

Otley Neighbourhood Plan

Landscape and Wildlife Evaluation 2019



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DISCLAIMER

This report has been compiled in accordance with BS 42020:2013 Biodiversity - Code of practice for planning and development, as has the survey work to which it relates.

The information, data, advice and opinions which have been prepared are true, and have been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

This survey was carried out and an assessment made of the site at a particular time. Every effort has been made to date to provide an accurate assessment of the current situation, but no liability can be assumed for omissions or changes after the survey has taken place.

It is our policy to submit any biological records to the Suffolk Biodiversity Information Service, in accordance with BS42020 (6.4.7). We will do this 3 months after the submission of this report. If you wish to discuss this, please contact us within this time period.

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Executive Summary

SWT Trading Ltd: Ecological Consultants, the wholly-owned consultancy of Suffolk Wildlife Trust, was instructed by Otley Parish Council to undertake a landscape and ecological evaluation of the parish as part of the Neighbourhood Plan that is currently under preparation. This document seeks to provide the Neighbourhood Plan Working Group with an evaluation of landscape character and in particular, highlight specific habitats and associated ecological networks as a rich source of biodiversity.

Most of the landscape character type of the parish is defined as 'Ancient Estate Claylands', but where the headwater streams of the River Lark drain in a south-easterly direction from a central location, the landscape is distinctly different and is defined as 'Rolling Valley Claylands'. In the southernmost part of the parish a third landscape character type, 'Ancient Rolling Farmlands', intrudes from the south.

Otley contains a statutory designated site: Moat Farm Meadow Site of Special Scientific Interest (SSSI). SSSIs represent areas of national importance due to their flora, fauna, geological or physiological features. There are currently no non-statutorily designated sites. Otley Gull, however, is a feature of ecological (and geological) interest and it is recommended that further survey work should be undertaken in the spring 2020, to further inform whether this site should be designated as a County Wildlife Site.

Five Priority Habitats have been identified within the Parish: ancient species-rich hedgerows, lowland mixed deciduous woodland, lowland meadows, rivers and ponds. Across the Parish, 33 UK and Suffolk Priority Species have been recorded which complement and help define the biodiversity value of the locality.

The ecological network across the parish is underpinned by the wooded corridors associated with the streams known as gulls. Interconnecting hedgerows are also an important feature of this network, along with other blocks of semi-natural habitat.

Development Management guidance for any new developments within the area covered by this Neighbourhood Plan should seek to protect existing landscape and ecological assets and restore, enhance and reconnect the ecological network.

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1. Introduction

1.1 Brief and Terms of Reference

SWT Trading Ltd: Ecological Consultants, the wholly-owned consultancy of Suffolk Wildlife Trust, was instructed by Otley Parish Council on 30th July 2019 to undertake a landscape and ecological evaluation of the parish as part of the Neighbourhood Plan that is currently under preparation.

The Civil Parish of Otley, within its formal parish boundary, is the 'Neighbourhood Area' for the purposes of the Plan.

The Parish Council advise that the main purpose of their Neighbourhood Plan is as follows: Otley Neighbourhood Plan is a way of helping our local community to influence the planning of the area in which we live and work. It is our aim to use the Otley Neighbourhood plan to develop a shared vision for the future of Otley Parish.

This document seeks to provide the Neighbourhood Plan Working Group with an evaluation of landscape character and in particular, highlight specific habitats and associated ecological networks as a rich source of biodiversity.

1.2 Parish Location and Statistics

Otley is a rural village within the former Suffolk Coastal District (now East Suffolk Council) around 5km to the north-west of the market town of Woodbridge and around 7.1km to the north-east of Ipswich. The parish shares boundaries with the civil parishes of Clopton, Grundisburgh, Monewden, Cretingham, Framsdon, Helmingham, Ashbocking, Swilland and a very small boundary with Witlesham.

The parish of Otley covers 874 hectares and its central point grid reference is TM 20424 55436. Also within the Otley parish boundary are the small hamlets of Otley Green, Otley Bottom and around half of Gibraltar.

Data from Otley Parish Council [1] indicate a population of around 650 people with approximately 300 households. The housing within the parish is fairly widespread along the more major roads: Helmingham Road and Chapel Road, but the village centre is focused around the junction between these two roads. There are 14 Grade II Listed buildings in Otley Parish, two of which are religious institutes (Grace Baptist Chapel and the Church of St Mary the Virgin) and 12 are timber framed houses or farmsteads. A single Grade I Listed building is present, Otley Hall, which is a timber framed manor house with parts dating back to the 15th Century. The Scheduled Ancient Monument known as The Mount is located in the south-west of the Parish. This former Norman motte castle occupied a strategic position in the landscape on one of the approaches to the large settlement of Otley, which is listed in the Domesday Book as having 62.5 households in 1086.

Outside of the road network, buildings and gardens there are approximately 98 plots of land given over to other land uses, with arable cropping being the most extensive.

2. Planning and Development Context

An outline of elements of the current planning system and associated strategic documents will help to place this present evaluation in context:

2.1 Localism Act (2011)

The Department of Communities and Local Government promoted the Localism Act (2011) [2]. The subsequent Neighbourhood Planning (General) Regulations (2012) provide the statutory framework for Neighbourhood Development Plans. These allow communities to establish the general planning policies for the development and use of land in a neighbourhood. 'Neighbourhood Plans allow local people to get the right type of development for their community, but the plans must still meet the needs of the wider area'.

2.2 National Planning Policy Framework

The National Planning Policy Framework (NPPF) is statutory guidance published by the Ministry of Housing, Communities and Local Government (February 2019), which provides national planning policy [3].

Of particular relevance to this project is Paragraph 170, under Section 15 'Conserving and Enhancing the Natural Environment', which states

The planning system should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside and the wider benefits of ecosystem services; including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate

The NPPF also sets out the plan-making framework in Paragraph 17, in that development plans must include strategic policies to address each local planning authority's priorities for the development and use of land in its area. These can be contained in a local plan and/or a spatial development strategy. Policies to address non-strategic matters are also included in local plans and in neighbourhood plans. These set out more detailed policies for specific areas, neighbourhoods or types of development. Neighbourhood plans must be in general conformity with the strategic policies in the development plan that covers the area.

2.3 Suffolk Coastal District Council Development Plan

Suffolk Coastal District Council, now formally part of East Suffolk Council, has a Development Plan against which all planning applications and other development proposals will be assessed.

In July 2013, SCDC adopted a revised Local Plan [4] setting out the planning policies, proposals and actions for the future development of the District to 2027 and beyond. This Local Plan consists *inter alia* of:

- Core Strategy and Development Management Policies (adopted July 2013)
- Site Allocations and Area Specific Policies Development Plan Document (adopted January 2017)
- Neighbourhood Plans (as developed by local communities)

The Core Strategy consists of a series of Objectives complemented by associated Strategic Policies - prefixed as 'SP'. Within Objective 11 - Protecting and Enhancing the Physical Environment - SP14 covers Biodiversity and Geodiversity and SP15 covers Landscape and Townscape.

Linked to the Strategic Policies are Development Management policies – prefixed as DM. These offer more detailed specific approaches for different aspects or topics of development, which will be used in the determination of planning applications.

The Core Strategy also sets out a Spatial Strategy based on a Settlement Hierarchy of: Major Centre > Town > Key Service Centre > Local Service Centre > Other Village > Countryside.

Otley is cited as an 'Key Service Centre'; a settlement considered capable of accommodating more strategic levels of growth. Within the Spatial Strategy, Strategic Policy SP27 for 'Key and Local Service Centres' is applicable.

However, the Local Plan is in the process of being reviewed and this new revised Local Plan is proposed for adoption in early 2020 [5]. Under Policy SCLP3.2: Settlement Hierarchy in the revised Local Plan, Otley is described as a 'Large Village'. In order to be identified as such, a settlement needs to have a primary school, village hall / community centre and a convenience store, as part of the mix of services and facilities present.

2.4 Suffolk's Nature Strategy

Published in 2015, Suffolk's Nature Strategy describes the challenges faced by and the opportunities open to our natural environment, [6]. This document has been compiled by a partnership consisting of Suffolk County Council, Suffolk Wildlife Trust, RSPB and National Trust and advised by Natural England, Environment Agency and Forestry Commission. It sets out the key natural environment priorities for the county and conveys to decision makers how the wildlife and landscapes of Suffolk not only have intrinsic value but are critically important building blocks for our own economic growth and well-being.

The Strategy has strong relevance and linkages to the Neighbourhood Plan process. Within the Our Health and Wellbeing section, it makes direct reference to Neighbourhood and Parish Plans, stating that:

- 'Once adopted, these plans become part of the Local Development Plan and as such become part of the statutory planning framework. These new powers provide a significant opportunity for communities to recognise, protect and improve local environmental assets.
- There is great scope for benefiting the environment, from designating green spaces to establishing 'green corridors' by linking open spaces and improving local watercourses. We will support communities' writing and implementing their plans and help describe the wider context as we seek to build ecological networks across Suffolk'.

These aspirations are reflected in Recommendation 26 of the Strategy:

- 'By 2018, all Neighbourhood Development Plans and Parish plans should ensure the natural environment is fully considered. They should maximise opportunities to conserve, enhance and link Suffolk's green and natural spaces. We will support the development and implementation of these plans'.

Reference is also made within the Our Natural Environment Priorities section to a wide range of landscape and wildlife assets within the county and wherever appropriate these are highlighted below in relation to Otley.

3. Methods

3.1 Field Survey

A 'Phase 1 type' field survey and ecological audit of the parish was undertaken, with a series of visits undertaken on 5th August 2019, 18th September and 3rd October. The objectives of the field surveys was to investigate and record land use, habitat types and notable plant and animal species and taking digital images to illustrate these features. Using public highways, bridleways and footpaths it was possible to view and comment upon all but a small percentage (around 10%) of the parish land area. The timing of the survey was optimal for assessing most habitats and for recording incidental species records.

3.2 Desktop Survey

A variety of existing source material was consulted including:

- Suffolk County Council website and other documents
- Suffolk Coastal District Council website and other documents
- Suffolk Biodiversity Information Service website and databases
- The MAGIC website (provides geographic information about the natural environment from across a range of government sources) including Sir Dudley Stamp 1933-1949 Land Use Inventory).
- Suffolk Wildlife Trust databases
- Suffolk Hedgerow Survey – County Report

3.3 Evaluation of Landscape and Wildlife Assets

The descriptions and evaluation that follow in the report draw on information collected during the field and desktop surveys. For convenience and clarity, elements concerned with the wider landscape are considered first in Section 4. These are then followed in Section 5 by wildlife elements, from protected sites through to wider ecological networks habitats.

However, these two sections should be considered together as there is integration of significant landscape and wildlife elements, resulting in a network of landscape and wildlife features.

4. Evaluation of Landscape Assets

4.1 Protected Landscapes

Otley lies 8.6km north-west of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB), the boundary of which runs to the east of Woodbridge. The statutory duty to conserve and enhance natural beauty within the AONB is fully recognised within the Suffolk Coastal District Local Plan.

4.2 Local Landscape Policy

Policy SP15: Landscape and Townscape in the Suffolk Coastal Local Plan (Core Strategy and Development Management Policies July 2013) sets out the landscape policy of the Suffolk coastal district. It seeks to 'protect and enhance the various landscape character areas within the district either through opportunities linked to development or through other strategies. As well as the Suffolk Coast and Heaths Area of Outstanding Beauty and other named sites and features.

The SCDC Local Plan is currently being reviewed and it is the intention to supersede the principle of area specific landscape designations with Landscape Character Assessment becoming the emerging Policy. Suffolk Coastal District Council commissioned a Landscape Character Assessment [7] and Settlement Sensitivity Assessment [8] in 2018 (Alison Farmer Associates, July 2018) to provide a detailed understanding of the landscape within the District. The character type boundaries in the County assessment (See 4.3) were used to help define the extent of character areas. This approach recognises particular qualities and features of landscapes to provide an understanding of distinct sense of place and sensitivities to development and change.

Within the SCDC Local Plan Final Draft (2019), Policy SCLP10.4: Landscape Character is proposed:

'Proposals for development should be informed by, and sympathetic to, the special qualities and features as described in the Suffolk Coastal Landscape Character Assessment (2018), the Settlement Sensitivity Assessment (2018), or successor and updated landscape evidence. Development proposals will be expected to demonstrate their location, scale, form, design and materials will protect and where possible enhance:

- a) The special qualities and features of the area;
- b) The visual relationship and environment around settlements and their landscape settings;
- c) Distinctive landscape elements including but not limited to watercourses, commons, woodland trees, hedgerows and field boundaries, and their function as ecological corridors;

- d) Visually sensitive skylines, seascapes, river valleys and significant views towards key landscapes and cultural features; and
- e) The growing network of green infrastructure supporting health, wellbeing and social interaction.

Development will not be permitted where it will have a significant adverse impact on rural river valleys, historic park and gardens, coastal, estuary, heathland, AONB and other very sensitive landscapes. Proposals for development will be required to secure the preservation and appropriate restoration or enhancement of natural, historic or man-made features across the District as identified in the Landscape Character Assessment, Settlement Sensitivity Assessment and successor landscape evidence. Proposals should include measures that enable a scheme to be well integrated into the landscape and enhance connectivity to the surrounding green infrastructure and Public Rights of Way network.

Proposals for development should protect and enhance the tranquillity and dark skies across the District. Exterior lighting in development should be appropriate and sensitive to protecting the intrinsic darkness of rural and tranquil estuary, heathland and river valley landscape character.

Neighbourhood Plans may include local policies related to protecting and enhancing landscape character and protecting and enhancing tranquillity and dark skies.'

4.3 Suffolk Landscape Character Assessment

In 2008, Suffolk County Council completed a project to describe landscapes throughout Suffolk in detail and assess what particular character and qualities make up the different landscape areas of the county. This is known as the Level 2 Suffolk Landscape Character Assessment (LCA), [9]. The guidance required the preparation of landscape character assessments in order to review and/or replace local landscape designations. The results of these assessments could then be used as supplementary planning guidance and to help produce landscape management guidelines.

Suffolk County Council worked in partnership with the Living Landscapes Project based at Reading University, private consultants and all District and Borough Councils in Suffolk, using methodology in which discrete units of broadly homogeneous land were identified according to a set of physical and cultural characteristics. These characteristics were defined by four principal attributes: physiography, ground type, landcover and cultural pattern, which in turn were derived from six mapable datasets: relief, geology, soils, tree cover, farm type and settlement. Application of this methodology maintained a consistent approach across Suffolk.

Development Control Officers, forward planners and other staff at County and District level are now using the Suffolk Landscape Character Assessment to manage landscape change and development across the county and to produce local detailed studies as appropriate.

It is highly appropriate for the Otley Neighbourhood Plan to acknowledge and make full use of both the descriptions and the land management guidelines related to the three Landscape Types that exist within the parish.

The Landscape Character Types (LCT) which cover Otley parish are:

- **Ancient Estate Claylands** (coloured striped olive on Figure 1)
- **Rolling Valley Claylands** (coloured dashed pale green on Figure 1)
- **Ancient Rolling Farmlands** (coloured striped orange on Figure 1)

For each of these Landscape Character Types, Suffolk County Council has produced written Guidance involving detailed descriptions of:

- key characteristics
- sensitivity to change
- key forces for change
- development management guidelines
- land management guidelines

SCC notes highlight that the Guidance documents have been written principally to address the needs of development management. That is, to provide a summary of the forces that have been and are at work in the landscape and the key forces for change operating in the landscape at the time of writing.

However, the caveat is added that Guidance cannot be considered to be definitive for a particular site, nor is it exhaustive. Rather it is intended to give a clear indication of the issues raised and principles to be followed when dealing with a particular type of development.

This evaluation for the Neighbourhood Plan therefore distils the essence of the information provided - as it applies to Otley - as a guide for any future development here. Much of the discussion on development guidance is taken verbatim from the documents, but linkages and comments are added that make it relevant to this parish.

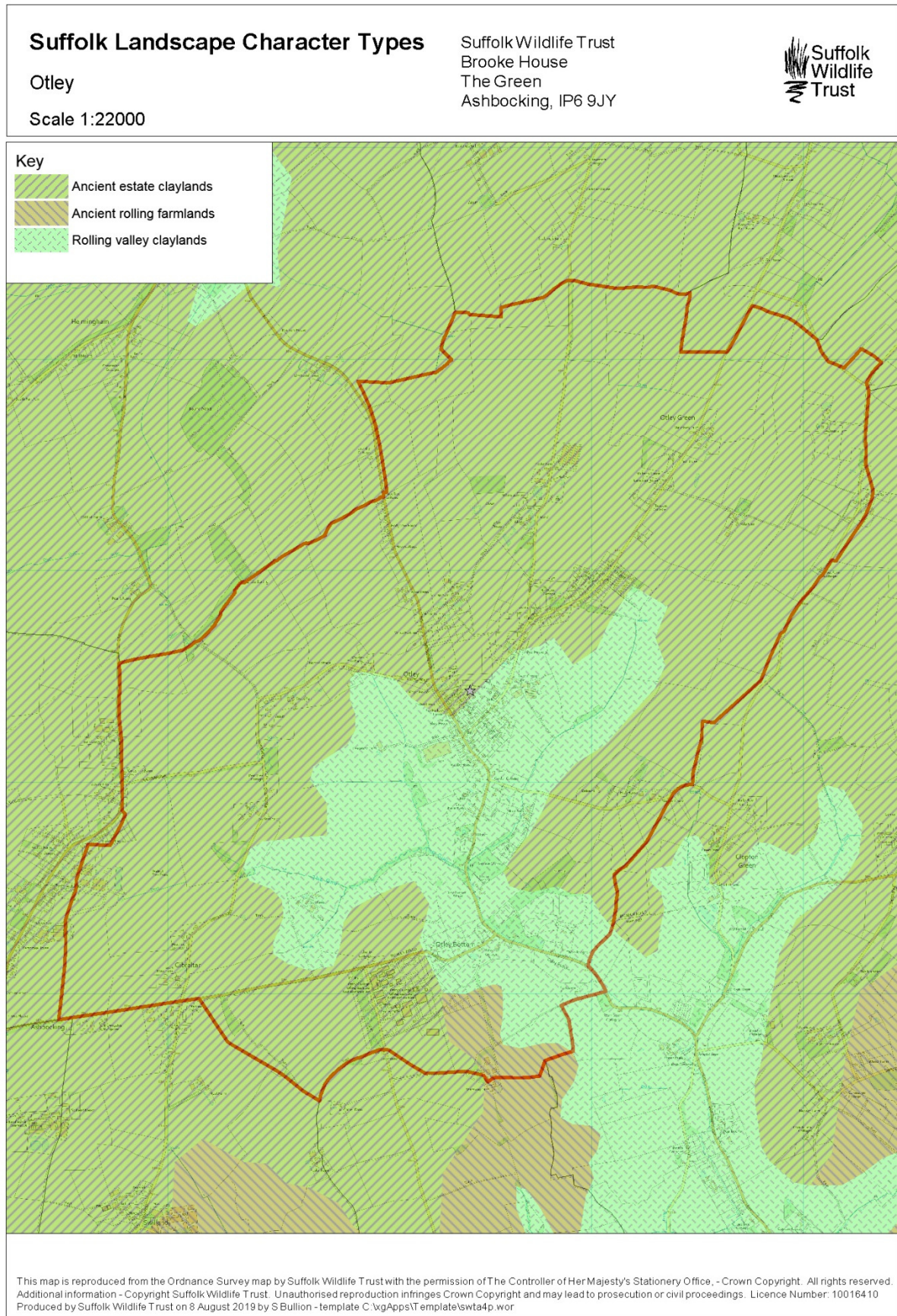


Figure 1: Suffolk Landscape Character Types ascribed to Otley (Source: Suffolk County Council)

4.3.1 Ancient Estate Claylands

This landscape character type occurs in eastern Suffolk on the indented edge of the central clay plateau. The rivers draining east and south have divided the edge of the plateau into a series of 'fingers' and this landscape is found on those residual areas of plateau. The dissected plateau is composed of glacial till or boulder clay, left behind by the great Anglian Glaciation ice sheet.



Photo 1: Relatively flat arable field within Ancient Estate Claylands

Key characteristics of this landscape type as they refer to Otley are:

- Dissected boulder clay plateau
- Organic pattern of field enclosures
- Enclosed former greens and commons
- Villages with dispersed hamlets and farmsteads
- Timber framed buildings

Although the enclosure pattern of fields is generally ancient and organic in appearance, 18th and 19th century rationalisation changed the field pattern into more easily managed units with straighter boundaries and a lot of pasture was converted into arable. The fields are medium to large and the hedges vary from large with a mix of trees and shrubs to single-species hedges that are more tightly controlled.

Otley Green, amongst others, is one of the flatter, poorly-drained interfluves which was used for large common pastures. Many of these were enclosed in the 18th and early 19th centuries and only their outlines survive as landscape features.

The settlement pattern consists of occasional villages and numerous dispersed hamlets and farmsteads. Many of the farmsteads are medieval in origin and some are surrounded by moats.

Although scattered blocks of ancient semi-natural woodland are typical of this landscape character type, there are no such features within this part of the parish. Generally, the views are open and long, but where there are tall hedges this provides a more intimate feel.

Key potential changes and Development Management guidance related to this landscape type:

- New building needs to be carefully located: it must be at an appropriate scale and style as well as being integrated into the existing pattern of vegetation and settlement.
- Any new building design, including the finishes such as tiles, brickwork, mortar or wooden cladding should be appropriate for the style of buildings present.
- New or expanded garden curtilage should always be designed to fit into the local context and respect the established pattern.
- Change of land use to horse paddocks, with associated subdivision of land and temporary boundaries can have a significant landscape impact, and on the quality and condition of the grassland in more ecologically sensitive areas. Mitigation strategies in terms of design, layout and stockings rates should be employed where possible and opportunities taken to design field layout that is in keeping with the local field pattern or historic pattern of boundaries.
- Changes in cropping practices that have taken place in some parts of this landscape type (such as the use of fleece and plastic, as well as outdoor pig production) have had a significant visual effect on the landscape. The siting and style of structures subject to planning control should be appropriately conditioned to minimise their landscape impact.
- It is important that new structures are located to make the best use of existing hedges and trees both to screen the development and as a backdrop. Existing hedgelines should also be reinforced to improve the mitigation they provide.

Land Management guidelines for this Landscape Type relevant to Otley include:

- Reinforce the historic pattern of sinuous field boundaries
- Recognise localised areas of late enclosure hedges when restoring and planting hedgerows
- Maintain and increase the stock of native hedgerow trees
- Maintain the extent, and improve the condition, of woodland cover with effective management
- Maintain and restore the stock of moats and ponds in this landscape.

4.3.2 Rolling Valley Claylands

These landscapes are found in the upper reaches of most of the east Suffolk rivers:

Key characteristics of this landscape type as they refer to Otley are:

- Gently sloping valleys on medium clay soils
- Fields often smaller than on surrounding plateau



Photo 2: View across Rolling Valley Claylands with a hidden valley in the dip of the slope

Key potential changes and Development Management guidance related to this landscape type:

- The visual impact of new vertical elements in valley side landscapes is increased by this landform. New buildings are likely to have a significant impact on both the character and visual amenity of valley floor and valley side landscape types. The setting of specific features and elements of these landscapes, such as small-scale enclosure patterns or historic buildings and monuments, can also be significantly damaged.
- Barn conversions and extensions require careful consideration and considerable attention to the detail of form and styling. Redevelopment proposals should also enhance the contribution these historic sites make to the wider landscape. Specifically, any new building should usually be close to the existing cluster of buildings and should be subordinate in size to the principal buildings. The changes to the surrounding land from agricultural to residential use, which entails the introduction of lighting and other suburban features, can be extremely intrusive.
- The expansion of gardens which is not in keeping with the existing local pattern has a significant impact on the local character and form of the built environment, as well as on historic patterns of field enclosure. The visual impact of domestic clutter and garden paraphernalia can be particularly intrusive in these sloping landscapes. New or expanded

curtilage should always be designed to fit into the local context and respect the established pattern. The use of locally appropriate hedging species including hawthorn, field maple, dogwood and other typical clayland species should be specified in preference to non-native plantings such as leylandii or laurel for example.

- In terms of horse grazing, the proliferation of post and rail fencing and subdivision of land into small paddocks using temporary tape can have a significant negative landscape impact, which is particularly intrusive on a sloping site. Similarly, the location of field shelters and material storage areas can also have a landscape impact, so should be specified in any new scheme.

Land Management guidance for this Landscape Type as relevant to Otley include:

- Reinforce the historic pattern of sinuous field boundaries.
- Recognise localised areas of late enclosure hedges when restoring and planting hedgerows.
- Maintain and increase the stock of native hedgerow trees.
- Increase the area of woodland cover; siting should be based on information from the Historic Landscape Characterisation and in consultation with the Archaeological Service.
- Maintain and restore the stock of moats and ponds in this landscape. Reinforce the historic pattern of regular boundaries.

4.3.3 Ancient Rolling Farmlands

A small part of this landscape character type occurs in the south-eastern part of the Parish. It is typified by rolling clayland landscapes with main soil type derived from chalky clays left behind by the Anglian Glaciation. The woodland cover is largely semi-natural and oak trees are frequently prominent, adding to the generally wooded feel of the landscape. Settlement is limited to a few landholdings over quite an extensive area. Arable production is dominated by cereals and oilseed rape, the latter making a seasonally significant visual impact.

Key characteristics of this landscape type as they refer to Otley are:

- Rolling arable landscape, dissected widely by the river valleys, with some sinuous field boundaries in places
- Substantial open areas created by post World War II agricultural improvement
- Hedges of hawthorn and elm, with oak, ash and field maple as hedgerow trees
- Dispersed and isolated settlement where it exists



Photo 3: Ancient Rolling Farmland in south of parish

Key potential changes and Development Management guidance related to this landscape type:

- Any settlement expansion, conversion or expansion of farmsteads, or release of land for development should reflect the local pattern. Ribbon development can have a considerable impact on the wider landscape and destroys this pattern. Any new buildings should be usually close to the existing buildings and be subordinate in size to the principle buildings.
- Larger scale agricultural buildings can have their impact mitigated by the right choice of siting, form, orientation and colour and should also relate to an existing cluster of buildings. Location in relation to existing trees should be carefully considered and any new planting should be designed to integrate the development into the character of the landscape.
- New or expanded garden curtilage should always be designed to fit into the local context and respect the established pattern.
- Change of land use to horse paddocks, with associated subdivision of land and temporary boundaries can have a significant landscape impact and on the quality and condition of the grassland in more ecologically sensitive areas. Mitigation strategies in terms of design, layout and stockings rates should be employed where possible and opportunities taken to design field layout that is in keeping with the local field pattern or historic pattern of boundaries.
- The impact of deer on woodland cover, particularly non-native species such as roe deer and Reeves's muntjac, continues to increase significantly. Large scale deer-control should be supported to reduce populations to a level that allows natural woodland regeneration to take place. Individual sites may require deer fencing.

Land Management guidance for this Landscape Type as relevant to Otley include:

- Reinforce the historic pattern of sinuous boundaries where they exist
- Carry out coppice management on elm-dominated hedgerows
- Maintain and increase the stock of native hedgerow trees

4.4 Suffolk Coastal District Council Landscape Character Assessment and Settlement Sensitivity Assessment

In the Alison Farmer Associates Reports of July 2018 [7 & 8], the Landscape Character Assessment for the Parish of Otley is described as two principal areas: The northern part of the Parish is defined as 'L4 Otley Hall and Debach Estate Claylands' and the southern section is 'B9 Lark Valley'. In the second document, Settlement Sensitivity Assessment Volume 2, July 2018, the central part of the Parish is subdivided into two Peripheral Areas: OT1 and OT2 in the Suffolk Coastal Settlement Analysis for Otley.

Peripheral Area OT1 lies within the elevated plateau landscape of the Ancient Estate Claylands, with long views punctuated by hedgerows and hedgerow trees. Peripheral Area OT2 has gently rolling topography and shallow stream valleys ascribed to the landscape of Rolling Valley Claylands. Replacing lost hedgerows is indicated as an opportunity for both Peripheral Areas, as well as planting woodland and improving the habitat value of the arable landscape in OT2.

4.5 The Significance of the Landscape for the Neighbourhood Plan

This Parish has a strong rural feel, with two distinct landscape character types reflecting largely flat farmland within large fields situated on the boulder clay plateau to the north and gently sloping valleys bisected by small streams to the south. Although this landscape has no formal designation, it has special qualities and features

As well as adherence to Local Plan Policy, development management guidance for any new developments within the area covered by this Neighbourhood Plan should consistently reflect the Development Management and Land Management Guidelines drawn up within the Suffolk Landscape Character Assessment and Suffolk Coastal District Landscape Character Assessment and Settlement Sensitivity Assessment.

5. Evaluation of Wildlife Assets

5.1 Local Biodiversity Policy

Strategic Policy SP14: Biodiversity and Geodiversity within the Suffolk Coastal Local Plan (Core Strategy and Development Management Policies July 2013) sets out the biodiversity policy of the Suffolk coastal district. The policy seeks to protect and enhance Biodiversity and geodiversity ‘using a framework based on a network of: designated sites, wildlife corridors and links, the rivers, estuaries and coast, identified habitats and geodiversity features, landscape character areas and protected species.’

Development Management Policy DM27 – Biodiversity and Geodiversity states that:

All development proposals should:

- (a) protect the biodiversity and geodiversity value of land and buildings and minimise fragmentation of habitats;
- (b) maximise opportunities for restoration, enhancement and connection of natural habitats; and
- (c) incorporate beneficial biodiversity conservation features where appropriate.

Reference is made to the hierarchy of designated sites (Global, European, UK and Local). The supporting text also highlights that in order to protect nature conservation, it will also be important to protect habitats outside designated sites and to protect particular species, such as those which are rare or protected.

Within the SCDC Local Plan Final Draft (2019), Policy SCLP10.1: Biodiversity and Geodiversity is proposed:

‘Development will be supported where it can be demonstrated that it maintains, restores or enhances the existing green infrastructure network and positively contributes towards biodiversity and/or geodiversity through the creation of new habitats and green infrastructure and improvement to linkages between habitats, such as wildlife corridors and habitat ‘stepping stones’. All development should follow a hierarchy of seeking firstly to avoid impacts, mitigate for impacts so as to make them insignificant for biodiversity, or as a last resort compensate for losses that cannot be avoided or mitigated for. Adherence to the hierarchy should be demonstrated.

Proposals that will have a direct or indirect adverse impact (alone or in-combination with other plans or projects) on locally designated sites of biodiversity or geodiversity importance, including County Wildlife Sites, priority habitats and species, will not be supported unless it can be demonstrated with comprehensive evidence that the benefits of the proposal, in its particular location, outweighs the biodiversity loss.

New development should provide environmental net gains in terms of both green infrastructure and biodiversity. Proposals should demonstrate how the development would contribute towards new green infrastructure opportunities or enhance the existing green infrastructure network as part of the development. New development must also secure ecological enhancements as part of its design and implementation, and should provide a biodiversity net gain that is proportionate to the scale and nature of the proposal.

Where compensatory habitat is created, it should be of equal or greater size and ecological value than the area lost as a result of the development, be well located to positively contribute towards the green infrastructure network, and biodiversity and/or geodiversity and be supported with a management plan.

Where there is reason to suspect the presence of protected UK or Suffolk Priority species or habitat, applications should be supported by an ecological survey and assessment of appropriate scope undertaken by a suitably qualified person. If present, the proposal must follow the mitigation hierarchy in order to be considered favourably. Any proposal that adversely affects a European site, or causes significant harm to a Site of Special Scientific Interest, will not normally be granted permission.

Any development with the potential to impact on a Special Protection Area or Special Area for Conservation within or outside of the District will need to be supported by information to inform a Habitat Regulations Assessment. A Supplementary Planning Document will be prepared to implement a strategic Recreational Avoidance and Mitigation Strategy in order to mitigate for potential adverse effects arising from new growth on Special Protection Areas, Ramsar Sites and Special Areas of Conservation. The Council will work with neighbouring authorities and Natural England to develop and implement this strategy. The strategy will include a requirement for developers to make financial contributions towards the provision of strategic mitigation within defined zones.'

5.2 Protected Wildlife Sites

The quality of the natural environment in Suffolk is reflected by the extent of its land area with statutory protection for its wildlife. 8% of the county has national designation as Sites of Special Scientific Interest (SSSI), reflecting the importance of habitats and species found here. Many of these areas are also of European or international importance, with designations as Special Areas for Conservation (SAC), Special Protection Areas (SPA) and Ramsar Site. Large areas of the nearby estuaries and coastline are protected in this way.

5.2.1 Sites of European and International Importance

The nearest European/Internationally designated site is the Deben Estuary SPA and Ramsar site which is particularly important for overwintering water birds and is located 8.6 km to the south-east of the parish boundary at its closest point. The Sandlings SPA lies beyond this, 10.5 km from the parish and this site is principally designated for breeding woodlark and nightjar populations. The Stour and Orwell Estuaries SPA and Ramsar site is important for breeding avocet in summer and overwintering water bird species; this is located 12.4 km to the south of the parish boundary. The Alde-Ore Estuary SPA, Ramsar site and the Alde-Ore & Butley Estuaries SAC lie 16.8km west of the boundary, which have a diverse scientific interest including geological, botanical, ornithological (particularly breeding avocet) and entomological.

It should be noted that development of new housing within the 13km 'zone of influence' of European designated sites is likely to have a significant effect upon the interest features of the designated sites, through increased recreational pressure, as set out in the Suffolk Coast Recreational Disturbance Avoidance and Mitigation Strategy (RAMS) [10].

New housing within the Suffolk Recreational Disturbance Avoidance and Mitigation area will be required to mitigate the effects of the development though Section 106 planning obligations.

5.2.2 Sites of Special Scientific Interest in Otley

Moat Farm Meadows. Otley (TM 222565)

These two small meadows are located in the north-east of the Parish and represent two of the best remaining unimproved, calcareous and neutral grassland meadows in Suffolk. It is cut annually for hay with aftermath grazing by sheep. The two meadows are divided by an old banked hedge and there is a central pond in the eastern meadow.

The Citation for the SSSI explains that ‘as well as representing one of the rarer grassland communities in which green-winged orchid *Orchis morio* is abundant, the meadows also contain one of the largest populations in Suffolk of meadow saffron *Cochicum autumnale*’. ‘Other notable species include adder’s tongue fern *Ophioglossum vulgatum*, twayblade *Listera ovata*, cowslip *Primula veris*, cuckoo flower *Cardamine pratensis* and ox-eye daisy *Leucanthemum vulgare*.’ [11]

The Natural England Condition Assessment for this SSSI was assessed in 2012 as ‘Unfavourable Recovering’. This was because although the positive indicator species are still present, the assessment noted the frequent presence of creeping thistle.

The grassland had been cut by the time of the August site visit, which is the appropriate time of year for this to take place. In addition the current owners now manage the two small fields to the south for hay to help buffer the SSSI.

5.3 County Wildlife Sites

5.3.1 Rationale behind this non-statutory designation

County Wildlife Sites (CWSs) are areas known to be of county or regional importance for wildlife. They have a key role in the conservation of Suffolk’s biodiversity and are important links in Suffolk’s ‘Living Landscape’, as described on the Suffolk Wildlife Trust website [12]. CWS designation is non-statutory but is recognition of a site’s high value for biodiversity. Suffolk currently has over 900 County Wildlife Sites representing approximately 2.6% of the county’s land area.

CWSs have been identified throughout Suffolk and range from small meadows, green lanes, dykes and hedges through to much larger areas of ancient woodlands, heathland, greens, commons and marsh. Outside of areas with statutory protection (such as SSSIs, Local and National Nature Reserves), CWSs are therefore the most important areas for wildlife in Suffolk and can support both locally and nationally threatened wildlife species and habitats.

Many County Wildlife Sites support UK Priority Habitats and Species (see 5.3 and 5.4 below). They complement the statutory protected areas and nature reserves by helping to buffer and maintain habitat links between these sites.

It is important to note that the designation of a site as a CWS does not confer any new rights of access either to the general public or conservation organisations.

Suffolk Wildlife Trust, Suffolk County Council, Suffolk Biodiversity Information Service and Natural England manage the Suffolk County Wildlife Site system in partnership. This CWS system involves:

- Maintaining an up to date database of CWSs in Suffolk. Partners and local authorities have copies of the database
- Designating new CWSs, extending existing CWSs and modifying information held on existing sites when changes occur. New sites and site extensions are notified in accordance with selection criteria.
- Supplying information on wildlife interest of CWSs to landowners and other organisations whose work may affect CWSs. The importance of CWSs is recognised by local authorities in Suffolk and they have all developed policies that give CWSs some protection in line with national planning policy. If a CWS is likely to be affected by development the views of the CWS partners is normally sought as part of the consultation process.

CWSs are implicitly recognised by the NPPF as having a fundamental role to play in meeting overall national biodiversity targets. In the NPPF 2019 they are described as ‘Locally Designated Sites’. CWS are not protected by legislation, but their importance is recognised by local authorities when considering planning applications. Under current planning policy there is a presumption against granting permission for development that would have an adverse impact on a CWS.

Suffolk Wildlife Trust monitors planning applications for potential impacts on County Wildlife Sites.

It is important to note that Environmental Impact Assessments are required by Natural England when areas of uncultivated land over 2 hectares are to undergo agricultural change, including operations such as increases in stock density, cultivation, soil spreading and new drainage work.

The high wildlife value of many CWSs has developed through land management practices that have allowed wildlife to thrive, for example traditional and historical management such as rotational coppicing of woodland, hay cutting or grazing of grasslands. Ensuring the continuation of such appropriate management is vital to maintain the wildlife value of a site. Establishing and maintaining good working relationships with landowners and managers is therefore essential.

The CWS partnership appreciates the difficulties that achieving the conservation management of CWSs can present and is therefore happy to offer advice on management and on potential sources of funding. Free advice is available from Suffolk Wildlife Trust to CWS owners and managers and includes:

- Information on the wildlife and nature conservation interest of the site;
- Advice and site visits can be made to establish the best management to maintain and enhance wildlife value.

5.3.2 County Wildlife Sites in Otley

There are currently no sites designated as County Wildlife Site in the parish of Otley.

5.3.3 Otley Gull

The feature known as Otley Gull has no biodiversity designation. Rather than including it in Section 5.5 (Suffolk Priority Habitats in Otley), where it would qualify under both lowland deciduous woodland and rivers, it is felt that it has sufficient merit to be described as a separate sub-heading

under this section. Further ecological surveys in 2020 will help inform whether this site should be included as a new County Wildlife Site.

Otley Gull is located in the southernmost part of the Parish and this feature and associated tributaries represent the landscape element of 'Rolling Valley Claylands'. A 'gull' is a small incision in the upper reaches of a river valley, often only a kilometre or so in length.

The Otley Gull represents a steep-sided 3.5m deep channel cut into the underlying glacial till deposit known as the Chalky Boulder Clay, with a stony bed formed of sub-rounded chalk pebbles and some flint. The stream drains first eastwards via a series of incised meanders from a point close to TM 198 545 and then in a south-easterly direction eventually into the River Lark at TM 204 546, just north of Otley Bottom. The geomorphology of the Otley and several other Suffolk gulls has been documented [13], and these small but striking landscape features are thought to originate from the end of the last glacial period known as the Devensian, which reached its glacial maximum 22,000 years ago. However, the Devensian ice sheet only reached as far south as the north Norfolk coast. In Suffolk, periglacial conditions, dominated by freeze-thaw action and high volumes of summer meltwater flows across seasonally frozen ground are likely to have been active agents of rapid erosion and transportation of sediments. These processes may have operated for many thousands of years and even into the subsequent post-glacial Holocene epoch which commenced 11,800 years ago.

The channel sides, as well as a strip along both the northern and southern bank tops, are largely covered by mature woodland. This woodland is primarily oak and ash, with some large, ancient hornbeams along much of the length of the gull, many of which displaying historical evidence of pollarding. Traveller's joy, a climber, is abundant. Woodland ground-flora is typically surveyed during April and May, so the site assessment in August took place at a sub-optimal time and a full species list wasn't obtained. Typical woodland species such as wood avens, arum, false wood-brome, violet sp, and hedge woundwort were recorded. However, there are several large patches dominated by wood melick, an ancient woodland indicator grass species. Consequently, it is strongly recommended that a more detailed plant survey is undertaken in the spring.

The stream associated with the gull is described as 'flashy' with high volumes of water being discharged soon after high rainfall events. It is believed that even in dry summers there is usually at least some water remaining. The stony base of the stream is unusual for Suffolk where streams tend to have a layer of deposited silt and is a result of these rapid flows. This will provide a specific niche for those freshwater invertebrates that are adapted to this type of substrate and conditions.

The woodland associated with the gull is well connected to other linear woodland features, including along the tributary stream to the north. This is covered in more detail in Section 5.9.

5.4 Biodiversity Action Plans

The UK Biodiversity Action Plan (UK BAP, 1994) was the UK Government response to the 1992 International Convention on Biological Diversity. The UK BAP listed a range of habitats, plus a number of birds and species from other taxa of conservation interest. National targets and priorities were set in order to address the particular needs of those species. The list was amended in August 2007 to include additional species and habitats to reflect concerns over continuing declines.

A change in strategic thinking followed the publication of the Convention on Biological Diversity's 'Strategic Plan for Biodiversity 2011–2020' and the launch of the new EU Biodiversity Strategy (EUBS) in May 2011. As a result, Government published 'Biodiversity 2020 – a strategy for England's Wildlife and Ecosystem Services', as successor to the UK BAP, [14].

Much of the work previously carried out under the UK BAP is now focused through from country level down to local level through the creation of local biodiversity strategies. However, the UK BAP lists of priority species and habitats remain important and valuable reference sources.

In addition, Section 40 of the 2006 Natural Environment and Rural Communities Act states that 'Every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. UK priority species, listed within Section 41 of the Act, are normally taken as a good benchmark for demonstrating biodiversity duty.

In January 2014, Suffolk Biodiversity Partnership (SBP) - a consortium of over 20 organisations working for wildlife within the county - published revised statutory lists of Priority Habitats and Species occurring in Suffolk, [15] and these have been subsequently updated and amended. In a small number of cases where previously no national BAP existed, certain species are described as Suffolk Character Species to reflect their particular importance within the county.

The following section deals with the Priority Habitats that are present in Otley. In most cases the habitat descriptions include Priority Species and other notable species as supporting evidence. For the majority of species, they are only referenced if they were noted during the field survey or are recent records (post 2000) held by Suffolk Biodiversity Information Service.

5.5 Suffolk Priority Habitats in Otley

Of the 24 Suffolk Priority habitats, five are known to be present in Otley parish:

- Hedgerows
- Mixed deciduous woodland
- Lowland meadows
- Rivers
- Ponds

The Priority Habitats are described in more detail below to highlight the significance of these ecological assets within the parish. The format is in three parts:

1. General descriptions of the habitats as they relate to Suffolk
2. These are followed by descriptions of the Priority habitat as found in Otley during the field survey, noting any associated UK and Suffolk Priority species.
3. Finally, reference is made from the Suffolk BAPs (or other sources) to those development activities that are most likely to affect the Priority Habitat as it exists in Otley.

5.5.1 Hedgerows

5.5.1.1. General description of this Priority Habitat in the context of Suffolk

Hedges are boundary lines of trees and/or shrubs, sometimes associated with banks, ditches and grass verges. Those considered ancient or species-rich or both are an important reservoir of biodiversity in the farmed landscape as well as being of cultural, historical and landscape importance. Hedges act as wildlife corridors, linking habitats of high biodiversity value such as woodland and wetland, thus enabling bats, other small mammals and invertebrates to move around under cover from predators.

Ancient hedgerows, which support a greater diversity of plants and animals than subsequent hedges, may be defined as those that were in existence before the Enclosure Acts, passed between 1720 and 1840.

Species-rich hedgerows contain five or more native woody species on average in a 30 metre length. Those which contain fewer woody species, but a rich basal flora may also be considered as important. The Hedgerow Regulations 1997 define 'important' hedgerows as those with seven woody species, or six woody species in a 30m length, plus other defined features.

Key Priority species in Suffolk which use hedges and associated grassy verges include: brown hare, grey partridge, song thrush, linnet, turtle dove, corn bunting, tree sparrow, bullfinch and various species of bats. Hibernating reptiles and amphibians and invertebrates such as white-letter hairstreak butterfly on elm hedges, also all make use of this Priority Habitat.

5.5.1.2. Hedgerow Priority Habitat in Otley

The field survey noted a network of hedgerows within the parish, although a number had been allowed to grow-on and are functionally more similar to thick lines of trees. Hedgerows are important for a number of bird Priority Species and the Suffolk Bird Atlas 2007-11 recorded dunnoek, yellowhammer, linnet and bullfinch in the parish – all typical of this habitat. It also recorded turtle dove. This rapidly declining species favours thickets and tall hedgerows with wide bases as breeding sites but is currently in severe decline.

Otley was one of the many parishes covered by the Suffolk Hedgerow Survey, 1998-2012. The 2012 report on this project [16] shows that, although access was not granted to some landholdings, out of the 289 hedges surveyed for woody species:

29 contained 4 species or fewer

139 contained 5, 6 or 7 species

121 contained 8 species or more

Therefore 90% of the sampled hedgerow resource within the parish can be deemed species-rich.

It must be noted that this summary is based on data collected in the early stages of the Suffolk Hedgerow Survey (2003) and that changes will have occurred since that time, both positive and negative. However, it remains broadly true that the hedgerows in the parish are an important reservoir for wildlife.

During the walkover surveys, it was noted that numerous hedgerows are tall, thick and species-rich. Common species include hawthorn, blackthorn, dog rose, field maple, elm, willow, with English

oak and ash as standard trees. However, many hedges also include hazel, spindle, crab apple, midland hawthorn and wych elm, indicating their ancient origins.



Photo 4: Ancient species-rich hedgerow north of Otley Hall



Photo 5: Ancient species-rich hedgerow in south of parish

5.5.1.3. Activities and developments most likely to affect Hedgerow Priority Habitat in Otley

- Removal to facilitate arable, other farming operations or other developments (though this may require consent under the Hedgerow Regulations 1997)
- Under-management and neglect of hedges leads to a reduction of their biodiversity value and structural coherence (and occasionally leads to their complete disappearance)
- Too-frequent flailing can lead to structural incoherence and – if carried out in successive years - loss of hedgerow fruit in autumn, as flowering and fruiting normally takes place on second year growth
- Mature hedges with a minimum grass strip separating them from arable land may suffer damage to tree and shrub roots through ploughing
- Fertilizer and other agro-chemical drift may degrade plant and invertebrate populations, especially where a crop extends to the hedge base
- Losses of veteran trees that may not be replaced by new plantings

5.5.2 Mixed Deciduous Woodland

5.5.2.1. General description of this Priority Habitat in the context of Suffolk

This Priority habitat includes all broadleaved stands and mixed broadleaved and coniferous stands which have more than 80% of their cover made up of broadleaved species. It also includes patches of scrub of above 0.25 hectares forming a continuous canopy, areas of recently felled woodland and other successional types, along with the other integral features of woodland such as glades and rides.

These woodlands may be ancient (where cover existed before c 1600) or recent (where cover has been created since c 1600). Both these age designations may have semi-natural cover or plantation cover, depending on past management. Management can vary from coppice or coppice with

standards to wood-pasture, high forest or minimum intervention. The latter, when found in ancient semi-natural woodland, contains some of the most important wildlife assemblages of any habitat.

5.5.2.2. Mixed Deciduous Woodland Priority Habitat in Otley

The largest concentration of woodland is in the south of the Parish. Much of woodland represents linear features bordering streams and 'gulls', where this habitat type was left due to difficulties of cultivation. Further information on Otley Gull is provided in 5.3.3. The very large old pollarded hornbeams of Otley Gull and also the wide range of species in the woodland along the tributary stream running into the Gull from the north indicates that there has been a long history of woodland in these areas. The latter includes wych elm which is a more unusual elm type and is observed as larger trees as it is more resistant to Dutch elm disease.

Although the survey was undertaken too late to record woodland ground flora, the banks of Otley Gull includes wood melick, a strong ancient woodland indicator species. Records from 1990 include some interesting species such as early purple orchid, goldilocks buttercup, wood spurge and hairy St John's-wort. Consequently, a spring survey of the ground flora is recommended for the Otley Gull to obtain an up-to-date assessment of ancient woodland indicator plant species.

In the south-western part of the Parish another steep-sided stream runs southward and eventually joins the Otley Gull stream where it passes beneath Church Road. This was dry at the time of the August surveys, but was densely wooded along much of its length, with some notable mature English oaks.



Photo 6: Hornbeam pollard in Otley Gull

There are some other areas of scrubby woodland where agricultural practices have ceased and woody species have become established. Such habitat is often undervalued and can be very important for invertebrates and nesting birds.

This habitat type is present to the west of the church and from the footpath represents thorny scrub dominated by over-stood blackthorn, but with other species including mature ash. This small woodland is directly connected to the linear woodland which runs southwards to link to Otley Gull.

A second extensive area of scrubby woodland lies north of the B1079 in the south-east of the Parish. This appears to be derived from several former paddocks which have become colonised by self-seeded ash and also areas of blackthorn and hawthorn. Midland hawthorn was also recorded here, likely to be derived from a seed source from an ancient hedgerow. There is also a tree nursery in this area which doesn't appear to be being currently managed, so these plants are also growing on to become future woodland.

A new woodland has been planted called 'Ruben's Wood' north of Otley Hall. This includes a good mix of native broadleaf species and will become valuable habitat in time.



Photo 7: Scrubby woodland west of Church of St Mary the Virgin



Photo 8: Blackthorn and hawthorn dominated scrubby woodland

5.5.2.3. Activities and developments most likely to affect the Mixed Deciduous Woodland Priority Habitat in Otley

- Further fragmentation of and within the existing woodland area
- Overgrazing and overbrowsing by expanding deer populations changes woodland structure through reduced regeneration
- Intensification of management between woodland fragments reduces the ecological value of edge habitats and the connectivity between woodland blocks in the landscape

5.5.3 Lowland Meadows

5.5.3.1. General description of this Priority Habitat in the context of Suffolk

Often termed 'old meadows', these grasslands are characterised by a long history of traditional management of haymaking and have not been altered through ploughing or the use of agro-chemicals. This definition is also broad enough to include unimproved pastures where livestock grazing is the main land use.

In addition to species-rich swards of grasses and other flowering plants, unimproved hay meadows and pastures support a wide range other wildlife, including birds, small mammals and invertebrates. 96% of this BAP Habitat has been lost in Suffolk since 1939, with less than 100 hectares still remaining, though churchyard flora and fauna can mirror this habitat to some extent.

5.5.3.2. Lowland Meadow Priority Habitat in Otley

Moat Farm meadows SSSI is a prime example of this habitat type (See 5.2.1 for more details).



Photo 9: Moat Farm Meadow recently cut for hay in August

The Parish church of St Mary the Virgin is situated in the south-west corner of the settlement. The surrounding churchyard is quite extensive and when visited in August was uncut. Flowering species include knapweed and yarrow, although ox-eye daisy, primrose and meadow vetchling are also present but rare. Currently, the sward is dominated by grasses and did not contain a high diversity of herbs, but a more detailed survey in 1993 recorded a much richer diversity of grassland species, including some scarcer species (quaking grass, crested dog's tail, goldilocks buttercup, hoary plantain, meadow barley and cowslip).

This grassland would benefit from staggered restoration, slowly reducing the dominance of the highly competitive grasses. The most diverse areas should be targeted for more intensive restoration, whilst retaining some rough areas to support overwintering invertebrates. How big an area is tackled each year will depend on available resources but at the very least will involve two-three cuts a year (July, September and possibly a third late-autumn cut). A key part of the restoration will be the removal of cuttings after each cut to help deplete the nutrient status. These should be placed in a heap in a little-used part of the churchyard and in subsequent years this should not be allowed to spread. This change in grassland management would not only increase the diversity of the grassland, it would also help support a richer invertebrate community, particularly for bees and butterflies.



Photo 10: Uncut grassland in churchyard

5.5.3.3. Activities and developments most likely to affect the Lowland Meadow Priority Habitat in Otley

- Declining agricultural value of species-rich hay
- Changes in plant communities through inappropriate grazing/cutting regimes
- Reduction in the availability of the appropriate type and size of farm machinery for traditional hay making
- Lack of resources for long-term management of hay meadows or churchyards
- Abandonment leading to rank overgrowth and scrub encroachment

5.5.4 Rivers

5.5.4 1. General description of this Priority Habitat in the context of Suffolk

During a 2007 national review of BAP Habitats and species by Joint Nature Conservation Committee (JNCC) it was considered appropriate to create a new BAP specifically for rivers. The criteria for a Rivers BAP were published by JNCC in July 2010 and include:

- Headwater reaches
- Presence of specific vegetation communities
- Chalk rivers
- Active shingle rivers
- Sites of Special Scientific Interest designated for riverine features or species
- Presence of priority BAP (Priority) Species or other indicator species

5.5.4.2. Rivers Priority Habitat in Otley

The only significant water course through the parish is associated with Otley Gull, a headwater of the River Lark, which eventually flows into the River Fynn and thence to the River Deben and the sea. At the time of the survey in August there was very little water in Otley Gull and the other

tributary streams were dry. By October, the streams were running again due to several episodes of rainfall.

Another incised tributary stream lies east of Church Road and runs southward to join the main watercourse at Church Road. This channel is steep sided but less markedly deep than Otley Gull and similarly is wooded along much of its length.

Otley Gull and the associated minor watercourses represent an important wildlife corridor through the parish and are an important part of the wider ecological network.



5.5.4.3. Activities and developments that could affect the Rivers and Streams Priority Habitat in Otley

Inappropriate management of and adverse events within the river channel would include:

- Extensive dredging or channel re-alignment
- Passage of major infrastructure schemes without mitigation of effects
- Extensive removal of bankside trees and other marginal habitat
- Severe point source pollution events

5.5.5 Ponds

5.5.5.1. General description of this Priority Habitat in the context of Suffolk

For the purposes of classifying this Priority Habitat, ponds are defined as permanent or seasonal standing water bodies up to 2 hectares in extent which meet one or more of the following criteria:

- Habitats of international importance
- Species of high conservation importance, for example ponds supporting Priority Species
- Ponds of high ecological quality, as determined by standard survey techniques

5.5.5.2. Ponds Priority Habitat in Otley

Suffolk Biodiversity Information Service have mapped around 100 ponds within the main area of the parish, but this may be an underestimate as this did not include all ponds within individual gardens. A density of nearly 9 ponds per hectare in the wider landscape means that Otley is an area of high pond density compared to many other parts of the county. The majority of the ponds lie within the Landscape Character Area 'Ancient Estate Claylands'. The numerous ponds are a historical feature associated with the grazing of pastures on poorly drained soil.

As access was limited it was only possible to visit very few of these ponds during the walkover survey, but reference to Google Earth imaging suggests that the majority still exist. There may also be an additional network of garden ponds, which it was not possible to identify during the field survey.



Photo 13: Pond north of Otley Hall

5.5.5.3. Activities and developments that could affect the Ponds Priority Habitat in Otley

Ponds are dynamic systems, being both lost and created over time. However, loss or degradation of ponds - even if they are at low densities within a landscape network - may lead to a reduced diversity of wildlife as ponds become more isolated from one another, compromising species that may rely on a network of ponds for their survival. Examples of how such changes may occur include:

- Complete infilling due to loss of economic value or new development

- Loss of terrestrial buffer zones in areas of intensive land use
- Diffuse or point source pollution from nutrients or other chemicals
- Inadvertent or deliberate introduction of non-native species such as New Zealand pygmyweed (*aka* Australian swamp stonecrop), least duckweed or ornamental fish
- Neglect and/or lack of management resulting in heavy shading and drying out

It should be noted that some apparently neglected ponds and many ephemeral ponds are of great interest for biodiversity and that a pond survey based on a standard procedure can do much to inform management decisions.

5.6 Suffolk Priority Species in Otley

Suffolk Biodiversity Information Service has provided records of species within the Parish. Those that are listed as Priority species are as follows:

Mammals: Bats including brown long-eared, pipistrelle sp., soprano pipistrelle, Natterer's and western barbastelle. Additionally, otter, brown hare and hedgehog have been recorded.

Birds: A good range of Red List and Amber List Birds of Conservation Concern (BoCC) has been recorded, most of which are also Priority Species. Key species associated with farmland include turtle dove, skylark, yellowhammer, linnet, lapwing (all Red List) and barn owl (Schedule 1). The species most associated with settlements include starling, song thrush, house sparrow, lesser redpoll, spotted flycatcher (all Red List), swift and dunnoek (both Amber List). Lesser redpoll and spotted flycatcher can also be found in woodland, along with tree sparrow (Red List) and bullfinch (Amber List). Wetland species include herring gull, cuckoo (Red List) and reed bunting (Amber List), whose nest the cuckoo often parasitizes.

A migratory species, ring ouzel (Red List) has also been recorded in the area but was likely only passing through or stopping to feed on its way to its breeding grounds in the uplands.

Swift and barn owl are also Suffolk Priority Species. Swift is classed as Endangered as a GB breeding bird according to International Union for Conservation of Nature (IUCN) criteria. Barn owl is listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).

Invertebrates: Several moth species have been recorded including Cinnabar, ghost moth, dot moth, white ermine, buff ermine, blood vein, oak hook-tip, pretty chalk carpet, shoulder-striped wainscot, large nutmeg, dusty brocade, grey dagger, rustic and mottled rustic. White admiral butterfly has also been recorded.

No reptile or amphibian species have been recorded in the parish, which is surprising due to the number of ponds present. There is a strong likelihood that grass snake will be associated with The Gull and the River Lark. Common lizard is also likely to be present in wider arable field margins and in grassland areas. Great crested newt may be breeding in some of the ponds but have hitherto been unrecorded.

In addition, several Suffolk Rare Plants have been recorded: common valerian, hoary plantain, marsh willowherb, shepherd's needle and two species of lichen.

5.7 Veteran Trees

A number of veteran trees were noted during the walkover survey. Of particular interest are the ancient pollarded hornbeams on the sides of Otley Gull. There are also some mature oak trees within the linear woodland features associated with all of the Gulls, as well as occasional large wych elm.

The NPPF 2019 considers veteran trees, along with ancient woodland as an 'irreplaceable habitat' and any development impacting on such features should be refused. The location of such trees within the Parish means that they are unlikely to be impacted upon by development. Consideration should be given to undertaking new planting in strategic locations, protected from livestock, to provide the veteran trees of the future.

5.8 Built Environment and Associated Habitats

5.8.1. General description of this habitat in the context of Suffolk

This habitat refers broadly to the wide range of structures, materials and microhabitats found in the built environment, including (though not exclusively) farm buildings, houses, gardens, allotments and waste land. These built-up areas, gardens and associated spaces can form a significant proportion of the land use within a settlement, but still provide a wide range of habitats with significant biodiversity value. All provide opportunities and in some case refuges for a wide range of species to complete their life cycles.

The conservation importance of the built environment and its associated habitats also lies as much in the opportunities they provide for people to have close contact with wildlife as in the protection of common and scarcer species. Becoming familiar with the wildlife in a garden often stimulates interest in species and habitats within the wider countryside.

5.8.2. Built Environment Habitat in Otley

The main settlement is located within the centre of the parish, broadly associated with the intersections of several minor roads with the B0179 including Chapel Road. A new development of up to 35 houses is being constructed at Hillview, Church Road, following demolition of a large, redundant industrial building.

From Chapel Road, Hall Lane then leads northwards past the historic moated Otley Hall with its associated gardens. Elsewhere, there are scattered farms and buildings across the parish and small clusters of dwellings associated with the hamlets of Otley Green, Otley Bottom and Gibraltar. Otley College, an Agricultural College dating from the 1970s, is located in the far south of the Parish south of the B1078.

5.8.3. Activities and developments that could affect this habitat in Otley

Rather than note adverse actions, there is a wide range of information and websites generally available on wildlife gardening. Some of the positive actions that individual gardeners can consider include:

- Creating ponds and mini wildflower meadows

- Putting up swift boxes on buildings
- Creating hedgehog highways between gardens
- Composting and creating deadwood areas
- Harvesting rainwater
- Avoiding garden chemicals

5.9 Ecological Networks and Connectivity

The significance of ecological networks and connectivity

Maintaining and improving connectivity between habitats is important in ensuring the longer-term survival of biodiversity in an increasingly fragmented landscape and with a changing climate.

An ecological network is the basic natural infrastructure that enables biodiversity assets (both habitats and species) to become re-established if damaged or in decline and become resilient to the impacts of climate change. Integrated with the natural cycling of water, soil and nutrients, biodiversity provides what are increasingly recognised as vital 'ecosystem services'. These services are not only of intrinsic of social and economic value, but will create social and economic problems if they fall too far into deficit.

The major components of an ecological network can be identified as:

- Core Areas: existing areas/features/resources of importance for biodiversity
- Corridors: existing linear features providing structural connectivity between Core Areas and into the wider landscape
- Stepping Stones: existing habitat patches providing functional connectivity between Core Areas and into the wider landscape
- Restoration Areas: areas/features/resources with the potential to become future Core Areas, or to improve connectivity, if they are enhanced or restored
- Buffer zones: can be included around all these elements to lessen the likelihood of direct or indirect impacts upon them

As already noted, the National Planning Policy Framework (NPPF) 2019 states that Plans should take a strategic approach to biodiversity. It includes a range of requirements to conserve and enhance the natural environment, among them requiring Local Plans (and by association Neighbourhood Plans) to: '...promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species.' Consequently, it is essential that decision makers have access to high quality ecological advice in order to meet these requirements.

In addition, Biodiversity 2020: A strategy for England's wildlife and ecosystems services also features a number of Priority Actions, including to 'establish more coherent and resilient ecological networks on land that safeguards ecosystem services for the benefit of wildlife and people'.

Ecological networks in Otley

The ecological network across the parish is underpinned by the wooded corridors associated with the streams/gullies which lie within the Ancient Valley Claylands. These can be seen well from the

air, contrasting with the large polygons of arable land on the sloping land either side. These corridors in turn link into the River Lark, on to the River Fynn and eventually to the River Deben. As these gulls are the headwaters of the above river system, they have a tendency to be flashy and hold less water or be dry in summer but regardless, these streams along with their marginal habitat represent an important wildlife corridor through this intensively farmed landscape.

Across the wider landscape the network of mature and species-rich hedgerows provide important connectivity through this largely arable landscape. Within this web of features there are larger patches of semi-natural habitat including small woods, small grasslands, occasional uncultivated fields and large gardens associated with historic houses. The land east of Church Road, in particular, has a pattern of small fields and greater amount of woodland compared with elsewhere in the Parish. There is also a cluster of small fields associated with the SSSI at Moat Farm.

Figure 2: Aerial view of landscape centred on Otley Gull and associated streams



5.10 The significance of wildlife and ecological assets for the Neighbourhood Plan

Otley contains the statutory designated site of Moat Farm Meadow SSSI but currently does not have any non-statutorily designated sites such as County Wildlife Sites or Roadside Nature Reserves, either within or overlapping the parish boundaries.

However, it is recommended that further surveys are undertaken of Otley Gull in the spring as it is possible that this site may meet the criteria for designation as County Wildlife Site. Such sites can support a wide range of Priority habitats and species. They complement statutory protected areas and nature reserves by acting as habitat in their own right, or by contributing to the wider ecological network.

Five Priority habitats have been identified within the Parish. Linear features such as the headwater streams and the hedgerow corridors provide the basis of an important network across the parish, whilst ponds, meadows and woodlands are largely spread across the parish, rather than being concentrated into a particular area or landscape character type. Collectively these habitats support 33 Priority species.

Development Management guidance for any new developments within the area covered by the Neighbourhood Plan should seek to protect existing ecological assets and restore, enhance and reconnect the ecological network.

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