflower planting of areas not in formal recreational use.

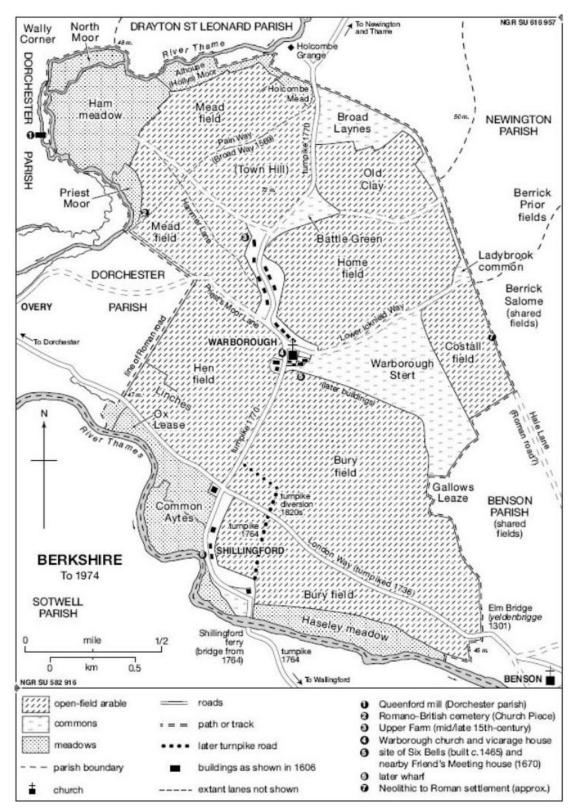


Figure 10 Warborough Parish c 1606 based on a contemporary map

Source: https://www.british-history.ac.uk/vch/oxon/vol18/pp393-421

CA4 - Modern Cul-De-Sac and Infill Character Area are usually formally designed sites dating from the 1960s to present day. More recent developments have had detailed consideration given to planting for biodiversity, whereas older developments tended to focus on formal, non-native planting and more sub-urban features and means of enclosure.

Given the proximity of these areas to the open countryside, it is encouraged that bird and bat boxes as well as hedgehog highways (purposely design gaps in fences) are retrofitted in these areas. This of course would be a community aspiration unless any new development or works to the properties is proposed.

CA5 - Shillingford Character Area comprises the Conservation Area and the historic element of Shillingford to the north. The area becomes gradually more tranquil away from the busy Henley Road, along Wharf Road towards the River Thames immediately to the south.

It is a small linear developed area, often a single plot deep and surrounded by open countryside. Within the adjacent area of open countryside are priority habitats including traditional orchard, floodplain grazing marsh and deciduous woodland beyond. The surrounding area has been identified as a Conservation Target Area, with a Local Wildlife Site (containing wet woodland and lowland meadow) and Wharf Road Parish Biodiversity Site.

It is key therefore that given the sensitivity of the area, that landowners work in harmony with these biodiversity designations. In particular, Wharf Road is seen as a key green lung with its wide grass verges and properties bounded by hedgerows, providing a north-south important corridor down to the River and the east-west priority habitats and River Thames beyond.

CA6 - Shillingford Bridge Approach Character Area comprises the largely loose knit form of development east of Wharf Road and alongside the River Thames. This is an area of low-density modern housing with substantial gardens set within the floodplain centred around Court Drive (an unadopted road maintained by residents). It contains a route lined with formally planted mature chestnut trees immediately adjacent to the floodplain grazing marsh and scrub.

This contrasts to the Wallingford Road area which is less tranquil due to the busy road with a cluster of houses and converted buildings. The area includes Ferry House and its extensive grounds which form part of the Conservation Target area and contain priority habitats in the form of deciduous woodland adjacent to the River Thames.

Both elements of the character area contain many unique and priority habitats and form part of the east-west wildlife corridor along the Thames and its floodplain.

As with Area 5, it is key that given the sensitivity of the area, that landowners work in harmony with these biodiversity designations and the flood plain.

Where any works are undertaken to improve issues arising from flooding, that this should be undertaken with the impact on biodiversity at the fore of any decision making.

4.2. Our footpath and bridleway network

Warborough and Shillingford has a valuable network of footpaths, permissive paths and bridleways which enable residents and visitors to enjoy pedestrian access and leisure activities alongside varying levels of engagement with nature, shown in Figure 12.

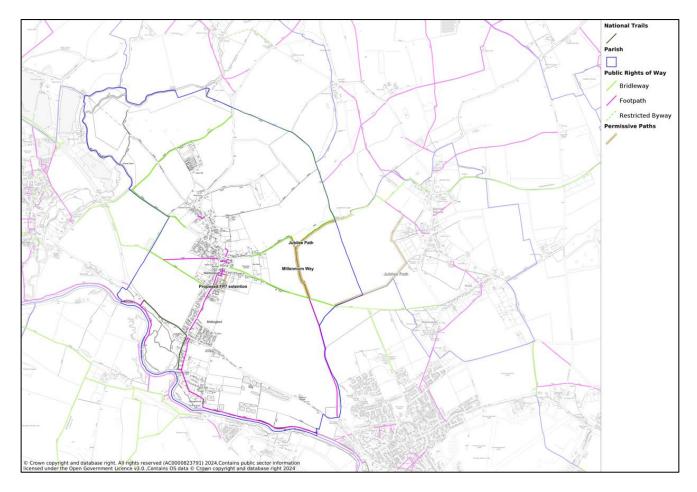


Figure 11Public Rights of Way

Many of our footpaths and bridleways have accompanying verges, ditches, hedgerows and trees which provide important wildlife habitats, and links between Local Green Spaces within our own and neighbouring parishes. The Thame Road and Warborough Road ditch is of significant biodiversity and has been included in the inventory of built environment biodiversity assets, Current Biodiversity within the Built Environment 5.2.1

A footpath survey took place as part of the 2018 Neighbourhood Plan, which showed the links in the built environment and is being updated for the WSRNP. This illustrated the limitations of the footways throughout the parish, with many areas where no footways or verges exist, or where they are narrow or in poor condition. The open country footpath network is in addition to this and is highly valued and frequently used by residents as confirmed in the 2017 Warborough and Shillingford

Neighbourhood Plan (WSNP) Village Survey, and Covid years plus remote working has increased this greatly.

Maintaining and enhancing our footways is clearly of great importance for both people and nature across the parish as a whole and is included in the WSRNP Pedestrian Links study.

4.3. Landscape

The village of Warborough and the Hamlet of Shillingford are situated between farmland, within the settings of both the adjacent North Wessex Downs and the Chilterns AONBs, clearly visible across the low, flat Thames Valley floodplain, with Warborough half washed in the Oxford greenbelt, along with the majority of the hamlet of Shillingford, as shown in Figure 13.

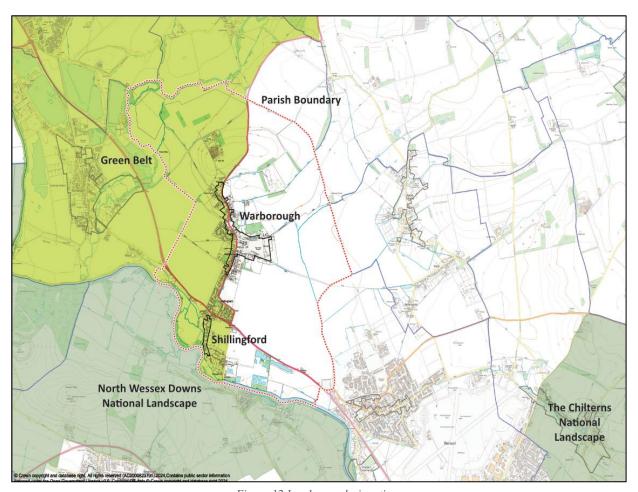


Figure 12 Landscape designations

The parish is classified as East Thames Lower Vale (13c) in SODC's 2024 Landscape Character Assessment. The farmland within this landscape is of high value due to quality arable and animal products produced. Correct management of these areas by farmers therefore shapes the known landscape. Fields at the southern border are adjacent to the Thames and those at the north are adjacent to the Thame. This provides vital habitats which contribute to high biodiversity within the area.

The parish within South Oxfordshire Character Area 4, River Thames Corridor, and Character Type 6, Open Flat Farmland, key characteristics include:

- o Distinctively flat, low-lying farmland (below 50 metres AOD)
- o Large-scale rectilinear field pattern with distinctive network of drainage ditches
- o Weak landscape structure with few trees, low or gappy hedges, open ditches and fences
- o Comparative inaccessibility creates a rural and remote character
- o Open, denuded landscape results in high intervisibility.



Figure 13 The Green, Looking to the East

The WSRNP Character Appraisal highlighted areas which provide vital Green Gaps which contribute to the rural character of the communities, as well as providing other benefits including wildlife habitats and flood mitigation. These are shown in Figure 15.

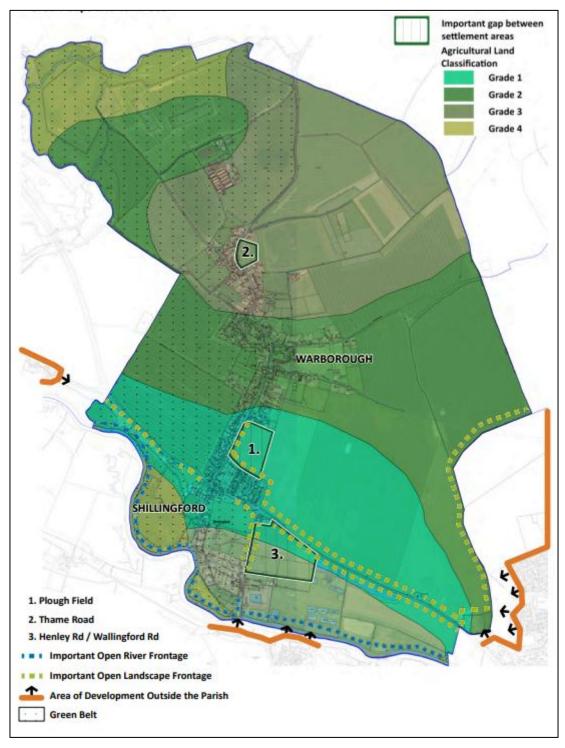
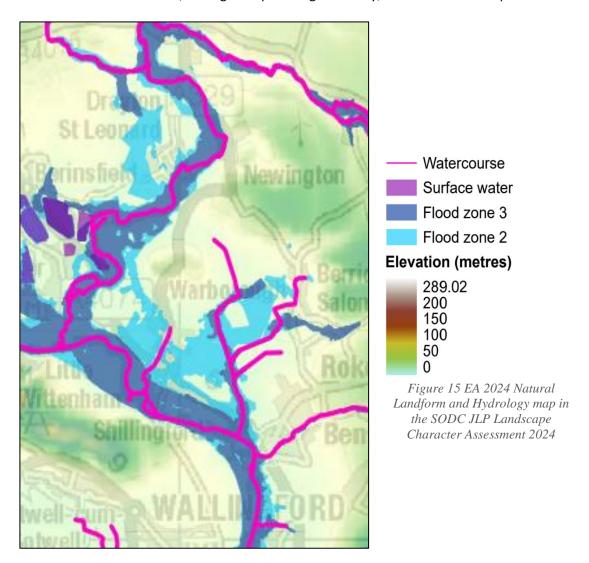


Figure 14 Green Gaps and Land Use

4.4. Wildlife Resources

Waterways within our Parish provide important resources for wildlife and are an important part of our landscape. Section 5.2 explores biodiversity asset within our built environment; here we explore biodiversity assets which are outside the built environment – a haven for wildlife that is isolated from the built environment but, through the public rights of way, often visible to the public.



Both the river Thames and river Thame lie with the Conservation Target Area. In the north the river Thame lies within the Thame Valley CTA and Priority Habitats of Floodplain Grazing Marsh are present, Figure 18.

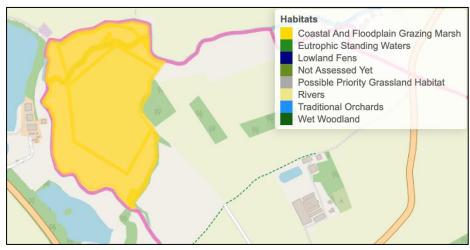


Figure 17 Priority Habitat of Floodplain Grazing Marsh, as identified by TVERC Biodiversity Report 2024

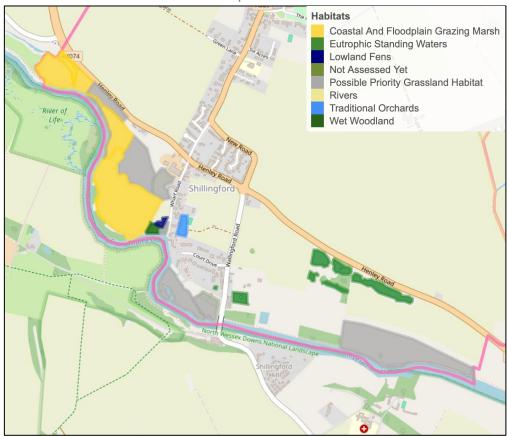


Figure 16 Priority Habitats identified in the south, as identified by the TVERC Biodiversity Report 2024

The River Thames passes across the southern border of the parish and has an important role in forming several Priority Habitats, floodplain grazing marsh, lowland meadow, wet woodland and eutrophic standing water, Figure 17.

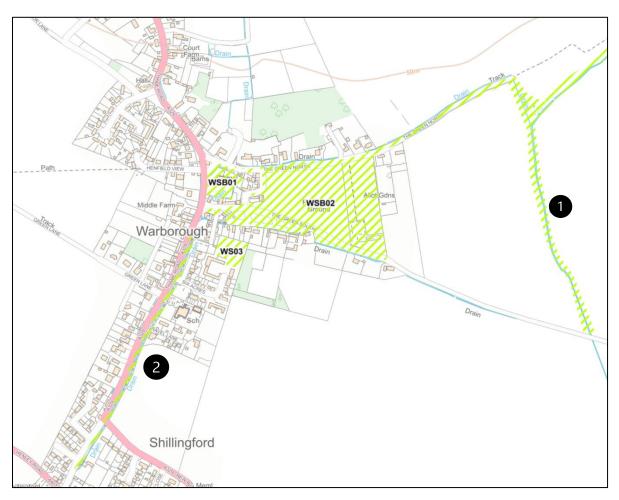
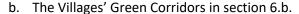
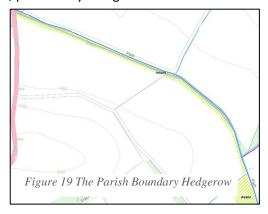


Figure 18 Waterway wildlife resources within the Parish:

Other waterways providing important wildlife resources within the parish include Millenium Ditch, labelled 1 in Figure 19, which has an important role in the wintering and migration of Stonechat, and the Thame & Warborough Road Ditch and hedgerow which provides many habitats for differing species, 2 in Figure 19.

- a. The planting of vegetation and trees along waterways, paths and field boundaries is important, allowing for the creation of new habitats and the movement of species from one area to another. There are several good examples, particularly along the eastern border of
 - the parish, the Millenium ditch, 1 in Figure 19, and Thame & Warborough Road ditch, 2 in Figure 19, as well as the newly planted hedge along Green Lane. The Parish Boundary hedgerow in NE Warborough, Figure 20, also has an important role in providing habitats for wildlife. In many cases this vegetation forms an important Green Corridor, allowing for the movement of wildlife between habitats (see





Woodland within the parish also provides important wildlife resources. There are several areas of woodland identified in Figure 21 each of which provide habitats for a variety of species with further information provided within Section 5.

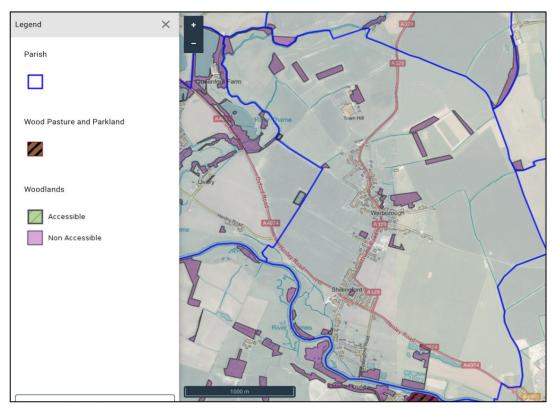


Figure 20 Woodland areas identified within the Parish by Natural England

Areas of species rich grassland are also important for providing wildlife resources identified by Treescapes, Figure 22.

Warwick Spinney, in the bottom right of **Error! Reference source not found.**, is an area of grassland in the east of particular wildlife value meticulously maintained by the Benson Nature Group and well supported by the residents of that parish. It provides resources for a variety of species including butterflies and rabbits.



Figure 21 Species rich grassland, identified by the Treescapes Report 2022

4.5. The farming landscape

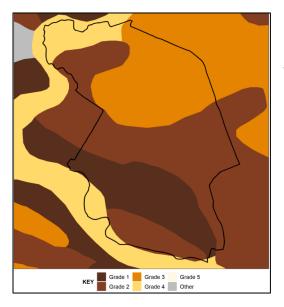


Figure 22 Land grades in Warborough Parish -Treescape report 2022

Clearly, farming dominates the parish, and the Treescapes report highlights the grades awarded to land Figure 23. This is also shown, along with geographic contours (which impacts land use) in more detail in the map in Section 4.3 Figure 13

4.6. Views

Significant value is placed on the views in our parish – within the built environment, out onto the open countryside and up to nearby AONB, and from the Public Rights of Way (PRoWS) either back into our community or out the open countryside. The 2018 WSNP highlighted some of these views, and the WSRNP will highlight others which are informed by the analysis in section 5, overviewed in Figure 24.



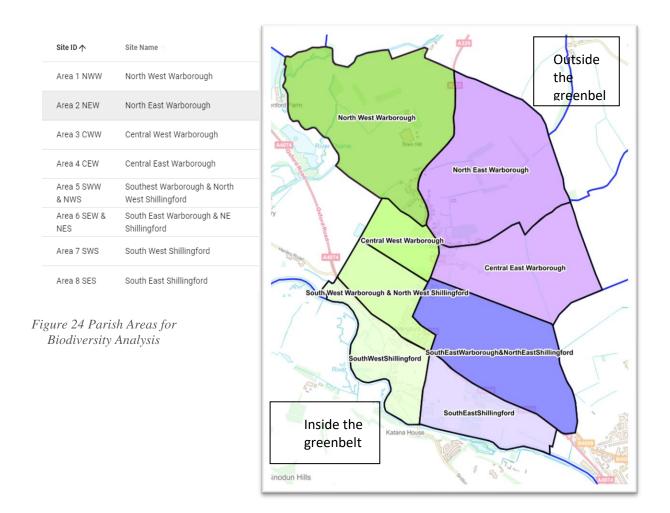
Figure 23 Community Views WSRNP 2024

5. A Strategy for Warborough and Shillingford

5.1. Approach

5.1.1. Identifying Areas of the Parish

To provide a convenient basis for closer evaluation of existing biodiversity and biodiversity opportunities, the parish has been divided into 8 geographical areas. These areas have been subdivided geographically based on geographical features such as tracks and roads, differing landscape characters and to reflect the greenbelt designation which divides the parish Figure 25.



The Built Environment and Green Corridors are considered first and as a whole, given that these perspectives bridge the geographical areas identified above.

5.1.2. Recording current biodiversity

This document presents the current biodiversity profile of each area using categories used by the TVERC report including Woodland, Boundary trees, Hedgerows, Grasslands, Orchards, agro-forestry and Wildlife corridors, along with waterways, landscape views and biodiversity highlights. In each section, areas are highlighted because of their official biodiversity value identified by either:

- 1. Nature Recovery Network (NRN) Priority Habitats
- 2. TVERC Conservation Target Areas (CTA)
- 3. Natural England habitats.

5.1.3. Highlighting Biodiversity Opportunities

The TVERC report outlines opportunities and recommendations to improve diversity in the parish. In the final section of each area, proposals are made for improving biodiversity because it has been identified as one or more of the following:

- Priority Habitats identified in the Nature Recovery Network (NRN)
- TVERC Conservation Target Areas (CTA)
- A biodiversity priority by The Warborough and Shillingford Nature Group or local studies, (often reflecting priority habitats or areas identified by other authorities such as Natural England.)

The map in Figure 25 summarises these improvement opportunities across the parish. The suitability of these options varies, not least because they must be compatible with landowners' needs, but also to respect valued landscape and views and to promote the engagement and benefit of local people. Where land is privately owned, the implementation of recommendations highlighted below relies on those landowners.

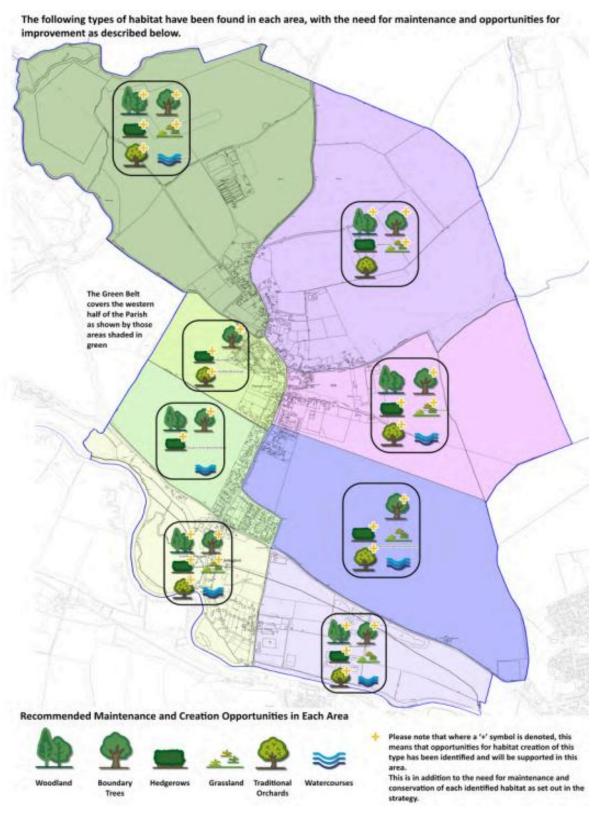


Figure 25 Opportunities to Improve Biodiversity

5.2. The Villages' Built environment and Parish Green Corridors

5.2.1. Current Biodiversity within the Built Environment

The parish of Warborough is quite large compared to the built environments of Warborough and Shillingford – both small communities. The green spaces within these built-up areas are of high value.

There are currently four village areas designated as Local Green Spaces in the 2018 Warborough and Shillingford Neighbourhood Plan: The Green, The Allotments, The Wharf and Rod Eyot.

The Table 1 below shows the habitable, community and biodiversity areas within the built environment of our parish, Appendix H Parish Trees and Hedgerow species outlines native species:

New housing has resulted in loss of green areas, mainly within Six Acres. However, the green boundary has been retained, common areas planted, and a new wild meadow has been planted in a buffer zone at the rear of the site – as well as new garden planting by residents. The Six Acres Meadow Area has not yet been assessed for biodiversity.

Table 1 Habitable Community and biodiversity areas within the built environment

Area	Habitable Areas	Community Sites	Biodiversity Areas
NWW	Hammer Lane NW Thame Road	Greet Memorial Hall	
NEW	The Green North NE Thame Road		Eaton Woodland The Old Rectory Woodland The Green North Woodland
cww	Sinodun View Henfield View North Green Lane CW Thame Road	Aisha Stores	Rod Eyot
CEW	The Green North The Green South Quaker Lane CE Thame Road Six Acres	St Laurence Church St Laurence Hall The Six Bells The Sport Pavilion	The Green including wildflower verges The Allotments including mature orchard and copses Six Acres Nature Area The Gilbert Whitehead Plot Millenium Ditch

SWW & NWS	Orchard Close Cherry Close CW Thame Road Plough Close Caldicott Close Hartley Close		Warborough Road Ditch New Shillingford Woodland
SEW & NES	Gravel Lane	St Laurence Church of England School	Thame Road ditch
SWS	Wharf Road Court Drive West Wallingford Road	The Wharf	The Wharf
SES	East Wallingford Road		

5.2.1. Current Green Corridors

Green corridors have not yet formally been identified but opportunities to formally consider them are included in the following section. These corridors often coincide with Green Gaps and views, which are explored in the WSRNP Design Guid and Character Assessment¹⁹.

5.2.2 Biodiversity Opportunities: Built Environment and Green Corridors

The built environment has an important role in wildlife and biodiversity and can enhance the natural environment. We encourage community efforts and those of individuals to improve biodiversity and applaud the multiple green areas have been planted in recent decades. To further build on this:

Page 29

¹⁹ WSRNP Design Guide and Character Assessment are found in the appendices of the WSRNP

- 1. We propose new Local Green Spaces within the Built Environment, detailed in Figure 27.
- We would recommend exploration of Tree Protection Orders (TPOs) for appropriate tree specimen
 within the built environment's woodlands outside the Conservation Area. The Arboricultural Report
 July 2023 produced by Sylva Consultancy for WPC can be used in the first instance for trees in public

Path

Was Nature Group Biodiversity Assets

Warborough

Figure 26 Areas within the built environment identified as LGS: The Gilbert Whitehead Plot, top right, St Laurence Churchyard, Six Acres Nature site and the Thame & Warborough Road ditch.

outside of conservation areas.

- 3. We support ongoing monitoring of wildlife assets, including the new area of the Six Acre Meadow
- 4. Homeowners are encouraged to explore ways of enhancing habitats. Woodland Trust, for example, identify multiple ways biodiversity can be increased within gardens. Many houses within Warborough and Shillingford benefit from generous sized gardens, and these provide a great resource, not just for the enjoyment of the residents, but for the encouragement of wildlife. The Warborough and Shillingford Design code outlines guidelines on how homeowners can increase biodiversity such as the planting of native trees and use of local stone walls or hedges as boundaries to encourage wildlife.
- 5. We support biodiversity net gain targets of 20% on any development
- 6. The WSRNP Design Code 2024:
 - a. Supports the community aspiration the establish of wild verges (over 1m wide) or woodland verges to enhance biodiversity. These rely on reduced and carefully timed cutting of hedgerows to allow for the growth of wildflowers to support a range of species.
 - b. specifies a Dark Skies approach to ensure a supportive environment for nocturnal wildlife

7. The Villages' Green Corridors: Wildlife benefit from corridors of green – thick greenery of different composition, height and mass, Figure 28 highlights these potential routes across the parish, which we would support, both within the built environments and across the parish.

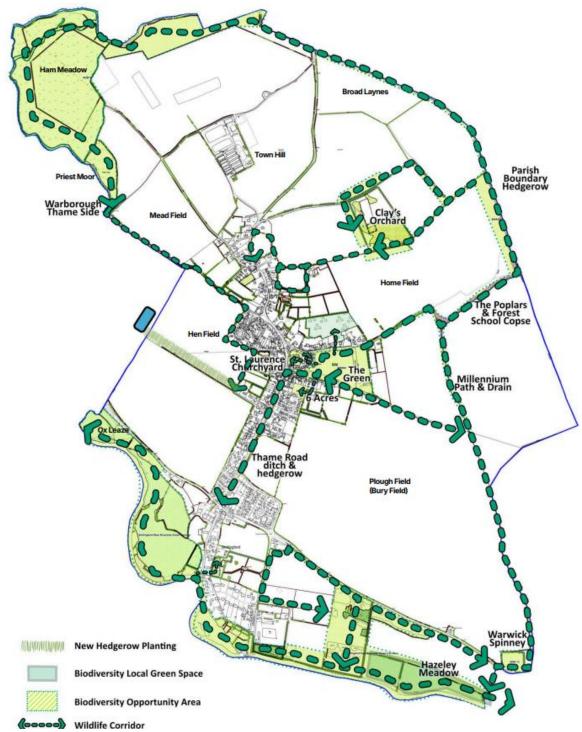


Figure 27 Potential Biodiversity Green Corridors

5.3. Northwest Warborough (NWW)

Overview:

Northwest Warborough (Figure 29 Northwest Warborough) is entirely washed by the greenbelt and consists of mainly farm yards and fields of 'The Pig Farm' which spread from Town Hill. The landscape here forms the entrance to The Vale of Clay, with the gentle rolling Town Hill rising out of the flat Thames Flood Plain or East Thames Lower Vale (SODC JLP Landscape Character Assessment), categorized as Floodplain Grazing Marsh. The farmyard on the hill contains extensive farm buildings, along with a small woodland. This area is rich in biodiversity and several management schemes exist.

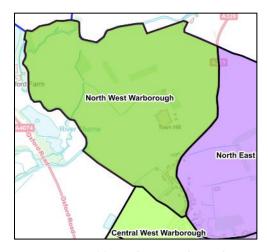


Figure 28 Northwest Warborough

5.3.1. Landscape Views

W-V01 (Existing WSNP V01)

This offers significant views of rising farmland where the rolling field and landscape character of the Clay Vale are visible from the A329 as you leave the village and Conservation Area.

W-V03 (Existing WSNP V10)

Hammer Lane edge of conservation area looking onto North Wessex Downs protected landscape (Wittenham Clumps),

W-V04 (Existing WSNP V9)

Hammer Lane edge of conservation area looking onto North Wessex Downs protected landscape (Wittenham Clumps)..

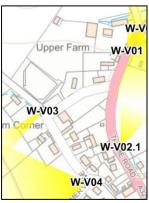


Figure 29 Views in NW Warborough

5.3.2. Woodland

Several areas of woodland located in this area were planted by the Pig Farm to increase biodiversity, along with small areas owned by a private landowner and at the Bathing Place, a Parish Council Asset.

5.3.3. Boundary Trees

Several boundary trees, specifically oak, are present within the hedgerow bordering the A329, shown Figure 31. These trees have an important role int providing habitats and food for a variety of birds, mammals and insects. Lime Trees, planted circa 2010, border the track up to the Pig Farm, shown in blue on Figure 31.

Willow trees are present bordering the river in the west and have been recently pollarded. These trees have a vital role in flood prevention as well as providing a valuable wildlife corridor and habitats and are included in the area identified by TVERC outlined in 5.1.2.



Figure 30 Oak trees planted within the hedgerow lining the A329 (red circles) and Lime trees planted along the track up to the Pig Farm (black outline)

5.3.4. Hedgerows

Many hedgerows are present and managed by schemes associated with The Pig Farm. Despite the Warborough and Shillingford Treescapes Report 2022 highlighting the potential for further hedgerow development, their data does not reflect many existing hedgerows and further schemes would interfere with farming needs. A survey into how to conserve and enhance the existing hedges is being undertaken by The Pig Farm in 2024 and community groups and Treescapes should familiarise themselves with the results and adapt recommendations as appropriate.

5.3.5. Grassland

A region of Priority Habitat floodplain grazing marsh is present in the northwest of this area, shown in Figure 32. This area is rich in biodiversity and classified as part of the Thame Valley Conservation

Target Area (CTA), as identified by TVERC Biodiversity Report 2024, Figure 33. This CTA supports over 15 Priority species, including important breeding wader populations²⁰.

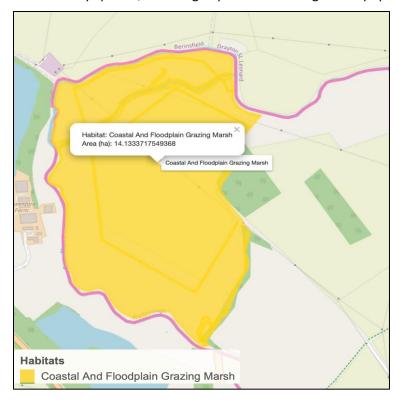


Figure 31 Priority Habitat Floodplain Grazing Marsh present in the northwest. Identified by the TVERC Biodiversity Report 2024

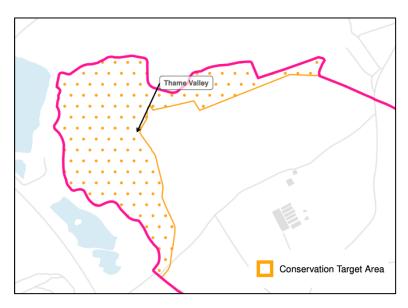


Figure 32 Conservation Target Area in the North, as identified by TVERC Biodiversity Report 2024

²⁰ TVERC Biodiversity Report 2024

5.3.6. Orchards

The TVERC Biodiversity Report 2024 identifies an area of small privately owned Traditional Orchard in the south of this area, as shown in Figure 34. This is privately owned.



Figure 33 Traditional Orchard, as identified by the TVERC Biodiversity Report 2024

5.3.7. Waterways

There is roughly 1.5 miles of River Thame frontage to the west of this area. Flooding from the River results in the formation of floodplain grazing marsh and margins to the north, although inaccessible by any Public Right of Way, are significant as they are identified in the CTA as priority habitats, see Figure 32.

5.3.8. Restrictions

An archaeological site containing graves is present within the southeast of this area therefore limiting the introduction of improvements. Within this area are two Impact Risk Zones for SSSIs, Zone 2907 and 1589, see Figure 1 in Section 2.1. Sensitivities are specifically for infrastructure, air pollution combustion, wind & solar energy, waste, water supply and mineral oils & gas²¹.

5.3.9. Biodiversity Highlights

Many schemes to conserve biodiversity are present within this area. The Pig Farm is currently managed by Entry Level Plus Higher-Level Stewardship, shown in Figure 34, and they are moving towards The Sustainable Farming Incentive (SFI), a more streamlined approach. The introduction of

²¹ https://naturalengland-defra.opendata.arcgis.com/datasets/sssi-impact-risk-zones-england/explore?location=51.636407%2C-1.101941%2C13.22

scrapes, shallow depressions within fields, has occurred in the northwest region of this area. This forms wetland habitats which provide ideal conditions for wading birds to feed, nest and roost.

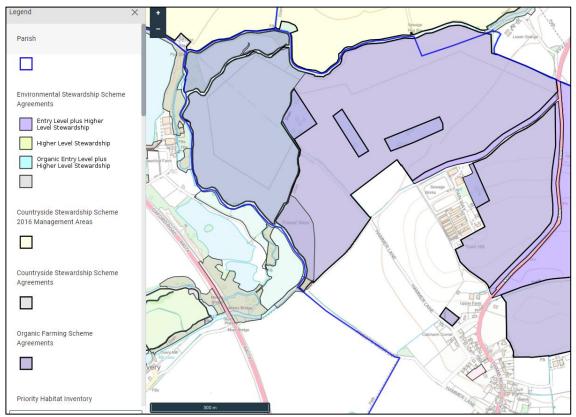
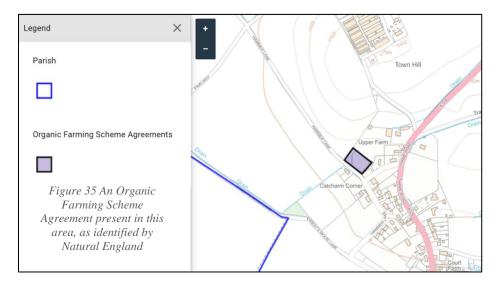


Figure 34 Entry Level plus Higher-Level Stewardship management present in this area

An Organic Farming Scheme Agreement exists in the South of this area, Figure 36. This area of land aims to encourage the expansion of organic production²².



5.3.10. Biodiversity Areas

Both Nature Recovery Network (NRN) Core and Recovery Zones are present in this area. A Core Zone is present in the northwest of Area 1, where the Floodplain Grazing Marsh exists. This is one of the most important sites for biodiversity in the county and is also identified as part of the Conservation Target Area Thame Valley therefore action here should focus on the protection of this site. This Core Zone is surrounded by Recovery Zone where habitat creation and restoration should be focused by extending or buffering the core sites²³.

Warborough Thame Side, an area of land owned by the Parish Council, is in the southwest of this area. Work is beginning to identify species present, plants, microbes, animals etc, organised by the Warborough and Shillingford Nature Group working in conjunction with the Benson Area Nature Group.

Green Corridors

A green corridor exists along the northwest of this area and stretches down to the Thame Road where it links with the Green North, Figure 37. As shown in Section 6.b.

Page 37

²² https://www.data.gov.uk/dataset/f79c982a-761f-4c2f-88a7-cc732655add3/organic-farming-scheme-agreements-

england #: ``: text = Organic % 20 Farming % 20 Scheme % 20 agreements % 20 holding, help % 20 during % 20 the % 20 conversion % 20 process.

²³ TVERC Biodiversity Report 2024



Figure 36 Green corridor joining the northwest to the Thame Road

5.3.11. Opportunities and Recommendations

Overall, many schemes exist in this area to promote biodiversity, and they should be applauded. Farm management are undergoing many procedures, such as surveys into the existing hedgerows and water voles, which will provide a better understanding of biodiversity within the area. The transition to Sustainable Farming Incentives is also underway:



Figure 37 Biodiversity Improvements opportunities in NWW

Views

Propose adding views identified above to inventory of Key Community Views of WSRNP.

Woodland

TVERC identify areas which they calculate would deliver the highest level of biodiversity uplift Figure 39. This is measured in the uplift in biodiversity units per hectare over the current use. Conversion of pastureland to woodland scores higher than conversion of arable. Woodland buffers have a higher biodiversity score than other woodland opportunities as wildlife from adjacent woodland can colonise them more rapidly.

Existing woodland should be conserved and maintained to support existing habitats and enhancements should be informed by the areas findings.

identified in the Treescapes biodiversity benefits 3 to 3.6 **Boundary Trees**

Existing boundary trees should be preserved, specifically the Oak trees bordering the A329 and the willows bordering the Thame. We support selective tree planting where it provides biodiversity and there is compatibility with farming needs and existing views. The Warborough and Shillingford Treescapes Report 2022 identifies three areas where there is the opportunity for introduction of woodland buffers, Figure 40. By planting woodland strips on the edge of existing woodland the new woodland will be colonised by nature more rapidly, supporting biodiversity gains. We support the introduction of woodland buffers where it is sympathetic to the existing views, landscape and farming needs.

Figure 39 Area where there is the opportunity for the introduction of woodland buffers

Hedgerows

We encourage the repair and improvement of existing hedges as it becomes feasible and would encourage Treescapes to scrutinize the upcoming Pig Farm report to update its

recommendations. There is the opportunity for the establishment of wild verges along the Thame Road to enhance biodiversity, see the Warborough and Shillingford Design Code 2024.

Grassland

The existing floodplain grazing marsh should be protected and maintained due to it being a Priority Habitat and an NRN Core Zone. The Warborough and Shillingford Treescapes Report 2022 also identifies several areas where grassland may be introduced.

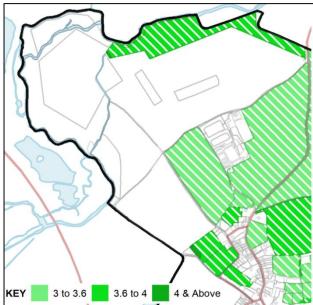


Figure 38 Areas identified by TVERC as delivering the highest level of biodiversity uplift

Woodland Buffer Opportunities

KEY

Orchards

The Warborough and Shillingford Treescapes Report 2022 identifies the potential for the introduction of community orchards.

Waterways

We encourage the continued management of stream vegetation to avoid flooding. Willows along the Thame riverbank should be conserved to slow field run-off as well as providing valuable wildlife corridors. We agree that the area identified by the CTA adjacent to the River Thame should receive maximum protection. Monitoring of water quality and aquatic life is encouraged to better understand and improve the health of the river.

Miscellaneous

We encourage the protection and management of the NRN Core Zones due to their vital role for biodiversity within the country.

Biodiversity Areas

We support the investigation carried out by Warborough and Shillingford Nature Group into The Bathing Place and recommend the implementation of schemes to protect this land.

5.4. Northeast Warborough (NEW)

Overview:

The area of Northeast Warborough descends from Spires hill and consists of fields of The Pig Farm, Clays Orchard (part of the Organic Farming Scheme), a large woodland close to the Green, shown in Figure 41.



Figure 40 Northeast Warborough

5.4.1. Landscape Views

W-V02 (Existing NDP View02)

From the A329 as you enter the village and Conservation Area, now partially obscured by overgrown hedges, but with onward seasonal views to the Wittenham Clumps (North Wessex Downs protected landscape) towards the south.

W-V02.1

As you exit the village to the North this provides a rural paddock view and keeps the linearity of the Northern end of the village.

W-V06

View from edge of Conservation Area northwards across open paddocks enclosed by woodland. It is a PRoW but has the feel of a private driveway entrance.

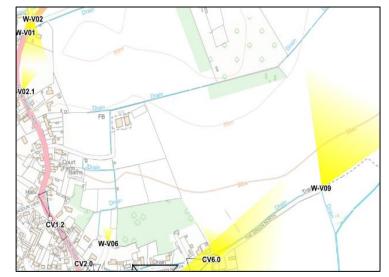


Figure 41 NEW Views

W-V09

From PRoW towards Chilterns, across farmland with avenue of poplar trees alongside.

5.4.2. Woodland

This area contains many of the Parish's scant woodland resources. Woodland on Spires Hill was planted by The Pig Farm and in conjunction with woodland in NWW (Area 1), forms 20 acres of woodland. These woodlands provide vital habitats and should be preserved.

Woodland, known locally as 'The Green North Woodland' (3, in Figure 43) north of The Green, consists of deciduous trees and is recognised as an area of High Spatial Priority for Woodland Improvement²⁴. This, along with two further areas (1,2 on Figure 43), are designated woodland areas by Natural England shown. Together, these areas perform meaningful flood mitigation for the centre of Warborough given the significant runoff from the clay gault substructure of Spire Hill, above this area to the north.

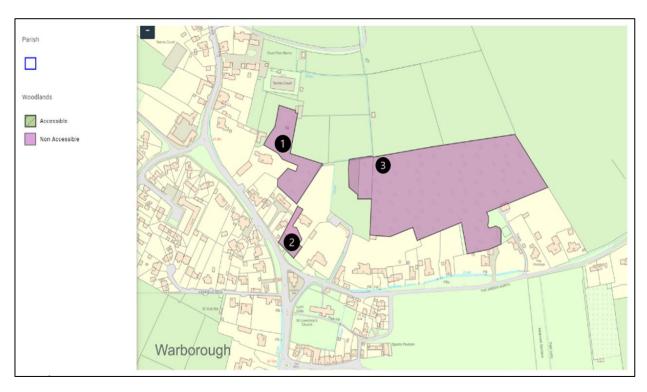


Figure 42 Areas of Woodland as identified by Natural England. 1) 'Eaton Woodland'. 2) 'The Old Rectory Woodland'. 3) 'The Green North Woodland'

²⁴ https://magic.defra.gov.uk/MagicMap.aspx

5.4.3. Boundary Trees

In the east of this area is a row of boundary Poplar trees, locally termed 'The Poplars'. These trees border a network of ditches which pass through this region draining the runoff from the clay gault hills to the north through to the River Thames, performing a vital role in flood prevention. They are also a key feature of the Warborough Jubilee Permissive Path. Several trees are also present along the A329 and along the border of fields, as shown in Figure 14.

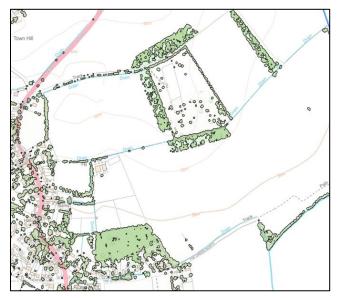


Figure 43 Tree Canopy cover as identified by Friends of Earth

5.4.4. Hedgerows

Many hedgerows are present in this area, providing habitats for many species, increasing biodiversity within this area. In particular, the hedgerow at the northern boundary of the parish is deemed of significant value by the Warborough and Shillingford Nature group for its mature hedgerow

consisting of Blackthorn, Hawthorn, Elder and Bramble. This hedgerow provides habitats for a variety of birds including Yellowhammer, classified in the UK as Red under the Birds of Conservation Concern 5:the Red List for Birds (2021)²⁵ and Reed Bunting and Whitethroat, classified as Amber²⁶. The WSNP would seek to formally classify it as a biodiversity area, currently WSB08 highlighted in Figure 45:

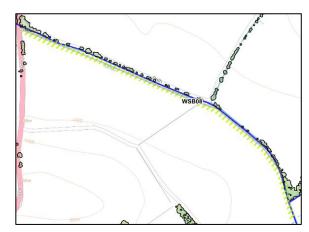


Figure 44 The Parish Boundary Hedgerow as shown on Parish Online

²⁵ https://www.wildlifetrusts.org/wildlife-explorer/birds/finches-and-buntings/yellowhammer#:~:text=Classified%20in%20the%20UK%20as,Wildlife%20and%20Countryside%20Act%2 C%201981.

²⁶ https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf

5.4.5. Grassland

Three areas of species rich grassland are present in this area, as identified by the Warborough and Shillingford Treescapes Report 2022 Figure 46 Species rich grassland present, as identified by the Warborough and Shillingford Treescapes Report 2022. 1 and 2) Grassland surrounding Clay's Orchard. 3) Forest School Copse grassland. Two areas of species rich grassland exist near Clays Orchard, labelled 1 and 2 in Figure 46. This grassland should be maintained to support existing habitats. The Forest School Copse is a species rich grassland area, labelled 3 in Figure 46 and in conjunction with The Poplars is an important biodiversity site.



Figure 45 Species rich grassland present, as identified by the Warborough and Shillingford Treescapes Report 2022. 1 and 2) Grassland surrounding Clay's Orchard. 3) Forest School Copse grassland

Bordering the fields of the east wildflowers have been planted by The Pig Farm to boost biodiversity and encourage pollinators.

5.4.6. Orchards

A region of traditional orchards is present, as identified in the Natural Environment and Rural Communities Act 2006, and termed Clay's Orchard, shown in Figure 47. This orchard consists of apples and pears such as the varieties Blenheim Orange, Newton Wonder and Devonshire Guardian²⁷, as well as some young plums. There are several veteran trees present. This site is vital due to providing a habitat for deadwood vertebrates and fungi, some of nationally rare species such as the *Sarcodontia crocea*, commonly called the Orchard Toothcrust.



Figure 46 Traditional Orchards Habitat identified by TVERC Biodiversity Report 2024

²⁷ TVERC Biodiversity Report 2024

There are many protected and notable species in this orchard, for example several birds of conservation concern present include the Red List Yellow Hammer, Linnet and Starling and the amber list Swift, Kestrel and Willow Warbler. Other birds of conservation concern are present in this area and can be identified in the TVERC Biodiversity Report. This orchard is a crucial biodiversity site by also providing habitats for protected and notable species of beetle, moths, true flies, and mammals, specifically *Meles meles*, the Eurasian badger. This orchard also provides habitats for Barn Owls, a Schedule 1 Species under the Wildlife and Countryside Act 1981, therefore under legal protection²⁸. Development within this area should mitigate the impact on barn owl habitats. This is protected by felling license agreements. Clay's Orchard is managed by an Organic Farming Scheme Agreement, as identified by Natural England²⁹.

5.4.7. Waterways

A small region of eutrophic standing water is present in this area as identified in the TVERC Biodiversity Report, 2024 as a Priority Habitat, shown in Figure 17. During periods of summer there are dense populations of algae which provide a habitat for bottom-dwelling invertebrates such as snails³⁰ and water beetles. Due to this eutrophic standing water supporting several habitats this area should be conserved.

Additionally, a ditch runs parallel to the Poplar trees in the southeast which is of value due to flood prevention and providing habitats for a variety of species. A variety of Reeds, Teasels and grasses are present providing habitats for birds including Reed Buntings, Stonechat and Wheater. This ditch plays a vital role in the wintering and



Figure 47 Eutrophic standing water, identified by the TVERC Biodiversity Report 2024

migration of Stonechat due to a supply of seed heads and insects.

²⁸ https://alar-ecology.co.uk/birds/barn-owls-licensing/#:~:text=Barn%20Owl%20(Tyto%20alba)%20benefits,disturbance%20when%20they%20are%20breeding

²⁹ https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::organic-farming-scheme-agreements/explore?location=51.639899%2C-1.137047%2C13.42

 $^{^{\}rm 30}$ https://data.jncc.gov.uk/data/dec49c52-a86c-4483-90f2-f43957e560bb/UKBAP-BAPHabitats-14-EutrophicStandingWaters.pdf



Figure 48 Environmental Stewardship Scheme Agreements in NEW

5.4.8. Restrictions

Within this area there are two Impact Risk Zones for SSSIs, Zone 2907 and 652, see Figure 1 in Section 2.1 Sensitivities are specifically for infrastructure, air pollution, combustion, and mineral oils & gas³¹

5.4.1. Biodiversity Highlights

Great Crested Newts have been identified close to The Green North. Due to their rapidly declining population, they are protected species with several laws surrounding their eggs, breeding sites and resting places³², which if broken result in fines and a prison sentence. The Pig Farm have planted wildflowers along the east border of the area, this boosts biodiversity by promoting pollinators. Entry Level plus higher-level stewardship schemes exist in this area, shown in Figure 49.

³¹ TVERC Biodiversity Report 2024

³² https://www.gov.uk/guidance/great-crested-newts-protection-surveys-and-licences

5.4.2. Biodiversity Areas

Both core and recovery NRN areas are present within the region, Figure 50

Clay's Orchard

Clay's Orchard, currently identified by the TVERC Biodiversity Report 2024 as a Local Wildlife Site is
rich in biodiversity, providing habitats for many different species, further details are in Section 5.4.6

The Poplars and Forest School Copse

• The Poplars and Forest School Copse, Figure 50, are important biodiversity sites due to their role in providing habitats for many species and being a Core NRN region. The ditch along the Poplar has a vital role in the wintering and migration of Stonechat and a variety of hedgerow species, mature trees, including Oak support several species such as the Songbirds Chiffchaff and Willow Warbler in summer. A thin area of recovery NRN region stretches from The Poplars to the east and along part of the eastern border. This recovery region is ideal for habitat creation and restoration, and within this specific region planting of hedgerows, as suggested by the Warborough and Shillingford Treescapes Report 2022, would allow for increased biodiversity.

A biodiversity asset is identified by the Warborough and Shillingford Nature Group on the border of the Ladybrook copse, Figure 51, due to a high number of wildflowers such as Oxeye

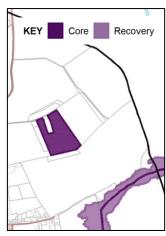


Figure 49 Core and Recovery NRN Zones, as identified in the Warborough and ShillingfordTreescapes Report 2022



Figure 50 The Biodiversity Assets: The Poplars & Forest School Copse and the Ladybrook Copse set aside border

daisies. During winter a variety of birds flock to this area, such as Fieldfare and Redwing. Throughout the summer period breeding pairs of Great, Blue and Coal Tits are present and then flock together during the winter.

Green Corridors:

This area showcases an excellent example of a green corridor linking the east border of the parish to Clay's Orchard. This green corridor has multiple routes and allows for the joining of multiple habitats by passing through Clay's Orchard, woodland and eutrophic standing water.

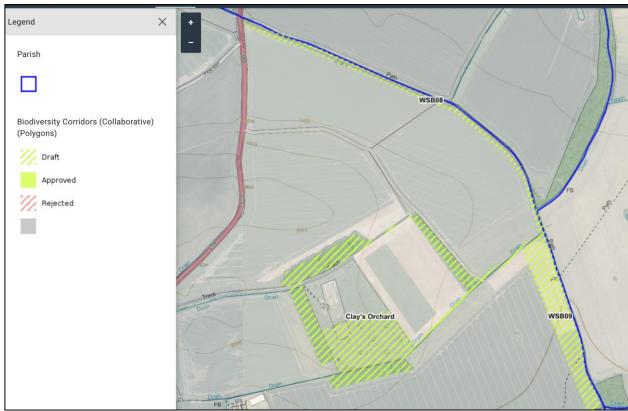


Figure 51 A green corridor linking the east side of the parish to Clay's Orchard and surrounding woodland

5.4.3. Opportunities and Recommendations

Many schemes exist in this area to promote biodiversity, and they should be applauded. Pig Farm management are undergoing several methods to better understand biodiversity, such as surveys into the existing hedgerows and their transition to Sustainable Farming Incentives is also underway.

Views:

Propose adding views identified above to inventory of Key Community Views of WSRNP.



Figure 52 Biodiversity Improvement Opportunities in NEW

Woodland:

As The Green North Woodland is a High Spatial Priority Woodland Improvement area Figure 54, we suggest the introduction of Countryside Stewardship Schemes to manage and enhance this woodland. Furthermore, we suggest the implementation of Tree Preservation Orders on appropriate specimens. This woodland provides habitat for the Great Crested Newt we encourage its conservation due to its role in supporting this protected species.

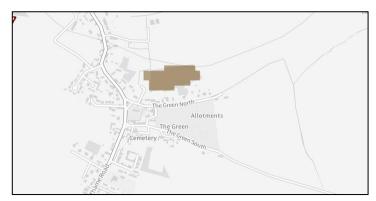


Figure 53 A region of High Spatial Priority Woodland Improvement, identified by Defra

Boundary Trees:

The Poplars should be conserved due to their role in flood mitigation and supporting habitats.

The Warborough and Shillingford Treescapes Report 2022 identifies 4 separate areas where there is the opportunity for the introduction of woodland buffers. By planting woodland strips on the edge of existing woodland the new woodland will be colonised more rapidly, supporting biodiversity gains. We support the introduction of woodland buffers where they are sympathetic to existing views, landscape and farming needs.

Hedgerows:

Despite the Warborough and Shillingford Treescapes Report 2022 highlighting the potential for further hedgerow development, many exist and the implementation of any further will disrupt the arable land. We therefore encourage the repair and

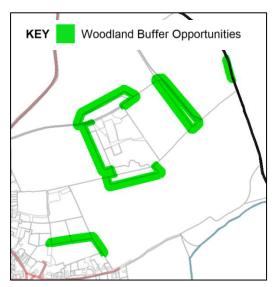


Figure 54 Area where there is the opportunity for the introduction of woodland buffers

improvement of existing hedges. Hedgerows along Thame Road can be managed more sensitively to allow for the establishment of wild verges³³.

Grassland:

The Warborough and Shillingford Treescapes Report 2022 identifies the opportunity to implement grassland areas to increase biodiversity, specifically the area surrounding Clays Orchard.

Orchards:

The existing orchard should be protected and maintained due to it providing many vital habitats.

³³ Warborough and Shillingford Design Code 2024

Waterways:

We suggest monitoring of ditches in the southeast to better understand the water quality and aquatic life.

Miscellaneous:

To protect Great Crested Newts in this area we encourage the retention of key features that form their habitat e.g. ponds, woodland, hedgerows and coarse grassland³⁴.

Biodiversity Areas:

Clays Orchard, currently identified by The TVERC Biodiversity Report 2024 as a Local Wildlife Site can be further protected by its establishment as a Local Green Space. We also encourage the establishment of the Poplars and Forest School Copse as a Local Green Space due to their rich biodiversity, classification as a Core NRN region and role in flood prevention.

The Ladybrook Copse set-aside border should be protected due to its role in providing habitats for birds during both the summer and winter periods.

The Green North Woodland provides an important biodiversity site due to forming habitats for a variety of species, in particular Great Crested Newts as well as a flood protection for the centre of Warborough. This area should be protected and we suggest its establishment as a Biodiversity Area.

The Green Corridor should be protected and we support its improvement in areas where it does not harm existing views and the farmland.

5.5. Central West Warborough

Overview:

Central West Warborough consists of the arable field known as Hen Field. This area borders the species rich lagoon, part of Dorchester Parish, accessed by a popular diagonal footpath which dissects the field. A large region of this area consists of Hen Field. The Local Green Space, Rod Eyot is present in this area.



Figure 55 Central West Warborough

5.5.1. Landscape Views

W-V05 (Existing WSNP V3)

Hammer Lane and the end of Green Lane, conservation area looking onto North Wessex Downs protected landscape (Wittenham Clumps)

W-V10

Along the edge of the Warborough Conservation Area there are public uninterrupted views of the North Wessex Downs protected landscape Wittenham Clumps from the end of Green Lane.

W-V14

From Henfield View across the fields to the west towards Green Lane with North Wessex Downs protected landscape.

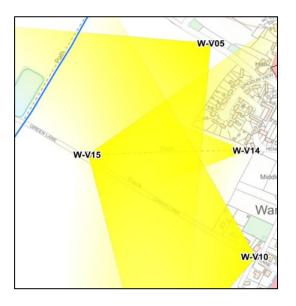


Figure 56 Views in CWW

W-V15

PRoW from lagoon at Diagonal path, historic stone in foreground.

5.5.2. Woodland

There is a small area of woodland present in the east of this area³⁵ by Green Lane, shown Figure 58.

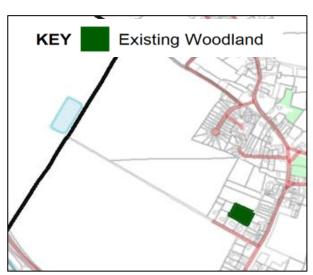


Figure 57 An area of woodland present, identified by the Warborough and Shillingford Treescapes Report 2022

³⁵ Warborough and Shillingford Treescape Report 2022

5.5.3. Boundary Trees

Boundary trees exist dividing the arable and private land, shown in Figure 21.

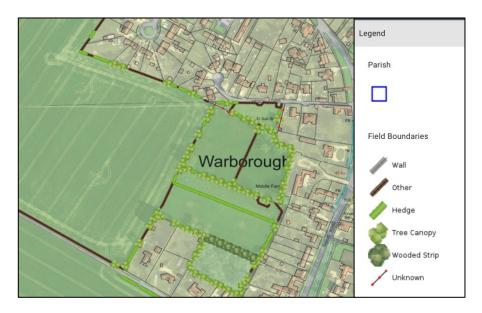


Figure 21. Field Boundaries as identified by Ordnance Survey

5.5.4. Hedgerows

There are multiple hedgerows present in this area bordering fields and the built-up areas. Existing hedgerows include the Lagoon hedgerow (east side) which consists of Hawthorn, Blackthorn, Elder and Hornbeam. This supports habitats of several birds including Finch flocks, yellow and grey Wagtails, Corn Buntings and Yellowhammer. A hedgerow has recently been planted along Green Lane which will provide many habitats, and a useful corridor to the lagoon for differing species as it is established. This hedge consists of dog rose, hawthorn, hazel, crab apple and dogwood³⁶.



Figure 21. Hedgerows present (highlighted in red), as identified by Ordnance Survey

³⁶ https://www.wildlifetrusts.org/online-shop

5.5.5. Grassland

There is no species rich grassland identified by the Warborough and Shillingford Treescapes Report 2022.

5.5.6. Orchards

There are no orchards present in this area.

5.5.7. Waterways

No waterways are present within this area; however, the Lagoon is located adjacent to the western border of this area. This falls within the Parish of Dorchester and will be incorporated within their upcoming Nature Recovery Plan.

5.5.8. Restrictions

Within this area are two Impact Risk Zones for SSSIs, Zone 2907 and 1589, see Figure 1 in Section 2.1. Sensitivities are specifically for infrastructure, air pollution combustion, wind & solar energy, waste, water supply and mineral oils & gas³⁷.

Additionally, a site listed on the National Heritage List for England is present within this area, specifically Cropmark remains of a possible Neolithic enclosure and cursus³⁸, List Entry Number 1006344, shown in Figure 23.

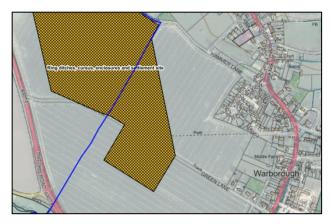


Figure 23. Area of scheduled monuments, as identified by Natural England

5.5.1. Biodiversity Highlights

Arable land is present within this area, the Hen Field which is currently managed by mid-tier countryside stewardship. This land is mostly Grade 2 agricultural land, Very Good Quality Agricultural land³⁹. There are several Bridleways, and a footpath are present in this area, see section 4.2. Presence of bats has been identified in the southeast area, TVERC Biodiversity Report 2024.

³⁷ TVERC Biodiversity Report 2024

³⁸ https://historicengland.org.uk/listing/the-list/list-entry/1006344?section=comments-and-photos

³⁹ https://parishonline.xmap.cloud/maps#map=16.76185980075834/459960.25/193786.02/0

5.5.2. Biodiversity Areas

This area has also been identified as an NRN Recovery Zone, therefore is a CTA that should aim to connect NRN Core Zones and focus on creation of habitats and restoration⁴⁰. A local green space, Rod Eyot is identified in the WSNP 2018, and is in the built area at the northeast boundary.

5.5.3. Opportunities and Recommendations

There are several sites rich in biodiversity present within this area that should be conserved and protected. The farmland is transitioning to sustainable farming incentives management allowing for the protection and enhancement of nature.

Views:

Propose adding views identified above to inventory of Key Community Views of WSRNP.

Woodland:

The existing woodland should be preserved and maintained, and we suggest the exploration of Tree Preservation orders on appropriate specimens. The Warborough and Shillingford Treescapes Report 2022 identifies no opportunity for woodland development.

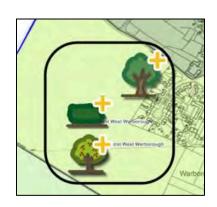


Figure 58 Opportunities for biodiversity improvements in CWW

Boundary Trees:

We encourage the maintenance of existing boundary trees and support the planting of trees in areas where it is sympathetic to the landscape and any existing views.

Hedgerows:

The Warborough and Shillingford Treescapes Report 2022 highlights the opportunity for the introduction of new hedgerows. We welcome the planting of hedgerows where it is sympathetic to the landscape. We encourage maintenance and conservation of the existing hedgerows.

Grassland:

The Warborough and Shillingford Treescapes Report 2022 does not identify the opportunity for any grassland development.

Orchards:

The Warborough and Shillingford Treescapes Report 2022 highlights the opportunity for the introduction of community orchards.

⁴⁰ https://www.researchgate.net/publication/357717032 Land-use tradeoffs between a proposed Nature Recovery Network housing and food production in Oxfordshire

Waterways:

The Warborough and Shillingford Treescapes Report 2022 does not highlight opportunities within this area for waterway biodiversity enhancement.

Miscellaneous:

Due to the presence of Bridleways efforts should be made to reduce human impact on the surrounding fields. We suggest the creation of a green corridor by enhancing vegetation along the footpath to provide habitats. This will link open spaces and allow for the movement of wildlife.

Biodiversity Areas:

The Local Green Space, Rod Eyot, should be maintained and preserved.

5.6. Central East Warborough

Overview:

Central East Warborough consists the Local Green Spaces, The Allotments and The Green. The Green is surrounded by many trees and the habitable areas of The Green North and The Green South, as well as The St Laurence Church and St Laurence Hall. To the east of this area exists arable fields through which are the PRoWs, the Warborough Jubilee and Millenium permissive paths. These paths follow a ditch, specifically the Millenium Ditch which is rich in biodiversity.



Figure 59 Central East Warborough

5.6.1. Landscape Views

W-V07B (WSNP V05b)

View from The Green (East). From The Green there are expansive views to the Chilterns protected landscape. Highly valued and important to the setting of the Conservation Area.

W-V11 (WSNP V 11)

Views towards the open countryside and farmland from the end of The Green north.

W-V12 SW

Multi-directional view taken from village Green South Bridleway which is also a farm track which links to the Warborough Millenium Walk and tracks to Benson and Roke. View north-west to fields and woodland from green south bridleway before entering Warborough. View south-west to North Wessex Downs National Landscape (Wittenham Clumps). View east from PRoW over to open countryside and Chilterns protected landscape to the east.

W-V-12.1

From the PRoW as enter Warborough from Benson, long ranging views towards North Wessex Downs protected landscape.

5.6.2. Woodland

Existing woodland is present behind the built-up area of The Green South, shown in Figure 24, and there are many trees present along The Green South and along Thame Road, Arboricultural Report Warborough Parish Council, 2023. Coppice trees are being planted at the southern end of the allotment site, to improve wildlife habitat and enhance the link between the allotment site and land immediately behind it. These trees will be a variety of Silver birch, Rowan and wild cherry⁴¹.

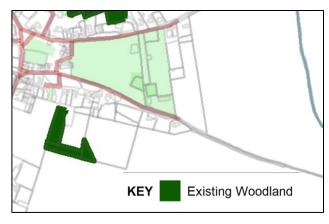


Figure 24. Region of woodland present by the Green South, identified by the Warborough and Shillingford Treescapes

5.6.3. Boundary Trees

The Arboricultural Report for Warborough Parish Council 2023 identifies many trees within this area. Trees surrounding The Green are of a variety of species such as Beech, Lime, Ash, Hornbeam, others can be found in the Arboricultural Report 2023. The ditch along Thame Road is bordered by Horse Chestnut and Norway Maple trees⁴². Trees have recently been planted in the northeast corner of the Green, enhancing wildlife and aiding drainage. Trees planted in this area include semi mature Alder, Oak, Hornbeam, Silver Birch, Wayfarer and a conifer.

⁴¹ https://www.wildlifetrusts.org/online-shop

⁴² Arboricultural report for Warborough Parish Council 2023

5.6.4. Hedgerows

Many hedgerows are present, shown in Figure 25. The provide habitats for many species, as well as ecological corridors⁴³. Partially unmanaged hedgerows are present in the Churchyard.



Figure 25. Hedgerows present, identified on Parish Online.

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⁴³ Warborough and ShillingfordTreescapes Report 2022

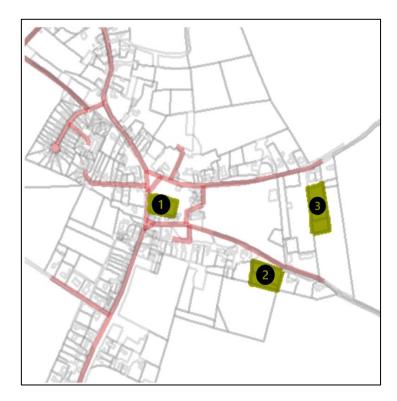


Figure 60 Species rich grassland present, identified by the Warborough and Shillingford Treescapes Report 2022. 1) St Laurence Church Graveyard. 2) The Green South grassland. 3)The Green North grassland

5.6.5. Grassland

There are 3 regions of species rich grassland; St Laurence Church, The Green South grassland and The Green North grassland, shown in Figure 61. These areas are rich in biodiversity therefore should be preserved and maintained. The TVERC Biodiversity Report 2024, highlights an area east of The Allotments as a possible Priority Grassland Habitat, 3 in Figure 61. Wild deer have been sighted in this area; protecting the surrounding area would support their habitat.

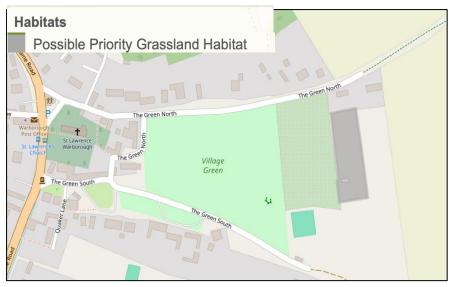


Figure 61 Potential Priority Grassland Habitats are present adjacent to the allotment as shown in the TVERC Biodiversity Report 2024 map

5.6.6. Orchards

Although TVERC do not acknowledge orchards in the is area, there is a mature allotment orchard grown by local residents.

5.6.7. Waterways

This area of the Parish experiences substantial surface water flooding as see Figure 63. There are a series of important ditches that channel runoff either to the west and through the villages or to the east and to The Thames

The Millenium ditch runs parallel to the Warborough Millenium Permissive path. This ditch supports a variety of habitats including the European Water Vole, *Arvicola amphibius*. The European Water Vole is protected under the Wildlife and Countryside Act 1981 and listed as rare and one of the most threatened species⁴⁴. A variety of



Figure 62 CEW EA Surface Water Flooding & Geography

Reeds, Teasels and grasses are present providing habitats for birds including Reed Buntings, Stonechat and Wheater. This ditch plays a vital role in the wintering and migration of Stonechat due to a supply of seed heads and insects. Due to a wide range of biodiversity within this ditch and their providing habitats for rare, threatened species we propose the establishment of this ditch as a Local Green Space.

5.6.8. Restrictions

There are several Local Green Spaces present within this area, as identified by the Warborough and Shillingford Neighbourhood Plan 2018; The Green and The Allotments. These areas should be maintained and conserved due to their importance within the local community and being rich in biodiversity. A Quaker burial ground exists in privately owned land.

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⁴⁴ https://www.gov.uk/guidance/water-voles-advice-for-making-planning-decisions#:~:text=Water%20voles%20are%20protected%20under%20the%20Wildlife%20and%20Countryside%20 Act%201981.

Within this area are three Impact Risk Zones for SSSIs, Zone 2907, 652 and 1589, see Figure 1 in Section 2.1 Sensitivities are specifically for infrastructure, air pollution, combustion, waste, water supply, composting and mineral oils & gas⁴⁵.

5.6.1. Biodiversity Highlights

Fields within this area contain middle tier Countryside Stewardship Agri-Environment management46. Two permissive paths, the Jubilee and Millenium path are present along with several Bridleways, see section 4.2. Our footpath and bridleway network.

5.6.2. Biodiversity Areas

1. The St Laurence Church (1 in Figure 64)

An area rich in biodiversity due to its many hedgerows and trees including Mature Lime, Oak and Yew. This area provides many species for birds. The Spotted flycatcher and Mistle thrush, classified as red under the Birds of Conservation Concern 5: the Red List for birds (2021), inhabit this area. Along with other bird species including the Great Spotted woodpecker, Goldcrest and the house martin.

2. The Gilbert Whitehead Plot (2 in Figure 64)

This site is identified as a Biodiversity Asset by the Warborough and Shillingford Nature Group. This plot consists of several mature trees, including a Beech tree.

3. The Green and Allotments (3 in Figure 64)

The Green and Allotments, both Local Green Spaces, are rich in biodiversity and identified as biodiversity assets due to internal and peripheral copses, mature hedges and wildflower borders. Habitats are provided for protected species including mistle thrushes, Pied wagtails and Red kites.

4. Six Acres Nature Area (4 in Figure 64)

This area provides a boundary between the newly developed Six Acres and existing houses present along The Green South. This area has not yet been assessed for biodiversity.

46 https://magic.defra.gov.uk/MagicMap.aspx

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⁴⁵ TVERC Biodiversity Report 2024

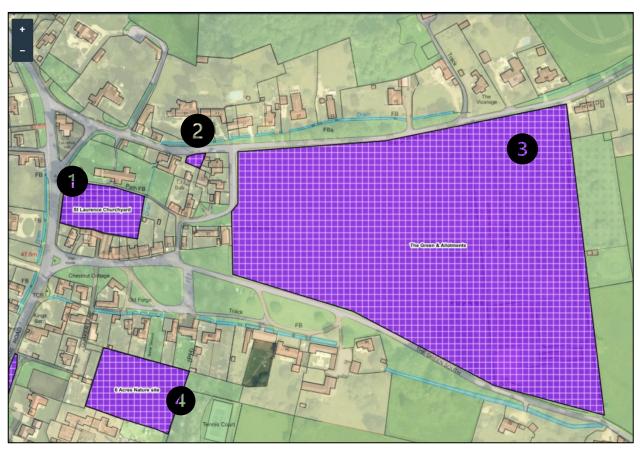


Figure 63 Recommended Biodiversity sites: 1. St Laurence Churchyard. 2. The Gilbert Whitehead Plot, 3. The Green & Allotments. 4. Six Acres Nature Site

5. Green Corridors

• A green corridor exists across the north of this areas due to the Poplars and hedgerows present along the Bridleway of The Green North. This corridor is continued along the Green North and links to the region of woodland north of The Green North, shown Figure 65 and shown in context in section 6.b.



Figure 64 Green Corridor consisting of the Poplars and vegetation bordering the Bridleway of the Green North



Figure 65 Green Corridor consisting of the Thame & Warborough Road ditch & hedgerow

 An Urban Wildlife Corridor, Thame & Warborough road ditch, passes in the south of this area, shown Figure 66. This green corridor allows for the movement of species within the built environment and passes into the area SEW & NES.

5.6.3. Opportunities and Recommendations

Overall, there is a high level of biodiversity within this area with several management schemes in place to protect biodiversity, the presence of Local Green Spaces and schemes within the arable land. Farm management is transitioning to Sustainable Farming Incentives which will enhance and protect nature. The establishment of biodiversity assets such as Local Green Spaces will allow for greater protection of areas rich in biodiversity.

Views:

Propose adding views identified above to inventory of Key Community Views of WSRNP.

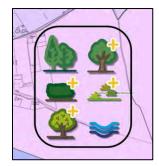


Figure 66 Opportunities for biodiversity improvements in CEW

Woodland:

We suggest the maintenance of the existing woodland areas due to their roles in flood protection and providing habitats and recommend exploration of TPOs for appropriate specimens.

Boundary Trees:

The existing boundary trees should be preserved. We support the introduction of new trees where it provides biodiversity, is compatible with farming needs and respects the scenic landscape and views.

Hedgerows:

We suggest the maintenance and enhancement of existing hedgerows and encourage the planting of new hedgerows where they are sympathetic to the landscape, this will allow for establishment of a wildlife corridor and increase available habitats. The Warborough and Shillingford Treescapes Report 2022 highlights several areas where new hedgerows can be introduced.

Grassland:

The three regions of species rich grassland should be preserved and maintained. We suggest the establishment of the area east of The Allotments as a Priority Grassland Habitat.

Orchards:

There is the opportunity for the introduction of community orchards within this area, however, to prevent the loss of views we suggest that any trees planted should be dwarf fruit trees.

Waterways:

The Millenium Ditch should be protected due to it supporting several habitats. To enhance biodiversity more vegetation could be planted along the bank of the ditch, providing a wildlife corridor and slowing field run-off.

For Warborough Road Ditch recommendation, see 5.2.2

Restrictions:

Archaeological sites such as the Quaker burial site should be respected.

Biodiversity Areas:

<u>Millenium Ditch:</u> We suggest the establishment of Millenium Ditch as a Local Green Space to allow for protection of the species it supports.

<u>The Green and Allotments</u>: Within the Allotments we recommend planting for pollinators and coppiced tree planting to allow for growth without obstructing existing views. We support their continued designation as LGSs.

<u>The Forest School Copse</u>: To protect the Forest School Copse we suggest the implementation of tree preservation orders where appropriate and we support management to protect this area.

<u>Six Acres Nature Area:</u> There is an opportunity for investigation into biodiversity within the Six Acres Nature Area, and management schemes to protect this land.

<u>The Gilbert Whitehead Plot:</u> We recommend this site to be added as a LGS. To protect trees within the Whitehead Plot we suggest the implementation of tree preservation orders. As this area is owned by the Warborough Parish Council and we recommend schemes to enhance biodiversity and encourage pollinators.

Warborough Road and Thame Road Ditch – Recommend designation as a LGS.

<u>The Green North and Green South grassland:</u> These grassland areas should be protected, and we suggest their establishment as Priority Habitats.

Green Corridor and LGS:

We recommend formal recognition of the Poplars Green Corridor, and the urban green corridor formed by the Thame & Warborough road ditch.

5.7. Southwest Warborough (SWW) & Northwest Shillingford (NWS)

Overview:

The Southwest Warborough and Northwest Shillingford areas, Figure 68 consists of habitable areas and a large field bordering the A4074, Henley Road. This area of the Parish is flat with views towards Wittenham Clumps.



Figure 67 Southwest Warborough & Northwest Shillingford

5.7.1. Landscape Views

S-V02

At the end of the cul-de sac of Cherry Close there are distant views to North Wessex Downs protected landscape and across farmland.

5.7.2. Woodland

Treescapes identified a small area of woodland exists near Caldicott Hartley Close which is privately owned. This is identified in Figure 69.



and

Figure 68 A region of woodland present in NW Shillingford

5.7.3. Boundary Trees

Several boundary trees exist along Thame Road. There are a mixture of Horse Chestnut, Ash, Walnut and Norway Maple trees⁴⁷. Trees also border the A4074, shown in Figure 69.

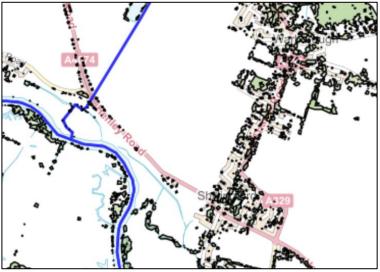


Figure 69 Tree Canopy cover as identified by Friends of Earth

5.7.4. Hedgerows

There are few hedgerows present which border the A4074 and A329, dividing the field and roads. The hedgerow bordering the A329, Thame Road, ditch consists of blackthorn, hawthorn and elder. This hedgerow supports a variety of songbirds such as siskin and goldfinch during the winter. To ensure there is no loss of biodiversity within this area buffer zones of vegetation, hedges must be conserved and sustained, reducing pollution from the roads. Additionally, a new hedgerow has been planted along Green Lane.

5.7.5. Grassland

There is no existing grassland present in this area.

5.7.6. Orchards

No orchard is present in this area.

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⁴⁷ Arboricultural Report Warborough Parish Council 2023

5.7.7. Waterways

The Thame Road ditch is bordered by hedgerows and grass verges which form a valuable urban wildlife habitat.

5.7.8. Restrictions

A mid-tier Countryside Stewardship agri-environment management scheme is used to manage the farmland present in this area. This land is grade 1 and 2 agricultural land, excellent and very good quality.

Within this area are two SSSI Impact Risk Zones, 1589 and 2907, see Figure 1 Sensitivities are specifically infrastructure, mineral oil & gas, air pollution, combustion, waste, composting and water supply⁴⁸.

5.7.1. Biodiversity Highlights

A site listed on the National Heritage List for England is present within this area, specifically cropmark remains of a possible Neolithic enclosure and cursus49, List Entry Number 1006344, shown in Figure 71. A bridleway passes along the northern border, as well as well-used permissive paths, see section 4.1

A grass snake, *Natrix helvetica*, has been identified close to Warborough Road, TVERC Biodiversity Report 2024. Due to these snakes being protected by law any development must comply with their protection, aiming to reduce the impact on any snake habitat⁵⁰.

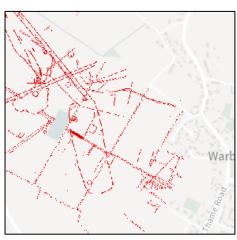


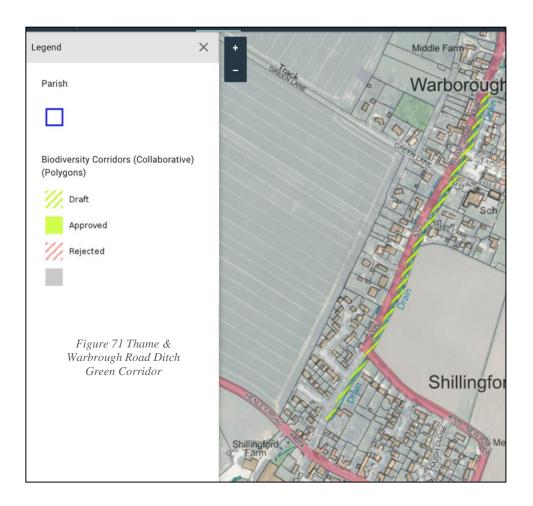
Figure 70 Historic England Archaeology Mapping

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⁴⁸ TVERC Biodiversity Report 2024

⁴⁹ https://historicengland.org.uk/listing/the-list/list-entry/1006344?section=comments-and-photos

⁵⁰ https://www.gov.uk/guidance/reptiles-advice-for-making-planning-decisions



5.7.2. Biodiversity Areas

The Thame & Warborough Road ditch passes through this area. This site is rich in biodiversity and forms a green corridor, shown in Figure 72. This corridor has an important role in the movement of wildlife through the bult up area.

5.7.3. Opportunities and Recommendations

The existing biodiversity rich areas, such as hedgerows, should be protected. Arable land is transitioning to Sustainable Farming Incentives which will allow for protected and enhanced nature.

Views:

Propose adding views identified above to inventory of Key Community Views of WSRNP.

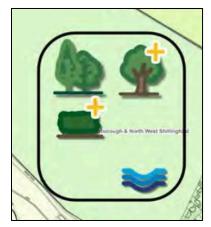


Figure 72 Opportunities for biodiversity Improvements in SWW&NWS

Woodland:

We encourage the conservation and maintenance of existing woodland within this area and we suggest the exploration of Tree Preservation orders on appropriate specimens.

Boundary Trees:

We suggest the conservation and preservation of existing boundary trees, with TPOs explored for public space specimen trees outside of the Conservation Area. We support the planting of trees where it provides biodiversity, aligns with farming needs and respects existing views.

Hedgerows:

We encourage the repair and maintenance of existing hedgerows. In cases where hedge planting is sympathetic to the landscape, we welcome the planting of hedgerows. We specifically encourage the enhancement of hedges along the border of the A4074, allowing for the formation of a buffer zone to protect wildlife within the field from the road.

Grassland:

The Warborough and Shillingford Treescapes Report 2022 identifies no opportunity for grassland implementation.

Orchards:

The Warborough and Shillingford Treescapes Report identifies no opportunity for the development of community orchards.

Waterways:

We suggest the maintenance of the ditches, ensuring they are kept clear to protect against flooding. For Warborough Road Ditch, see 5.2.2

Miscellaneous:

We encourage the conservation of the area surrounding the grass snake to allow for it to be supported.

Biodiversity Areas:

The Thame & Warborough Road ditch should be protected to allow for movement of wildlife.

5.8. Southeast Warborough (SEW) & Northeast Shillingford (NES)

Overview:

Southeast Warborough and Northeast Shillingford consists of habitable areas, St Laurence Church of England School and stretch across the east to Benson. Plough Corner is present in the southwest area, adjacent to Plough Field, an important landscape feature due to its role in dividing village of Warborough and the hamlet of Shillingford⁵¹. The A4074 runs

across the south border and is flanked by hedgerows. The

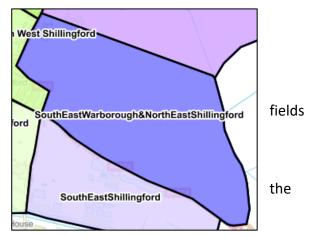


Figure 73 Southeast Warborough and Northeast Shillingford

biodiversity rich Warwick Spinney is present in the southeast, bordering Benson.

5.8.1. Landscape Views

W-V13

First open view as you exit build area of Warborough over the last remaining gap separating Warborough and Shillingford settlements to the open countryside /Chilterns AONB to the east.

S-V01 (Existing WSNP V06a)

View across Plough Field from New Road Shillingford, expansive views across farmland to the Chilterns protected landscape

W-V10 O W-V13 S-V01 S-V03 N

Figure 74 SEW & NEW Views

S-V03 N&E

Multi-directional view North, East and South-east from New Road across Plough Field to Chilterns protected landscape and from New Road across Plough Field to Warborough

5.8.2. Woodland

There is no identified woodland within this area, however Warwick Spinney has many excellent tree specimen.

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⁵¹ WSNP 2018 Character Assessment

5.8.3. Boundary Trees

Several boundary trees exist along the border of Warborough Road, consisting of a mixture of Sycamore, Norway Maple, Elm and Ash⁵², shown Figure 75. Trees also border the Parish of Benson in the East.

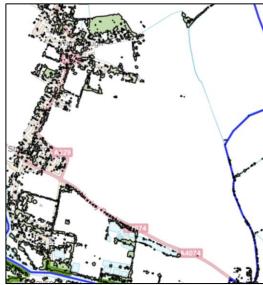


Figure 75 Tree Canopy cover as identified by Friends of Earth

5.8.4. Hedgerows

Several hedgerows are present, along Warborough Road and the A4074, dividing fields from the road across the southern border. Hedgerows along Warborough Road consists of blackthorn, hawthorn and elder, providing habitats for a wide variety on songbirds including Siskin and Goldfinch in the winter.

5.8.5. Grassland

A small habitat of species-rich grassland is present in the Eastern corner of this area, known as Warwick Spinney. This consists of mainly 'rough grassland' and is scattered with trees and shrubs⁵³. The area is rich in biodiversity, specifically areas adjacent to the site entrance and it provides habitats for a range of flora and fauna. In the northern edge there is extensive rabbit grazing, and many species including pollinating insects and wildflowers are supported. Due to areas of bare ground and

⁵² Arboricultural Report Warborough Parish Council

 $^{^{53}\} https://www.bensonnaturegroup.com/_files/ugd/661674_6e6dea8825bb45b6b0a123f20f95c2fb.pdf$

nectar from wildflowers many butterfly species are present⁵⁴. Warwick Spinney represents a key connection between the remaining riverside meadows by the River Thames and the new green space associated with the development plans in Benson village⁵⁵. Flora present in this area includes:

- Ragwort
- Creeping buttercup
- Pyramidal orchid
- Wood anemone
- Teasel
- Dog rose
- Ivy

Fauna within this area include:

- Banded Demoiselle
- Grass Snake
- Red Kite
- Cinnabar moth
- Yellowhammer

This area supports a range of butterflies including Small Blue, Marbled white, Ringlet, Brown Arugus and Essex Skipper⁵⁶.

5.8.6. Orchards

A small orchard is present at the front of the St Laurence Church of England School. This consists of a variety of fruit trees.

-

⁵⁴ https://www.bensonnaturegroup.com/_files/ugd/4b122c_e5cb402764f749cc804705434a06008e.pdf

⁵⁵ https://www.bensonnaturegroup.com/_files/ugd/661674_6e6dea8825bb45b6b0a123f20f95c2fb.pdf

⁵⁶ Butterfly data supplied by Tom Stevenson

5.8.7. Waterways

A significant drainage ditch runs along the east border of this area and the Warborough and Thame Road ditch runs along the west border. There are large areas of standing seasonal in the central field, and fields are often puddled, providing suitable environment for aquatic birdlife.

5.8.8. Restrictions

A Romano-British settlement in present in the field to the east, historically known as Bury Field⁵⁷, this is identified as heritage at risk and should be protected. As this is a scheduled monument, a procedure of Scheduled Monument Consent is required for development within the area⁵⁸, shown in Figure 77.

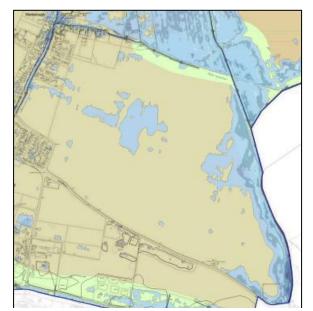


Figure 76 SEW & NES EA Surface water flooding & area geography

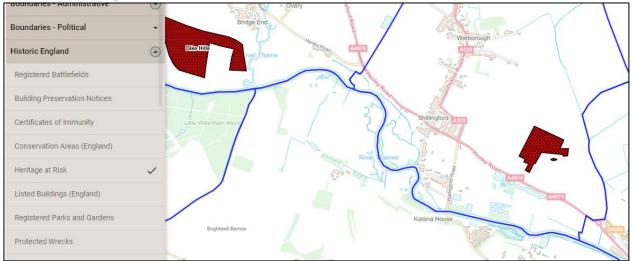


Figure 77 Scheduled Monument present in the east

Within this area are three Impact Risk Zones for SSSIs, Zone 2907, 652 and 1589, see Figure 1 in Section 2.1 Sensitivities are specifically for infrastructure, air pollution. Compostings, combustion, waste, water supply and mineral oils & gas⁵⁹.

⁵⁷ https://historicengland.org.uk/advice/heritage-at-risk/search-register/list-entry/31020

⁵⁸ https://historicengland.org.uk/listing/what-is-designation/scheduled-monuments/#:~:text=Certain%20development%20works%20to%20your,Consent%20is%20a%20criminal%20offence.

⁵⁹ TVERC Biodiversity Report 2024

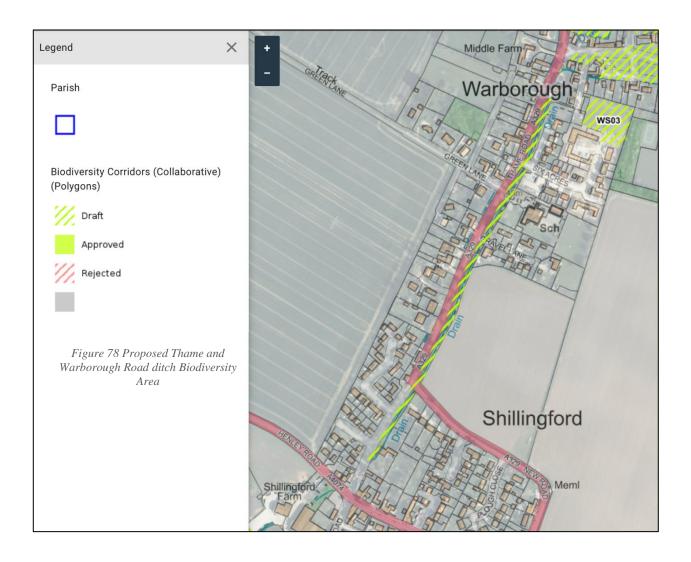
5.8.9. Miscellaneous

Two footpaths are present, along the east and west boundary, see section 4.1. The field Milestone is present within this area and is owned by S M Cook Shillingford. This land is of Grade 1 and 2 agricultural land and is currently managed by mid-tier countryside stewardship scheme however is transitioning to Sustainable Farming Incentives. This field has a vital role in the gathering of geese prior to their migration during the winter period.

5.8.10. Biodiversity Areas

A Recovery NRN Zone exists along the east border. This area should focus on the creation and restoration of habitats⁶⁰. Warwick Spinney is rich in biodiversity, providing habitats for many species such as butterflies, see section 5.9.5 for information on biodiversity within this area. The Thame Road ditch is also a biodiversity area due to it supporting many habitats. This ditch also has an important role in the formation of a green corridor, shown Figure 79, allowing for the movement of wildlife within the built-up area, linking area SEW & NES with SWW & NWS.

⁶⁰ Treescapes Report 2022



5.8.11. Opportunities and Recommendations

We support the protection of an enhancement of nature within this area where it is sympathetic to the landscape. The arable land is transitioning to Sustainable Farming Incentives which will enhance and protect the existing nature.

Views:

Propose adding views identified above to inventory of Key Community Views of WSRNP.

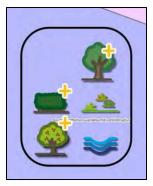


Figure 79 Opportunities for Biodiversity Improvements in SEW & NES

Woodland:

The Warborough and Shillingford Treescapes Report 2022 does not identify the opportunity for the implementation of any woodland, but we suggest the implementation of Tree Preservation orders on appropriate specimens in the Warwick Spinney area.

Boundary Trees:

We encourage the maintenance of existing trees and the planting of new trees where it is sympathetic to the landscape and views, with TPOs explored for public space specimen trees.

Hedgerows:

Existing hedges should be conserved as they provide a boundary between the road and fields. The introduction of more hedgerows could provide a buffer zone between pollution from the road and habitats within the field. This would benefit biodiversity and limit habitat loss.

Grassland:

We encourage efforts to increase flora within the Warwick Spinney area of grassland. We encourage the conservation of this area.

Orchards:

We encourage the maintenance of the existing orchards. The Warborough and Shillingford Treescapes Report 2022 identifies several areas for implementation of community orchards.

Waterways:

We suggest the maintenance of the ditches, ensuring they are kept clear to protect against flooding. For Warborough Road Ditch, see 5.2.2

Miscellaneous:

We encourage correct maintenance of the footpath to reduce human impact.

Biodiversity Areas:

Warwick Spinney currently identified as species rich grassland by the Warborough and Shillingford Treescapes Report 2022 can be further protected by its establishment as a Local Green Space. This will allow for increased awareness of the area.

5.9. Southwest Shillingford (SWS)

Overview:

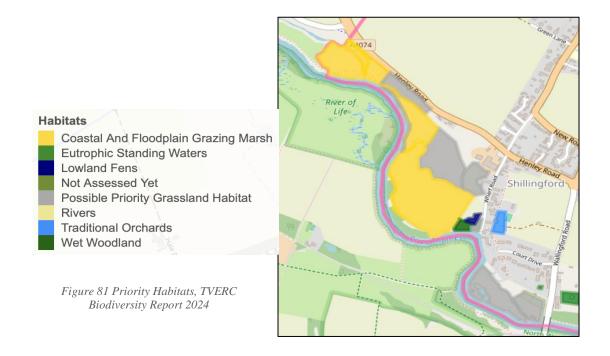
Southwest Shillingford is an area adjacent to the River Thames. The a4074 defines the norther boundary of this with Wallingford Road on the east. The Parish of Dorchester is to the west, and the river Thames runs its southern boundary.

Most of the land within this area is identified floodplain grazing marsh and habitable areas, however there are regions of lowland fens and wet woodland, shown in Figure 82. The Wharf, a Local Green Space, is present in central south region. Wallingford Road borders the east Camping and Caravan site is present in the southeast region.



Figure 80 Southwest Shillingford

the and a



5.9.1. Landscape Views

S-V10

View from the Thames Path across the floodplains

S-V09

View westwards out of Shillingford Conservation Area across floodplain of River Thames with backdrop of North Wessex Downs protected landscape

S-V08 (Existing WSNP V07)

There are westward views across the Wharf to river Thames, and then, out of parish and beyond is the North Wessex Downs protected landscape (Wittenham Clumps).

S-V5

View from Shillingford Bridge approach into floodplain and listed building / willow maze.

S-V02 Shilling S-V04 S-V05 S-V06 S-V06

Figure 82 SWS Views

S-V5.1

From Shillingford Bridge scross the flood meadow and boathouse.

5.9.2. Woodland

An area of wet woodland exists adjacent to the River Thames, in the southern part of this area, this is known as The Shillingford Boathouse Carr and is identified as an Oxfordshire Local Wildlife Site. This woodland is dominated by crack willow with osier and shrubs including hawthorn and blackthorn. The field layer consists of nettle with cleavers, comfrey, lesser pond-sedge, greater pond-sedge and ground ivy. Lodden Lily is locally abundant and there are small amounts of wild angelica, flag iris and orange balsam.

The Shillingford Boathouse Carr also has an area of lowland meadow containing many species including:

- Brown sedge
- Greater pond-sedge
- Meadowsweet
- Creeping buttercup
- Silverweed
- Common spike-rush
- Meadow vetchling
- Jointed rush
- Reed sweet grass
- Reed canary grass.

A region of deciduous woodland, identified by the Priority Habitat Inventory and Natural England⁶¹ is also present adjacent to the River Thames, shown Figure 85. The Friends of Earth (FoE), a leading environmental organization, identified a region with the opportunity for implementation of woodland, shown in Figure 86. FoE use a variety of factors to determine an areas suitability for woodland implementation, further information can be found on the <u>Friends of Earth website</u>.

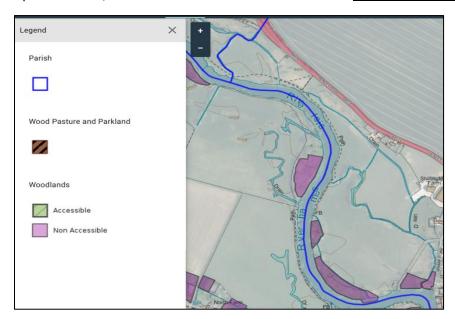


Figure 84 Woodland present, Natural England

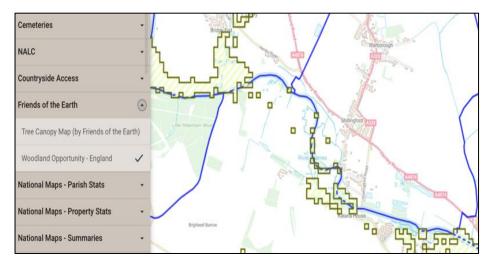


Figure 85 A region with woodland opportunity in SWS

⁶¹ https://magic.defra.gov.uk/MagicMap.aspx

5.9.3. Boundary Trees

Many trees border the River Thames, shown in Figure 87 covered by Woodland in 5.9.2 above, and there are many trees which line the flood grazing meadow ditches, providing a variety of habitats as well as vital flood defences.

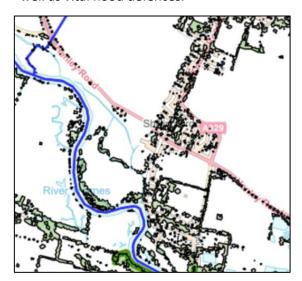


Figure 86 Tree Canopy Cover (Friends of the Earth)

5.9.4. Hedgerows

There are several hedgerows present in this area within both built up areas and the fields. An opportunity to plant more hedgerows is present to increase the biodiversity further⁶².

5.9.5. Grassland

The River Thames is adjacent to fields with a GS9 and GS10 eligibility for Countryside Stewardship schemes due to high levels of species rich grassland present, reported in Warborough and Shillingford Treescapes Report 2022.

⁶² Warborough and ShillingfordTreescapes Report 2022

These fields are identified in Priority Habitat Inventory as floodplain grazing marsh⁶³ and have been identified as sites of wildlife value, Treescapes 2022. This floodplain contains high levels of biodiversity due to the presence of rare species such as the Lodden Lily⁶⁴ and Marsh Marigold which are supported in this site.

The TVERC Biodiversity Report 2024 identifies land adjacent to this floodplain as possible priority grassland habitat. Other areas of possible Priority Grassland Habitat are shown Figure 88.

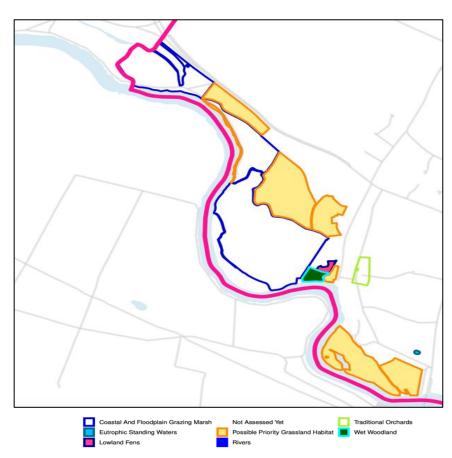


Figure 87 Possible Priority Grassland Habitats, as identified by TVERC Biodiversity Report 2024

5.9.6. Orchards

The TVERC Biodiversity Report 2024 identifies an area of Traditional Orchard in the east of this area, shown in blue in Figure 89. This is privately owned.

5.9.7. Waterways

The River Thames runs along the South border of this region and is adjacent to fields. The Thames River

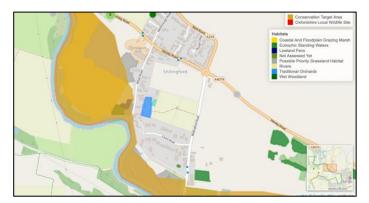


Figure 88 An area of Traditional Orchard as identified by The TVERC Biodiversity Report 2024.

⁶³ https://www.data.gov.uk/dataset/4b6ddab7-6c0f-4407-946e-d6499f19fcde/priority-habitats-inventory-england

 $^{^{64}\} https://cdn.prod.website-files.com/62602eef03c83769e0539df4/63386d1ed610db4fc2456b9c_Thames-Cliftonto-Shillingford-CTA.pdf$

Management Plan stresses the importance of waterway protection therefore this area should be conserved and managed.

5.9.8. Restrictions

Several Eurasian Badgers have been identified in this area. As they are protected by the Protection of Badgers Act 1992 any development may require application for a Wildlife Licence⁶⁵ to ensure and development will not harm the badgers or their habitat. Within this area are two Impact Risk Zones for SSSIs, Zone 1191 and 1589, see Figure 1 in Section 2.1. Sensitivities are specifically for infrastructure, air pollution, composting, combustion, rural residence, waste, water supply and mineral oils & gas⁶⁶.

5.9.9. Biodiversity Highlights

High levels of biodiversity are measured in this area, greater than 6, therefore there should be conservation of the existing habitats to prevent biodiversity loss. Pipistrelle bats have been detected within this area. As these bats are protected by the Wildlife and Countryside Act it is an offence to interfere with them or their roosts⁶⁷. The Thames Path is present in this area as well as a footpath to along Shillingford Road, see section 4.2. This should be managed to ensure there is little human impact on the surrounding fields.

Agricultural land in this area is Grade 1 and 2, with the land adjacent to the River of Grade 4, poor quality land and not farmed. This area is managed by the farm with a scrub prevention scheme on rotation to ensure there is no negative impact on biodiversity.

Many birds are present within this area with sightings of Red Kites and Blue Tits and Swifts and Swallows at the Cook Farm barn yard.

This area contains Red and Amber Risk Zones for Great Crested Newts (GCN), see 8.4, thus provides suitable and highly suitable habitats for GCN.

5.9.10. Biodiversity Areas

The Wharf, an area owned by the Parish, is identified as a Local Green Space and Biodiversity Asset. This area has views overlooking the River Thames and is identified as Earth Trust River of Life Wet Woodland. A variety of species are present such as house martins, Swallows, Kingfisher, Hobby and Common Tern.

There is a core NRN area located between Wharf Road and Court Drive, thus an important site for biodiversity68.

⁶⁵ https://www.gov.uk/guidance/badgers-advice-for-making-planning-decisions

⁶⁶ TVERC Biodiversity Report 2024

⁶⁷ https://www.bats.org.uk/advice/bats-and-the-law

⁶⁸ https://www.researchgate.net/publication/357717032 Land-use tradeoffs between a proposed Nature Recovery Network housing and food production in Oxfordshire

The area SWS is adjacent to The Wittenham Clumps, which are identified as a National Landscape in North Wessex Downs. Correct maintenance of this area is therefore vital to ensure a buffer zone whereby The Wittenham Clumps are protected from urbanization. This buffer zone sustains biodiversity within the National Landscape. This area is a part of the Thames Clifton to Shillingford CTA (conservation target area), Figure 40, therefore is recognised as an area where there is substantial biodiversity interest. As such any development is required to preserve the existing wildlife and ensure there will be significant gains to the existing biodiversity69.

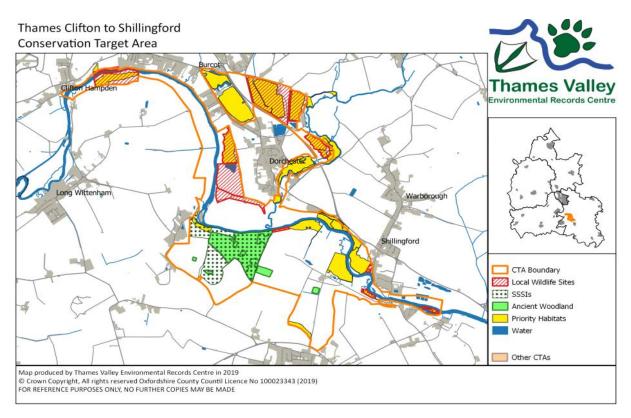


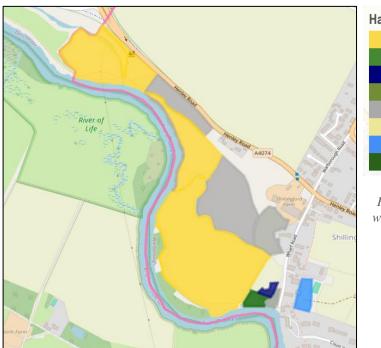
Figure 40. The Thames Clifton to Shillingford Conservation Target

This area contains three Habitats of Principle Importance shown in Figure 90:

- wet woodland
- lowland meadow
- floodplain grazing marsh.

The wet woodland and lowland meadow form a site name Shillingford Boathouse Carr, further detail see 5.9.2.

⁶⁹ https://www.wildoxfordshire.org.uk/oxfordshires-nature/conservation-target-areas



Habitats Coastal And Floodplain Grazing Marsh Eutrophic Standing Waters Lowland Fens Not Assessed Yet Possible Priority Grassland Habitat Rivers Traditional Orchards Wet Woodland

Figure 89 Habitats of Principal Importance – wet woodland, lowland meadow and floodplain grazing marsh.

Green Corridors:

The River Thames provides a vital green corridor, Shillingford West Riverside Green Corridor, due to its role in facilitating movement and connectivity between different habitats, shown Figure 91. The corridor extends onto the riverside due to presence of floodplain grazing marsh, allowing for vital links between different habitats. This Green Corridor links to Shillingford East Riverside Green Corridor facilitating the movement of wildlife from the west to east.

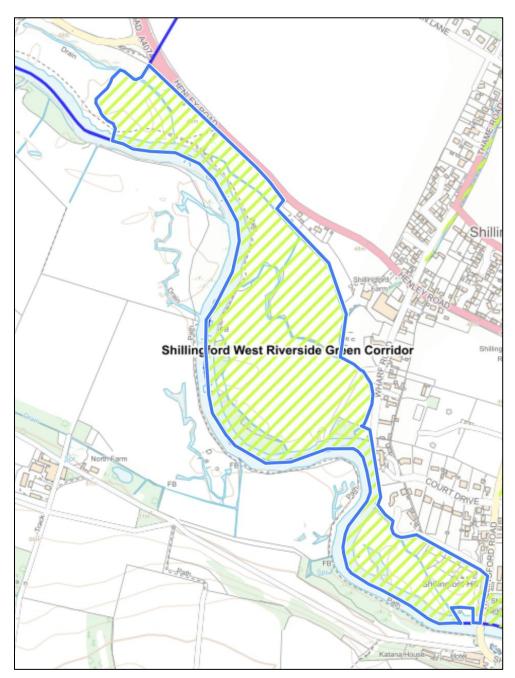


Figure 90 Proposed Shillingford West Riverside Green Corridor

5.9.11. Opportunities and Recommendations

We support schemes to enhance and protect nature within this area where it is sympathetic to the landscape. Biodiversity rich sites should be conserved and we support careful and correct management of the River Thames frontage.

Views:

Propose adding views identified to inventory of Key Community Views.

Woodland:

The areas of wet woodland and deciduous woodland should be conserved and maintained. We support the planting of new trees where they are sympathetic with the landscapes and any existing views, specifically the implementation of new woodland in the area as identified by the Friends of Earth organization.

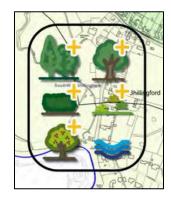


Figure 91 Opportunities for Biodiversity Improvements SWS

Boundary Trees:

We encourage the maintenance of existing trees and the planting of new trees where they are sympathetic to the landscape and views.

Grassland:

To protect the Floodplain grazing marsh we recommend further investigation into species present within this area and encourage schemes to protect this land. We also suggest the establishment of Priority Grassland Habitats in areas where TVERC identify possible Priority Grassland Habitats, see Figure 90 in Section 5.9.5.

Hedgerows:

Existing hedgerows should be conserved as they provide a boundary between the road and fields. The introduction of more hedgerows could provide a buffer zone between pollution from the road and habitats within the grassland. This would benefit biodiversity and limit habitat loss.

Orchards:

The existing Traditional Orchard should be maintained due to its role in providing habitats for species including pollinators.

Waterways:

We encourage the monitoring of water quality and aquatic life to allow for better understanding and improvement of the health of this river.

Miscellaneous:

Correct maintenance of the footpath is required to reduce human impacts. In areas where there are suitable and highly suitable habitats for GCN, see Appendix D, we encourage the retention of key features that form their habitat e.g. ponds, woodland, hedgerows and coarse grassland.

Biodiversity Areas:

As this area has a high biodiversity rating, contains a Core NRN region and is a CTA it is should be conserved and correctly managed to ensure there is no biodiversity loss. Any development will

require significant net gains to biodiversity and there will be no damage to the existing site. This area also needs to be maintained to allow for a buffer zone between The Clumps and urbanized areas.

Shillingford Boathouse Carr is currently identified by the TVERC Biodiversity Report 2024 as a Local Wildlife Site, however this site can be protected further by its establishment as a Local Biodiversity Asset.

We support the continued designation of the Wharf as a Local Green Space.

We support the designation of the wildlife corridor identified in Figure 91, due to the role of the River Thames as a wildlife corridor. It requires protection to allow the continued movement of wildlife between habitats.

5.10. Southeast Shillingford (SES)

Overview:

Southeast Shillingford consists mostly of fields adjacent to the River Thames a few dwellings that line Wallingford Road on the approach to Shillingford Bridge and agricultural outbuildings. The A4074 runs across the north and Wallingford Road to the west. The Thames Path, a PROW runs parallel to the River Thames.

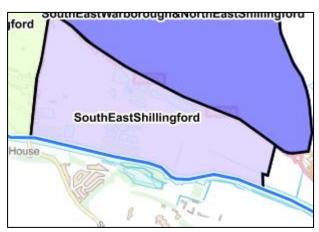


Figure 92 Southeast Shillingford

Land here has several woodland assets and priority habitats identified by TVERC including eutrophic standing waters, wet woodland and potential priority grassland habitat (Figure 94).



Figure 93 Priority Habitats identified by the TVERC Biodiversity Report 2024



5.10.1. Landscape Views

S-V06

From Shillingford Bridge towards Benson view of Thames and Thames path.

S-V07

View from PRoW (Thames Path) alongside the River Thames towards Shillingford Bridge and River Thames



Figure 94 Views in SES

5.10.2. Woodland

Existing deciduous woodland is present in the south, adjacent to the River Thames, and in the north, adjacent to the A4074, shown in Figure 96. This woodland is rich in biodiversity and identified as having wildlife value. Whilst the two areas close to the River Thames are within the CTA and therefore protected, the area in the north is not. A slope of 5-7 degrees within this area provides an opportunity for the development of treescapes as identified in the Warborough and Shillingford Treescapes Report 2022.



Figure 95 Woodland corridors present within SES, Treescapes 2022

5.10.3. Boundary Trees

Boundary trees exist along the River Thames as well as surrounding the bodies of eutrophic standing water. Trees are also present along the A4074 providing a buffer between human impact from the road and biodiversity along the River Thames and adjacent land, shown in Figure 97.

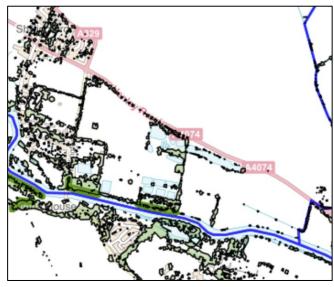


Figure 96 Tree Canopy cover as identified by Friends of Earth

5.10.4. Hedgerows

Several hedgerows are present along the road Figure 5 border and next to an area of woodland in the center. There is the opportunity to introduce new ones.

5.10.5. Grassland

A large area of existing species rich grassland is present in the southeast of this area adjacent to the river, termed Rushy or Hazeley Meadow, shown in grey in the map in section 4.10 introduction. It is identified by the TVERC as a possible Priority Grassland habitat. It is adjacent to a Local Green Space classified by Benson NP because of its rich biodiversity and local benefit. This area is rich in biodiversity due to providing habitats for many species such as Lodden Lily and its role in the summer breeding of the scarce Grasshopper Warblers. Flora within this area includes:

- Bluebells
- Small Teasel
- Wormwood
- Grey Club-rush
- Greater Dobber.

Further plants can be found within the TVERC Biodiversity Report for Benson Flood Meadow 2023.

Birds within this area are listed on the Birds of Conservation Concern 5: Red list include:

- Corn Bunting
- Cuckoo
- Dunlin
- Fieldfare
- Greenfinch
- Grey Partridge
- Herring Gull.

Further birds on the Red and Amber list can be found on the Benson Nature Group website.

5.10.6. Orchards

There are no orchards present in this area.

5.10.7. Waterways

The River Thames runs across the southern border of this area and requires correct management in accordance with the Thames River Management plan. Several areas of Eutrophic Standing water, as identified by the Priority Habitat Inventory are present in the centre of this area (Figure 98). These provide habitats for multiple different species and play an important role in flood prevention. They are identified by The Warborough and Shillingford Treescapes Report 2022 as being of Wildlife Value.

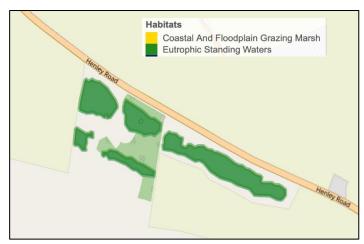


Figure 97 Priority Habitats of Eutrophic Standing Water

5.10.8. Restrictions

Within this area there are three Impact Risk Zones for SSSIs, Zone 2907, 1589 and 625, see Figure 1 Site of Special Scientific Interest Risk Zone Numbers Map in Section 2.1. Sensitivities are specifically for infrastructure, air pollution, composting, combustion, waste, water supply and mineral oils & gas⁷⁰.

5.10.9. Biodiversity Highlights

The Eastern section is managed by Middle Tier Countryside Stewardship Agreements, however, is transitioning to Sustainable Farming Incentives. This area contains Red and Amber Risk Zones for

⁷⁰ TVERC Biodiversity Report 2024

Great Crested Newts, see Appendix D, thus providing suitable and highly suitable habitats for GCN. The Thames Path is present along the southern boundary, see section 4.2.

5.10.10. Biodiversity Areas

Similarly to Area 7 SWS, a National Landscape, The Clumps AONB is adjacent to this area. Maintenance of this National Landscape buffer zone is critical for maintaining biodiversity with the Making Space for Nature review ⁷¹ highlighting the importance of 'joining' habitats. The enhancement of ecological connections between habitats allows for increased wildlife movement thus preventing biodiversity loss. This area therefore requires correct management. This area is part of the Thames Clifton to Shillingford CTA, Figure 40, and is therefore recognised as an area of substantial biodiversity interest. Development in this is required to deliver significant biodiversity gains to the area⁷².

The Rushy, or Hazeley, Meadow, see section 5.10.5, is an area rich in biodiversity and is identified by the Nature Group as a Biodiversity Asset.

 $[\]frac{71}{https://assets.publishing.service.gov.uk/media/5a78c263ed915d04220651ea/pb13583-biodiversity-strategy-2020-111111.pdf} ((reference report directly))$

⁷² https://www.wildoxfordshire.org.uk/oxfordshires-nature/conservation-target-areas

Green Corridors:

The River Thames provides a vital green corridor due to its role in facilitating movement and connectivity between different habitats, linking Benson, Warborough and Dorchester. This corridor

has further links with the bodies of Eutrophic Standing water on the riverside and a corridor of trees along Shillingford and Henley Roads, forming one large Green Corridor, termed **Shillingford East** Riverside Green corridor shown Figure 99. This links to **Shillingford West** Riverside Green Corridor, section 5.9.10 Figure 91 Proposed **Shillingford West** Riverside Green Corridor, allowing for vital movement of wildlife along this important national waterway.



Figure 98 Shillingford East Riverside Green Corridor

5.10.11. Opportunities and Recommendations

We support schemes to enhance and protect nature within this area where it is sympathetic to the landscape. Biodiversity rich sites should be conserved and we support careful and correct management of the River Thames frontage.



Figure 99 Opportunities for Biodiversity Improvements in SES

Views:

Propose adding views identified above to inventory of Key Community Views of WSRNP.

Woodland:

Three areas of High Spatial Priority woodland improvement have been identified by DEFRA, Figure 101. We therefore encourage woodland improvement and the planting of trees within this area where it is sympathetic to the existing views and does not interfere with farming needs. We encourage the maintenance of the existing woodland, exploration of TPOs on appropriate specimens, and support the development of new woodland in areas as identified by the Warborough and Shillingford Treescapes Report 2022.

Boundary Trees:

We encourage the maintenance of existing trees and the planting of new trees where it is sympathetic to the landscape and views. We support the exploration of TPOs on appropriate

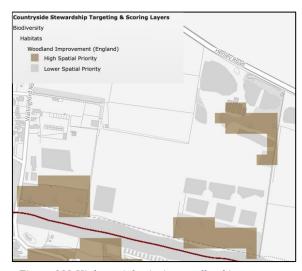


Figure 100 High spatial priority woodland improvement areas, as identified by Spatial Metadata, Defra

specimens eg the alternative red and green maples along Warborough and Henley Roads.

Hedgerows:

We support the repair and preservation of existing hedgerows. We encourage the introduction of new hedgerows which could provide for a greater barrier between the road and bordering fields, thus allowing for the preservation of biodiversity within this area.

Grassland:

We encourage the protection and conservation of the Rushy meadows.

Orchards:

We support the maintenance of the existing traditional orchard and encourage the introduction of community orchards in areas as identified by the Warborough and Shillingford Treescapes Report 2022.

Waterways:

We encourage the monitoring of water quality and aquatic life to allow for better understanding and improvement of the health of this river. We encourage the maintenance of the areas of eutrophic standing water due to their role in providing habitats for many species and being a Priority Habitat.

Miscellaneous:

In areas where there are suitable and highly suitable habitats for GCN, see Appendix D, we encourage the retention of key features that form their habitat e.g. ponds, woodland, hedgerows and coarse grassland.

Biodiversity Areas:

Due to the presence of a CTA this area requires correct maintenance and preservation. Any development within this area must aim to increase the biodiversity net gain.

The Shillingford East Riverside Green Corridor should be protected due to its vital role in allowing the movement of wildlife. This corridor could be extended by the planting of further trees and hedgerows along Henley Road towards Benson.

To further protect the Hazeley (Rushy) Meadows we suggest its establishment as a Local Green Space. Although outside of the WSNP area, Benson Parish have recently designated a region of the riverside by the marina as a Local Green Space⁷³. Allocation of the new local green space will will form a cumulative biodiversity area which joins the Benson LGS with the Shillingford East Riverside Green Corridor.

Local Green Spaces:

The previous Neighbourhood Plan identifies 4 Local Green Spaces however we propose the addition of 7 new sites.

Each of these sites is rich in biodiversity and can be further protected by their establishment as Local Green Spaces. These sites are:

- The Poplars
- Clays Orchard
- Millenium Ditch
- Warwick Spinney
- Shillingford Boathouse Carr
- Warborough Thame Side

Buffer Zones:

The Wittenham Clumps, a National Landscape in West Sussex is located adjacent to areas 7 and 8, thus they are identified as buffer zones. These areas play a critical role in the mitigation of human impacts on the National Landscape and reducing edge effects which may reduce biodiversity within the Wittenham Clumps. We encourage the preservation of this land and its role as a buffer zone.

⁷³ Benson Neighbourhood Plan Modification Statement https://www.southoxon.gov.uk/south-oxfordshire-district-council/planning-and-development/local-plan-and-planning-policies/neighbourhood-plans/emerging-neighbourhood-plans/benson-neighbourhood-plan/

6. Next Steps

This report has been prepared as part of the Warborough and Shillingford Neighbourhood Plan and its first application will be to inform the 2024 update of the Plan.

We hope the strategy will prove useful for landowners, homeowners and others who are considering actions to increase biodiversity, and that it will lead to a better understanding of parish assets, so that stakeholders can work together to coordinate actions and interventions which support nature recovery in the parish and involve adjoining parishes where appropriate.

7. References

In addition to the formal reports referenced throughout this document, we are especially grateful to to local contributors for their input and encouragement:

- Joe Blackstone
- Steve Ash
- Verenique Beviere
- Robin McClelland.

Special thanks to the many village photographers who sent in their images

And special thanks to Florence Keene, whose heroic efforts produced this draft.

8. Appendices:

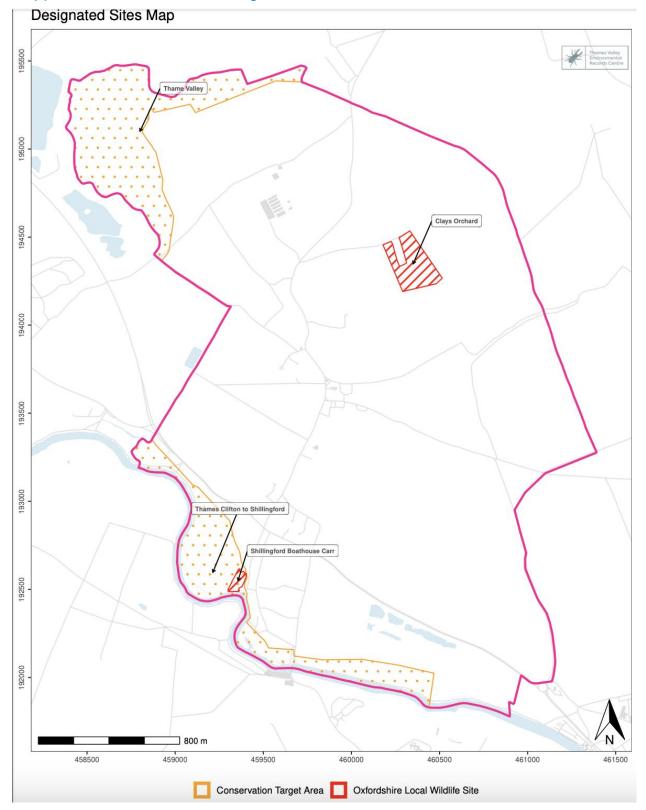
8.1. Appendix A. Biodiversity Assets

Site	Current Designation	Biodiversity	RP Designation	Value
Clay's Orchard & surrounding woodland NRN	Priority Habitat	Traditional Orchard Variety of apple & pear trees providing many habitats Rare fungi – Orchard Toothcrust Birds on the Red List – Hammer, Linnet and Starling Birds on the amber list – Swift, Kestrel and Willow warbler Other species include Eurasian badger, beetles, moths & barn owls	LGS	Important in providing habitats for a variety of species
Shillingford Boathouse Carr NRN	Oxfordshire Local Wildlife Site Priority Habitat	Wet woodland and Lowland meadow Variety of species supported including Lodden Lily, wild angelica and orange balsam	LGS	Provides important habitats for species and contains 2 Priority habitats
Thames Clifton to Shillingford CTA	Conservation Target Area Priority Habitat	Floodplain grazing marsh, lowland fens and wet woodlands are covered by this designation Supports the rare Lodden Lily	LGS	Identified as a CTA
Thame Valley CTA	Conservation Target Area Core NRN Priority Habitat	Floodplain grazing marsh Supports important breeding wader populations	LGS	Identified as a CTA
Warwick Spinney		Species rich grassland Wildflowers supporting pollinating insects Large numbers of butterflies	LGS	Provides habitats for a range of species Close to Benson, the community it serves

The Poplars and Forest School Copse	Core NRN region	Role in wintering and migration of stonechat Species rich grassland Variety of vegetation eg reeds	LGS	
Millenium Ditch		Role in wintering and migration of Stonechat European water vole Variety of vegetation eg reeds	LGS	Important site for the wintering and migration of Stonechat
Warborough River Thame Side		Supports important breeding wader populations	LGS	Important site for biodiversity along the River Thame
Thame and Warborough Road Ditch		Hedgerow consisting of Blackthron, Hawthorn and Elder Variet of songbirds such as Siskin and Goldfinch	LGS	Important role in forming an urban green corridor allowing for wildlife movement
Ladybrook Copse Set Aside Border		Sunflowers, wild flowers such as Oxeye daisies Flocks of Fieldfare, Redwing, Finches and Tits	LGS	Habitats are provided for a range of species
Parish Boundary Hedgerow		Mature hedgerow of Blackthorn, Hawthorn, Elder, Bramble Birds present include Yellowhammer, Reed Bunting and Whitethroat	LGS	Important site due to providing many habitats for a variety of species
Rushy Meadows, or known historically as Hazeley Meadow		Summer breeding site for Grasshopper Warblers Important habitats for many protected birds	LGS	Important site due to providing many habitats for a variety of species
St Laurence Churchyard		Species rich grassland mature lime, oak and yew trees spotted flycatcher, house	LGS	Important site due to providing many habitats

		martin, goldcrest, mistle thrush and great spotted woodpeckers		for a variety of species Range of important trees
The Gilbert Whitehead Plot		Several mature trees, including a beech tree	LGS	Rich in biodiversity
Eutrophic Standing water near River Thames	Priority Habitat	Role in formation of the East Shillingford Riverside Green Corridor	LGS	Forms part of an important green corridor
The Green North woodland	High Spatial Priority for woodland improvement	Provides a habitat for GCN Role in flood protection	Priority Habitat	Area where limited woodland within the parish can be improved
The Green North Grassland		Species rich grassland	Priority Habitat	Community copse x2 and mature allotment orchard
The Green South Grassland		Species rich grassland	Priority Habitat	
Shillingford East Green Corridor			Green Corridor	
Shillingford West Green Corridor			Green Corridor	
WNW Green Corridor			Green Corridor	
WCW Poplars Green Corridor			Green Corridor	

8.2. Appendix B Conservation Target Area and Oxfordshire Local Wildlife Site



8.3. Appendix C Orchards

The Warborough and Shillingford Treescapes Report 2022 identifies many areas for the implementation of community orchards Figure 102. We do not anticipate that such sites would be open to the public/community but may be planted as orchards.

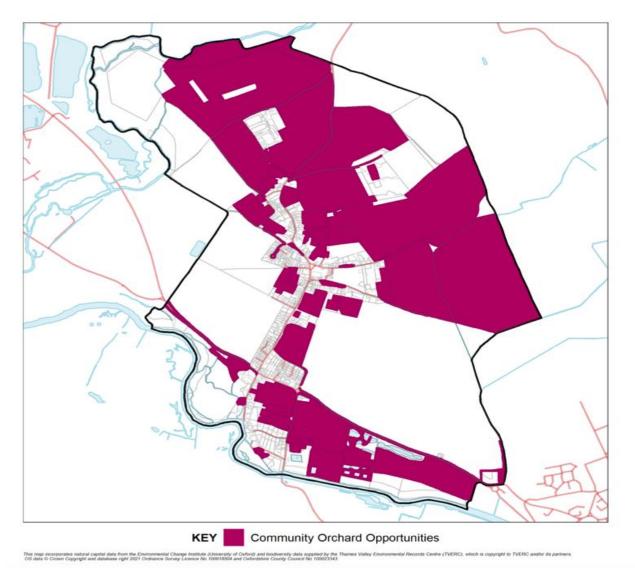
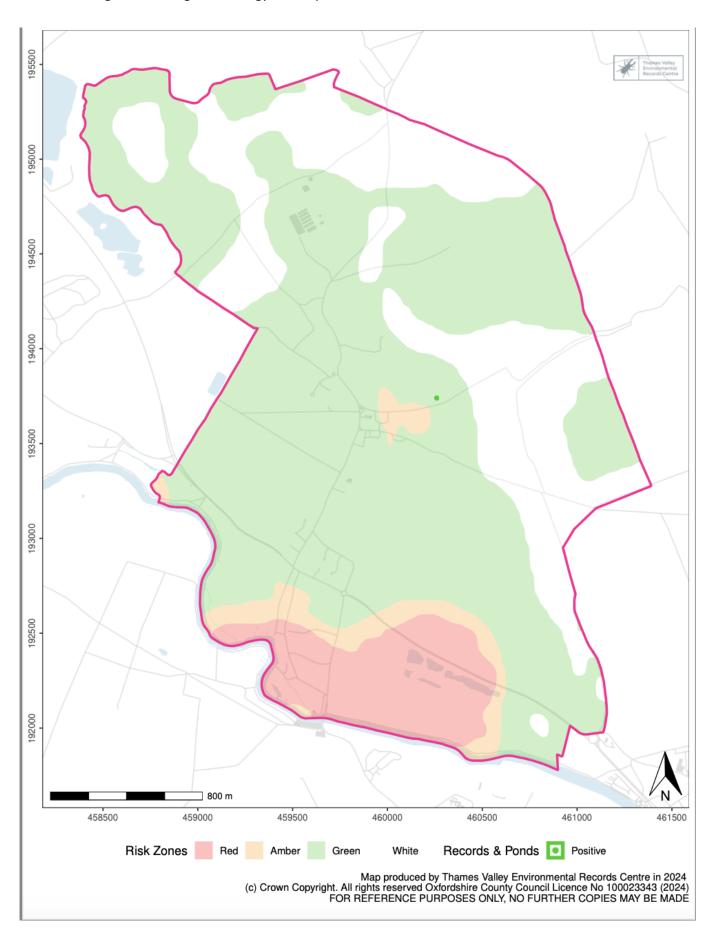


Figure 101 Areas identified by the WARBOROUGH AND SHILLINGFORD Treescapes Report 2022 as suitable for Community Orchards

8.4. Appendix D Great Crested Newts

Impact Risk Zones have been established, categorising land dependent on the distribution of Great Crested Newts and the level of impact development is likely to have on the species.



8.5. Appendix E Views

The following views were put forward in the WSRNP 2024 and are referenced in the area analysis in section 4 Strategy for People and Nature.:

Name or ID	Status	Type of View	
W-V01	Existing NDP	This offers significant views of rising farmland where the rolling field and landscape character of the Clay Vale are visible from the A329 as you leave the village and Conservation Area.	
W-V02	Existing NDP	From the A329 as you enter the village and Conservation Area, now partially obscured by overgrown hedges, but with onward seasonal views to the Wittenham Clumps (North Wessex Downs protected landscape) towards the south.	
W-V02.1	Draft	As you exit the village to the North; provides a rural paddock view and keeps the linearity of the Northern end of the village	
W-V03 (FORMER V10)	Existing NDP	Hammer Lane edge of conservation area looking onto North Wessex Downs protected landscape (Wittenham Clumps).	
W-V04 (FORMER V9)	Existing NDP	From Hammer Lane Along the edge of the Warborough Conservation Area there are public uninterrupted views of the North Wessex Downs protected landscape (Wittenham Clumps)	
W-V05 (FORMER V3)	Existing NDP	View from the Village Green (East). From the Village Green there are expansive views to the Chilterns protected landscape. Highly valued and important to the setting of the Conservation Area.	

Name or ID	Status	Type of View	
W-V06 (FORMER AV02)	Draft	View from edge of Conservation Area northwards across open fields enclosed by woodland. It is a PROW but has the feel of a private driveway entrance.	
W-V07B (FORMER v05b)	Existing NDP	View from the Village Green (East). From the Village Green there are expansive views to the Chilterns protected landscape. Highly valued and important to the setting of the Conservation Area.	
W-V08 (FORMER PV024)	Draft	PROW Footpath by bathing place River Thame to Town Hill	
W-V09 (FORMER pv21)	Draft	From PROW towards Chilterns, across farmland with avenue of trees alongside	
W-V10 (FORMER v04)	Existing NDP	Along the edge of the Warborough Conservation Area there are public uninterrupted views of the North Wessex Downs protected landscape Wittenham Clumps from the end of Green Lane	
W-V11 (FORMER v11)	Existing NDP	Views to the open countryside and farmland from the end of the Green north	

Name or ID	Status	Type of View	
W-V12 (FORMER PV25, PV06 and AV7	Draft	Multi-directional view taken from village Green South Bridleway which is also a farm track which links to the Warborough Millenium Walk and tracks to Benson and Roke. View north-west to fields and woodland from green south bridleway before entering Warborough. View south-west to North Wessex Downs National Landscape (Wittenham Clumps). View east from PRoW over to open countryside and	
W-V12.1 (FORMER pv20)	Draft	Chilterns protected landscape to the east From the PRoW as enter Warborough from Benson, long ranging views towards North Wessex Downs protected landscape.	
W-V13 (FORMER AV08)	Draft	First open view as you exit build area of Warborough over the last remaining gap separating Warborough and Shillingford settlements to the open countryside /Chilterns AOBNB to the east	
W-V14 (FORMER AV01	Draft	From Henfield View across the fields to the west towards Green Lane with North Wessex Downs protected landscape	
W-V15 (FORMER PV048)	Draft	PROW from lagoon at Diagonal path, historic stone in foreground,	
CV1.1 (FORMER AV3)	Draft	Important street scene along A329 Thame Road. View towards Greet Hall as per Conservation Area Appraisal	

Name or ID	Status	Type of View	
CV1.2 (FORMER AV4)	Draft	View south along Thame Road	
CV2.0 (FORMER AV05)	Draft	View adjacent to St Laurence Hall east towards The Green	
CV2.1 (FORMER AV05B)	Draft	Church and Lynch Gate	
CV3.0 (FORMER AV09)	Draft	View from northwest corner of village green towards allotment gardens with Chilterns protected landscape in the background	
CV4.0 (FORMER V12)	Existing NDP	The street scene along the part of the Green North nearest the Thame Road, and towards the 6 Bells	
CV5.0 (FORMER AV10	Draft	View from southeast corner of village green towards Church bell tower & sports pavilion	
CV6.0 (FORMER AV16	Draft	View from Northeast corner of village green towards church tower, sports pavilion	
CV7.0 (FORMER v14b)	Draft	Heart of Village: Shop, St Lawrence Hall, Lynch Gate and Old Vicarage, Church Tower, Alms houses, Memorial	
CV7.1 (FORMER v14)	Existing NDP	From the War Memorial view towards the Green South	

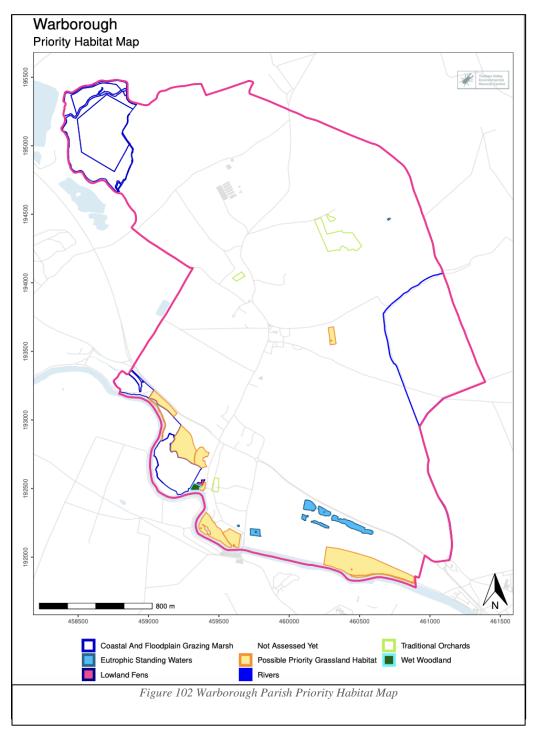
Name or ID	Status	Type of View	
CV8.0 (FORMER v13)	Existing NDP	Glimpse of the Chilterns Protected landscape from the A329; preserved through the Six Acres development	
CV9.0A (FORMER V05a)	Existing NDP	View from the village green (North) which is a local green space onto numerous heritage assets.	
CV9.0C (FORMER v05c)	Existing NDP	View from village green (South) towards Heritage assets.	
CV9.0D (FORMER v05d)	Existing NDP	View from village green (West) which is a local green space towards Cricket Pavilion and Church Bell Tower and Six Bells pub.	
S-V01 (FORMER v06a)	Existing NDP	View across Plough Field from New Road Shillingford, expansive views across farmland to the Chilterns protected landscape	
S-V02 (FORMER pv19)	Draft	Cherry Close has distant views to North Wessex Downs protected landscape and across farmland.	

Name or ID	Status	Type of View	
S-V03 N and E (FORMER PV07d PV07c)		Multi-directional view North, East and South-east From New Road across Plough Field to Chilterns protected landscape. From New Road across Plough Field to Warborough	
S-V04 (FORMER v08)	Existing NDP	Views from the main A4074 across the flood plains to North Wessex Downs protected landscape (Wittenham Clumps)	
S-V05.0 (FORMER AV15)	Draft	View from Shillingford Bridge into floodplain and listed building / willow maze	
S-V05.1 (FORMER pv16)	Draft	From Shillingford Bridge	
S-V06 (FORMER pv15)	Draft	From Shillingford Bridge towards Benson view of Thames and Thames path.	
S-V07 (FORMER AV14)	Draft	View from PRoW alongside the River Thames towards Shillingford Bridge and River Thames	
S-V08 (FORMER v07)	Existing NDP	There are westward views across the Wharf to river Thames, and then, out of parish and beyond is the North Wessex Downs protected landscape (Wittenham Clumps).	
S-V09 (FORMER AV12)	Draft	View westwards out of Shillingford Conservation Area across floodplain of River Thames with backdrop of North Wessex Downs protected landscape	
S-V10 (FORMER pv18	Draft	View from the Thames Path	

Name or ID	Status	Type of View
CV10.0 (FORMER pv17)	Draft	Conservation area from River Thames up Wharf Road.
CV11.0 (FORMER AV11)	Draft	View southwards from within Shillingford Conservation Area towards the River Thames

8.6. Appendix F Designated Priority Habitats

There are several areas within the parish that are defined as local biodiversity areas, with management such as agri-environment schemes in place to protect and enhance the environment. The Priority Habitat Inventory (PHI) identifies several areas considered high priority, thus identified as of a particular importance for biodiversity shown below.



8.7. Appendix G Warborough Treescapes Report 2022

Please request to see this report by emailing wandsplan2023@googlegroups.com

8.8. Appendix H Parish Trees and Hedgerow species

Common Name	Latin Name	Size and Type	Soil Suitability			
TREES	TREES					
Field Maple	Acer campestre	- Medium - Deciduous	- Chalk - Clay - Loam - Sandy			
Alder	Alnus glutinosa	Medium Deciduous	Clay Loem Sandy			
Silver Birch	Betula pendula	Large Deciduous	Clay Loam Sandy			
Downy or White birch	Betula pubescens	Medium Deciduous	Clay Loam Sandy			
Hornbeam	Carpinus betulus	Large Deciduous	Chalk Loem Sandy			
Hazel	Corylus avellana	Small Deciduous	- Chelk - Loam - Sandy			
Hawthorn (Midland)	Crataegus laevigata	Small Deciduous	- Chelk - Loam - Sandy			
Hawthorn (common)	Crataegus monogyna	Small Deciduous	- Chelk - Clay - Loam - Sandy			
Spindle	Euonymus europaeus	- Small - Deciduous	Chalk Clay Loam Sandy			
-Beech (common)	Fagus sylvatica	Large Deciduous	Chelk Loam Sandy			
Ash (common)	Fraxinus excelsior	Medium Deciduous	Chalk Loem Sandy			
Holly	liex aquifolium	Small Deciduous	Loam Sandy			
Juniper (common)	Juniperus communis	- Small - Conliferous	Chalk Loem Sandy			
Crab Apple	Maius sylvestris	Small Deciduous	Chalk Loam Sandy			
Black Mulberry	Morus nigra	Small Deciduous	Clay Loam Sandy			
Scots Pine	Pinus sylvestris	Large Coniferous	- Chelk - Loam - Sandy			
Poplar	Populus alba	- Large - Deciduous	Chalk Clay Loam Sandy			
Aspen	Populus tremula	Large Deciduous	Chelk Loam Sandy			
Sweet Cherry	Prunus avium	Medium Deciduous	Clay Loem Sandy			

Bird Cherry	Prunus padus	- Medium - Deciduous	- Chelk - Clay - Loem - Sandy
Holm Oak	Quercus llex	Large Deciduous	Clay Loam Sandy
English Oak	Quercus robur	Large Deciduous	- Chalk - Clay - Loem - Sandy
Goat Willow	Salix caprea	Smail Deciduous	- Clay - Loam - Sandy
Bay Willow	Sallx pentandra	Small Deciduous	Clay Loam Sandy
Whitebeam	Sorbus aria	Medium Deciduous	- Chelk - Clay - Loam - Sandy
Rowan	Sorbus aucuparla	Small Deciduous	Chalk Loam Sandy
Wild Service Tree	Sorbus torminalis	Medium Deciduous	- Chalk - Clay - Loem - Sandy
English Yew	Taxus baccata	Medium Deciduous	- Chelk - Cley - Loem - Sandy
Lime, small-leaved	Tilia cordata	Large Deciduous	Clay Loam Sandy
Lime, large-leaved	Tilia platyphylios	Large Deciduous	Clay Loam Sandy
Lime, common	Tilia x europaea	Large Deciduous	Clay Loem Sandy

HEDGEROW PLANTS

- Hawthorn
 Blackthorn
 Field Maple (neutral solis)
 Hazel
 Holly
 Guelder Rose (neutral solis)
 Hornbeam (damp solis)
 Beech
 Wild Service tree
 Field rose
 Dogwood (damp solis)
 Dog Rose; and
 Spindle (neutral solis).