



Chapter 5: Case Studies

*The streets we travel, the pubs
and shops we visit,
the fields we walk,
the buildings we occupy,

and the scarps and valleys,
the quarries and bridges,
stations and roundabouts
by which we navigate*

*are reverse engineered from four dimensions
onto a flat sheet,
turning the white
blanks of the OS map
into bright cells.*

From 'The Queen of Polygonia' by Dr Romola Parish, Poet in Residence.

This chapter presents five case studies to illustrate how Historic Landscape Characterisation data can be used to research the past and better manage the future. These case studies were chosen and approved by consultation with the Oxfordshire HLC Stakeholder Group. Further suggestions of how HLC data might be used are presented in Chapter 6.

The five case studies conducted were:

[5.1 Case Study 1: Comparing the Areas of Outstanding Natural Beauty](#)

[5.2 Case Study 2: The Integration and Correlation of the Oxfordshire Historic Landscape Characterisation and Landscape Character Assessment datasets](#)

[5.3 Case Study 3: Capacity for Change “on the edge” of Oxfordshire’s major settlements](#)

[5.4 Case Study 4: HLC and Other Archaeological/Historical Data](#)

[5.5 Case Study 5: Comparing the County and the City](#)



5.1 Case Study 1: Comparing the Areas of Outstanding Natural Beauty

5.1.1 Introduction

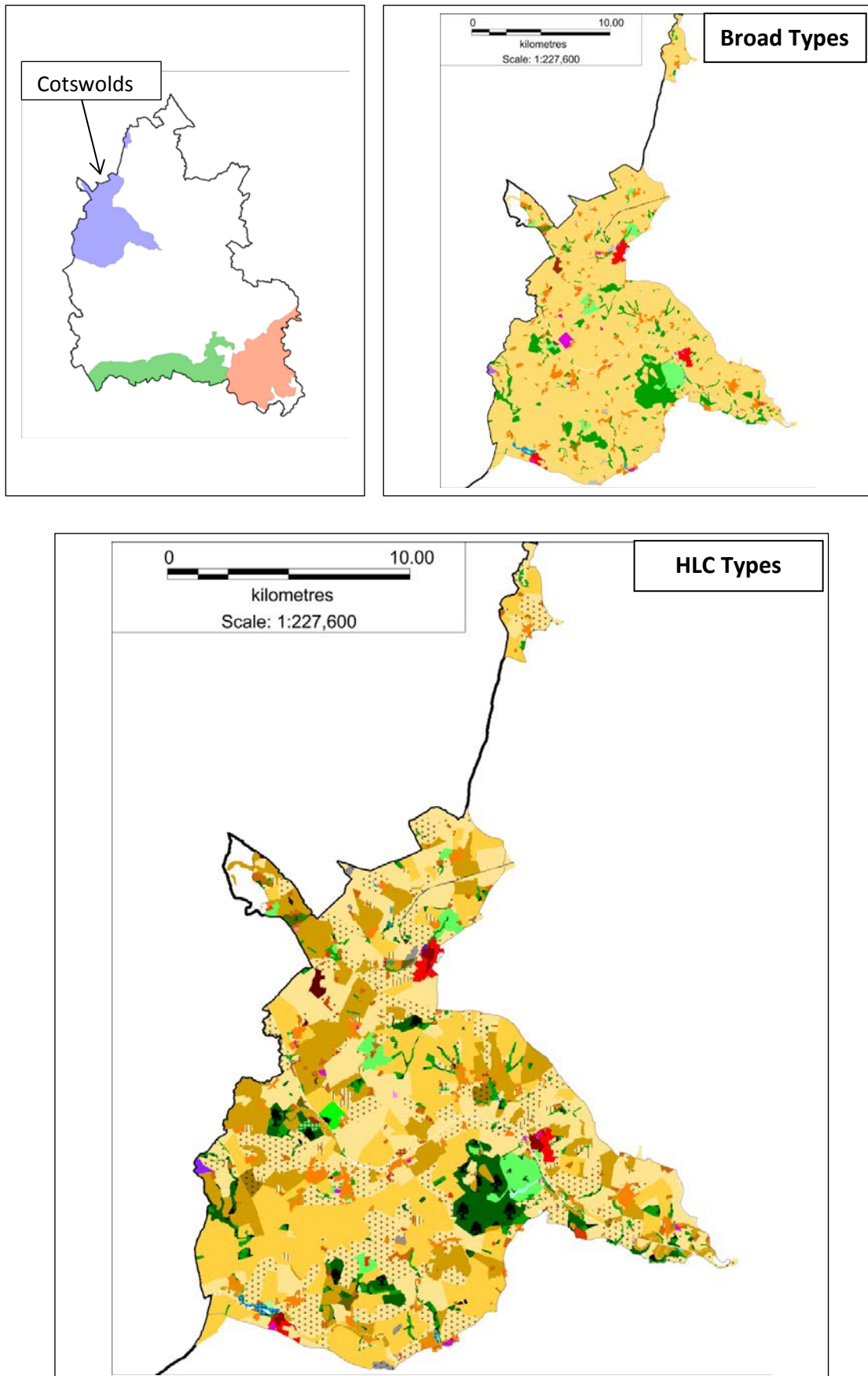
This case study looks at the distribution and occurrence of Broad and HLC Types across the three Areas of Outstanding Natural Beauty (AONBs) found within Oxfordshire – the Cotswold Hills, the Chiltern Hills, and the North Wessex Downs. It compares and contrasts these three areas and considers the landscape differences between these areas and the rest of the county. This case study, therefore, aims to assess the effect of legislative protection on historic landscape and to consider whether these designations, made in the post-war period, responded to and reflect certain aspects of the historic landscape.

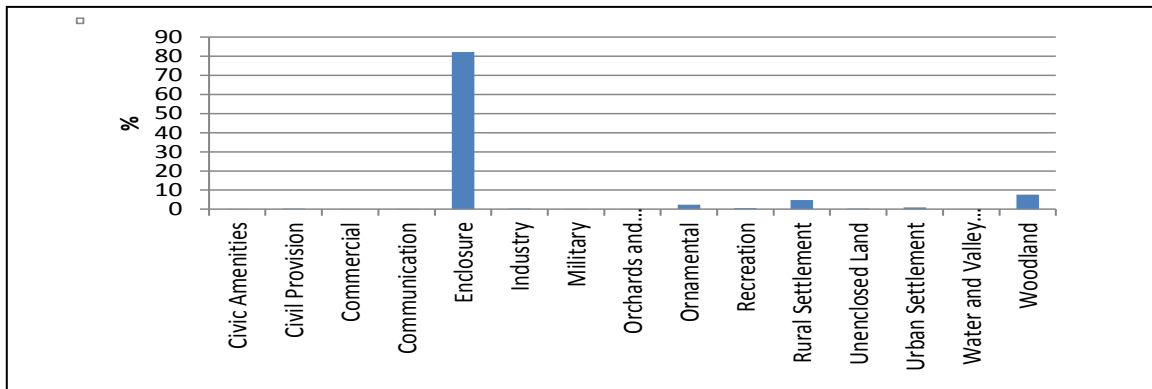
5.1.2 Research Questions

- Do the three AONBs comprise similar landscapes?
- Are these landscapes different to the county in general?
- How does the rate of change in the AONBs compare to that observed in the county in general?



5.1.3 Cotswold Hills



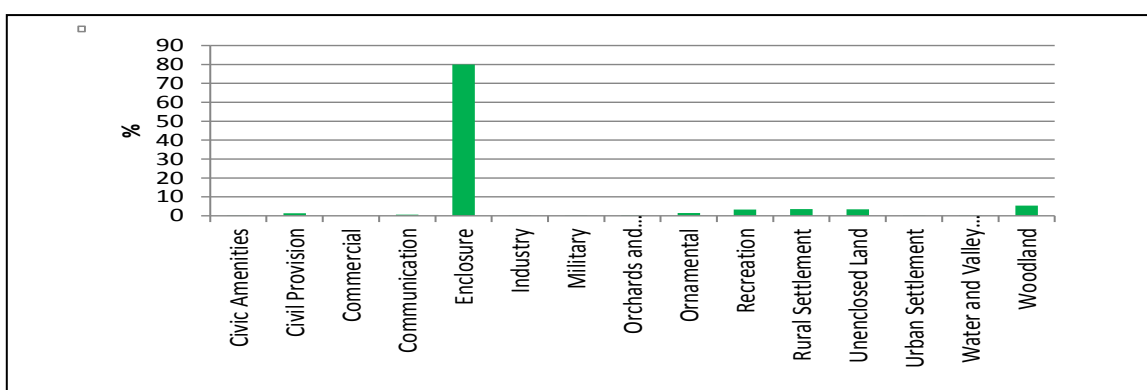
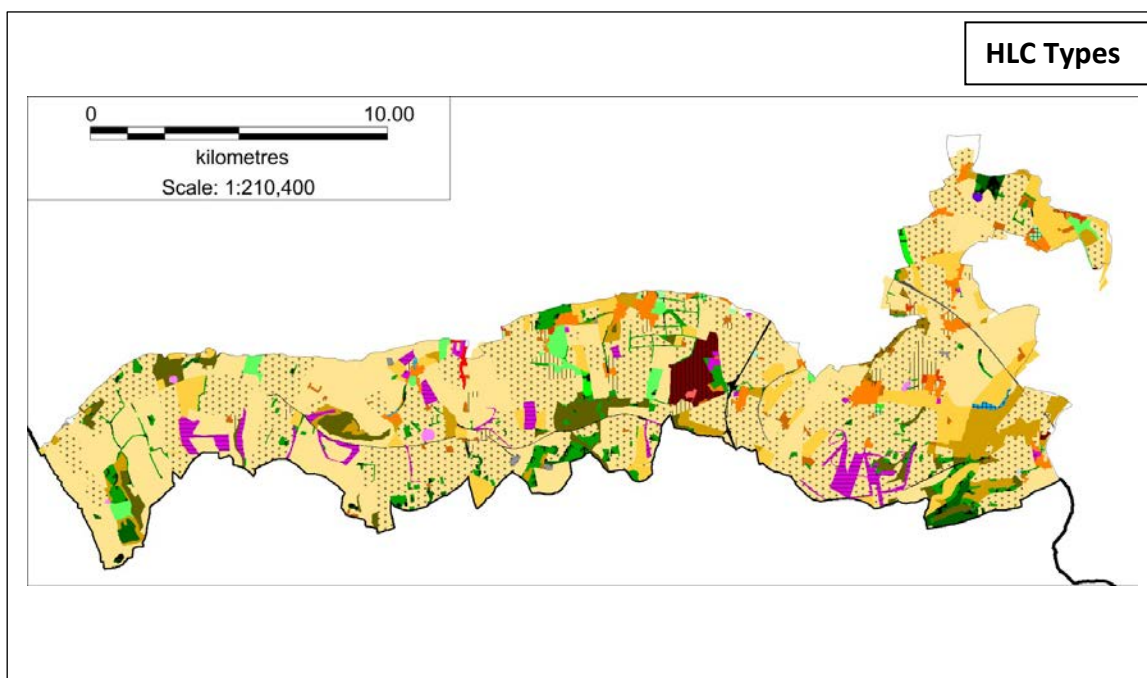
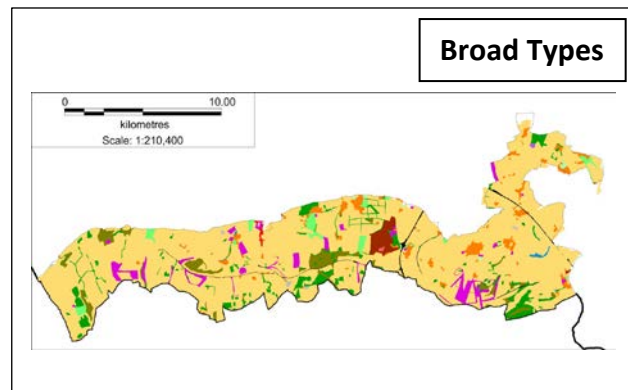
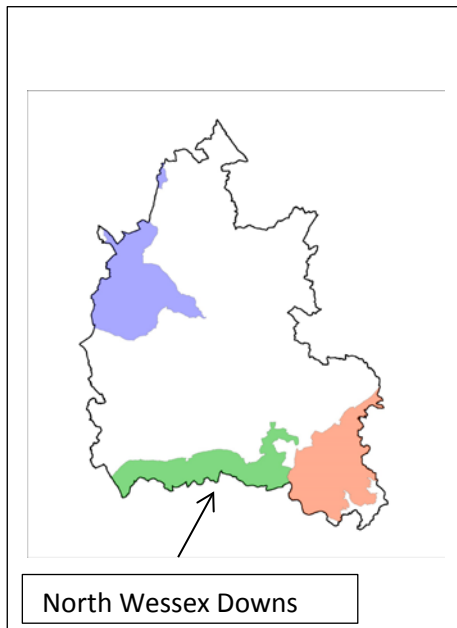


Description

The Cotswolds AONB covers approximately 24,825 hectares of the north-western part of Oxfordshire and includes the towns of Chipping Norton, Burford, and Charlbury as well as many villages and hamlets, such as the Wychwoods and the Rollrights. It is a predominantly rural area, characterised by Enclosures, Woodland, Rural Settlement, and Ornamental Landscapes. Enclosures are the most common Broad Type, accounting for more than 80% of the AONB. Planned Enclosures and Reorganised Enclosures are the most frequently occurring. Woodland Types are predominantly Ancient Woodland and include Sarsgrove Wood, Bruern Wood, and Tangley Woods. There are some large Ornamental Landscapes associated with country houses – at Sarsden, Cornwell, Chastleton, Over Norton, and Great Rollright, to name but a few. The largest is Cornbury Park, a former royal hunting estate and now a grand house, originally built in the 16th century, and deer park. Within the estate, part of the Ancient Wychwood Forest is preserved. Other Broad Types occur in such low numbers, or at too small a scale to be captured by this project, that no one type exceeds more than 1% of the AONB.



5.1.4 North Wessex Downs

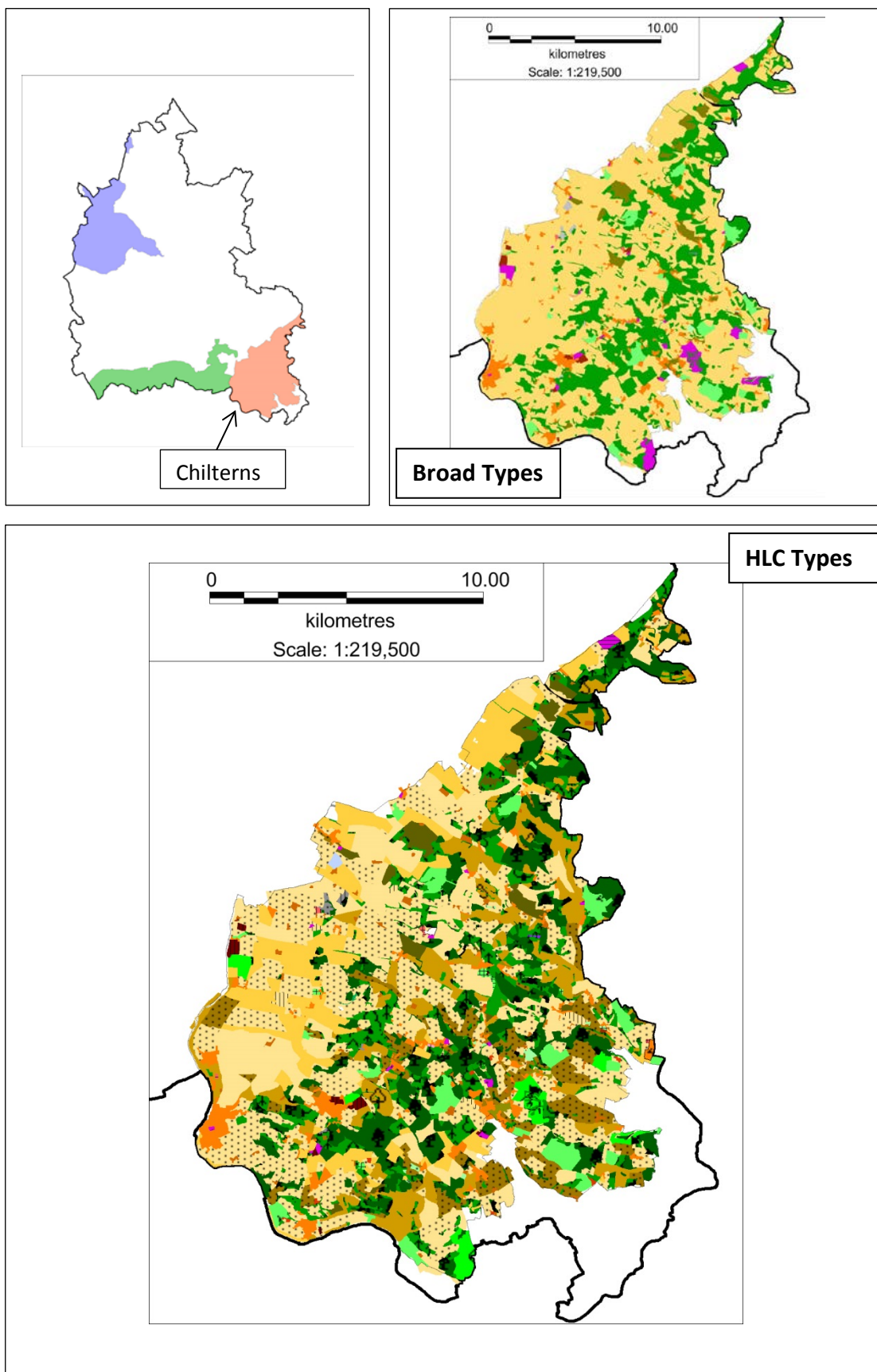


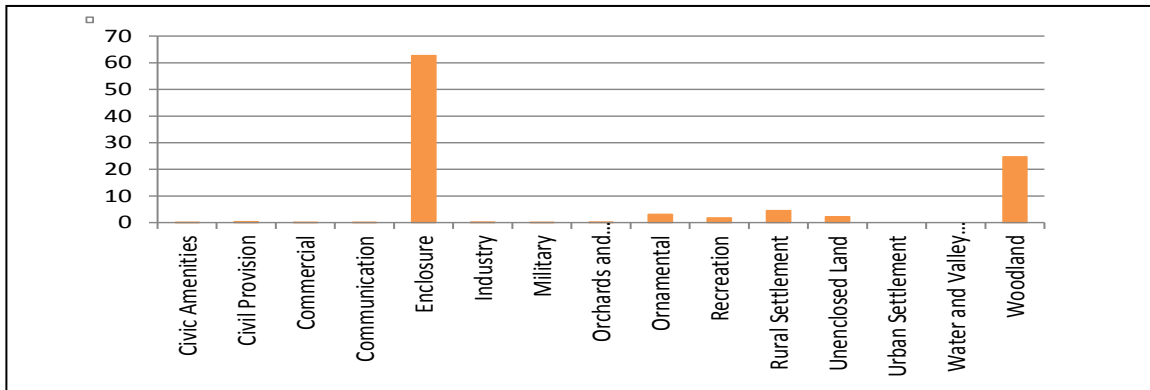
**Description**

The North Wessex Downs AONB covers approximately 18,650 hectares on the southern and south-western edge of Oxfordshire. The AONB does not include any towns in Oxfordshire, skimming only the southern edge of Wantage, but does comprise a number of villages, such as the Hendreds, Blewbury and Aston Tirrold, and Letcombe Regis. It is a predominantly rural area, characterised by Enclosures, Woodland, Unenclosed Land, Rural Settlement, Recreational sites, and Ornamental Landscapes. Enclosures are the most common Broad Type, accounting for 80% of the AONB. Reorganised Enclosures and Prairie Fields are the most dominant types. Woods tend to be Plantations and include those created on Yew Down and Betterton Down and on The Warren. Unenclosed Land is an important component in this landscape, comprising wide areas of Downland which has seen little modern intervention. Areas include Ardington Down and Cholsey Down and the land surrounding the White Horse at Uffington. Traversing this open ground are a number of gallops and horse riding facilities, these account for the high percentage of Recreation Types in the AONB. There are some large Ornamental Landscapes associated with Country Houses – Ashdown House and Park managed by the National Trust, for example, which was originally built in the 17th century. Another significant feature in this landscape is the large site of Harwell Science and Innovation Campus, a research and business park in the middle of the AONB. Other Broad Types occur in such low numbers, or at too small a scale to be captured by this project, that no one type exceeds more than 1% of the AONB.



5.1.5 Chiltern Hills



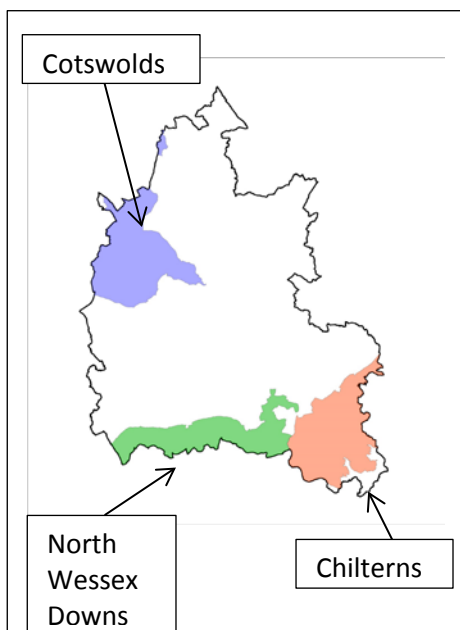


Description

The Chilterns AONB covers approximately 23,160 hectares on the south-eastern edge of Oxfordshire. The AONB does not include any towns in Oxfordshire, skimming only the western edge of Henley-on-Thames, but does comprise a number of Villages, such as Stoke Row, Nettlebed, Christmas Common, and Goring to the west, which is quite large. It is a predominantly rural area, characterised by Enclosures, Woodland, Unenclosed Land, Rural Settlement, Recreational sites, and Ornamental Landscapes. Enclosures are the most common Broad Type, accounting for more than 60% of the AONB - Reorganised Enclosures being the most dominant type. Woodland Types are an important part of this landscape and are quite common and tend to be Ancient Woodland, including Howe Wood and Shotridge Wood. Unenclosed Land also features largely, comprising areas of Downland on the northern scarp slope of the Chiltern Hills – good examples can be found on a stretch from Bald Hill to Watlington Hill. Large golf courses, for example at Caversham Heath and Greys Green Golf Course, account for the prevalence of Recreation types within the AONB. There are some large Ornamental Landscapes associated with country houses – Greys Court Tudor mansion managed by the National Trust, for example. Other Broad Types occur in such low numbers, or at too small a scale to be captured by this project, that no one type exceeds more than 0.5% of the AONB.



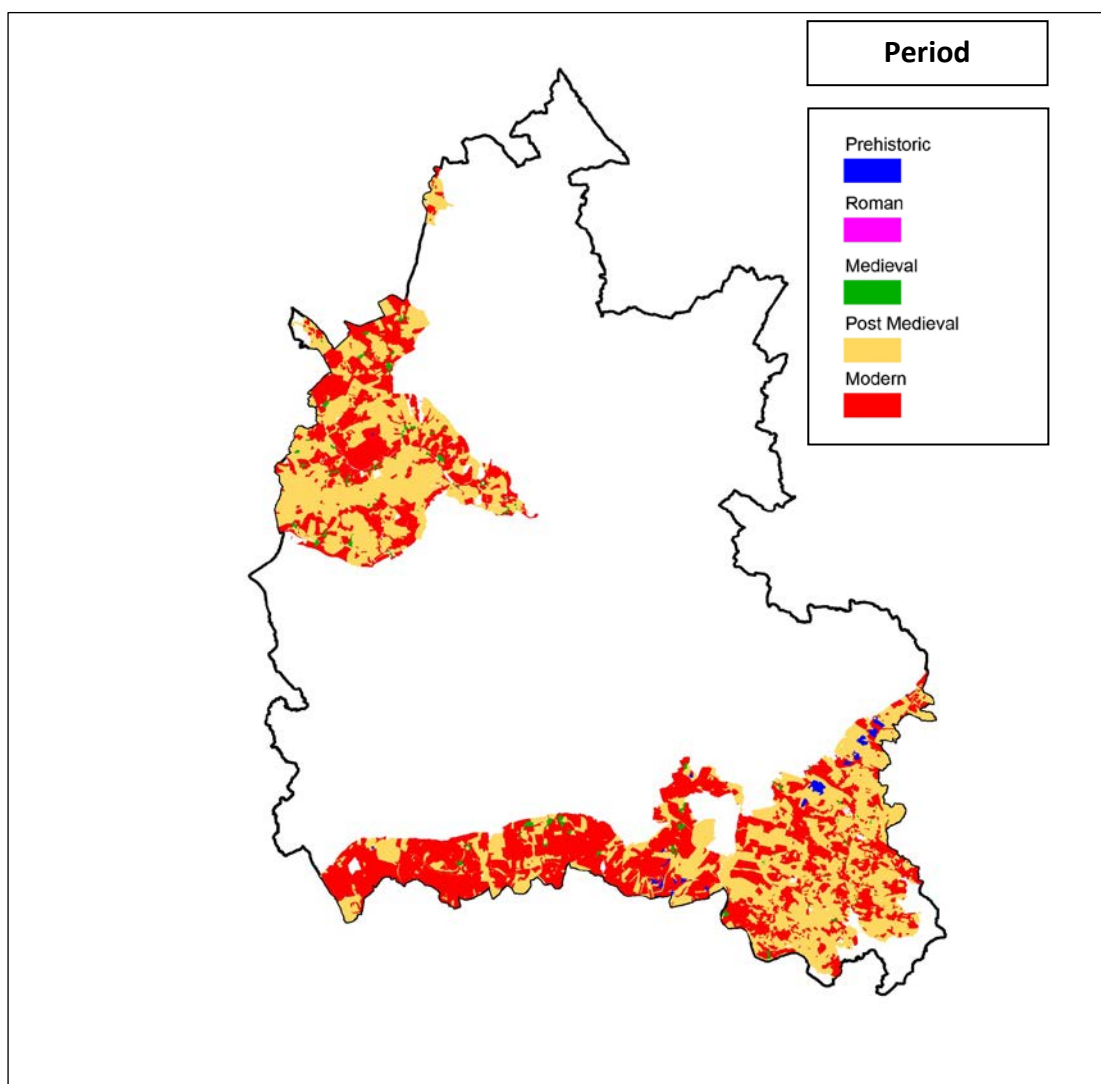
5.1.6 Comparing the AONBs and the rest of Oxfordshire

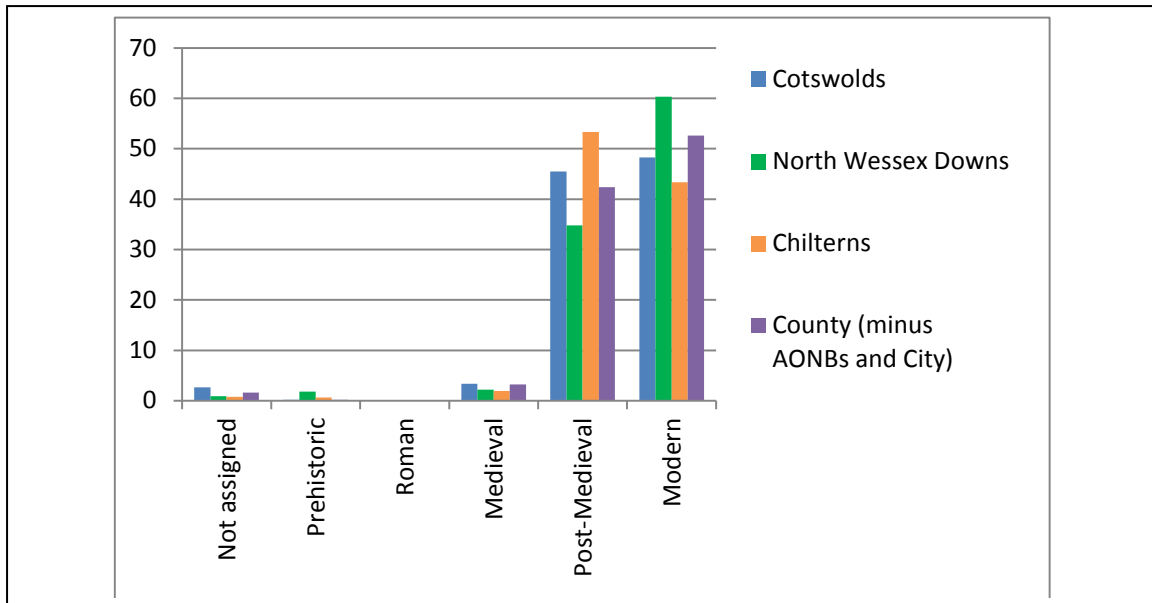


	Cotswolds	NWD	Chilterns	County*
% of Area	9.5	7.2	8.9	72.6
% of Polygons	7.4	4.2	9.0	59.2
Average Polygon (ha)	20.7	27.6	16.0	19.8
Broad Types	15	14	13	15
HLC Types	52	45	43	94

*The figures for the County do not include Oxford city.

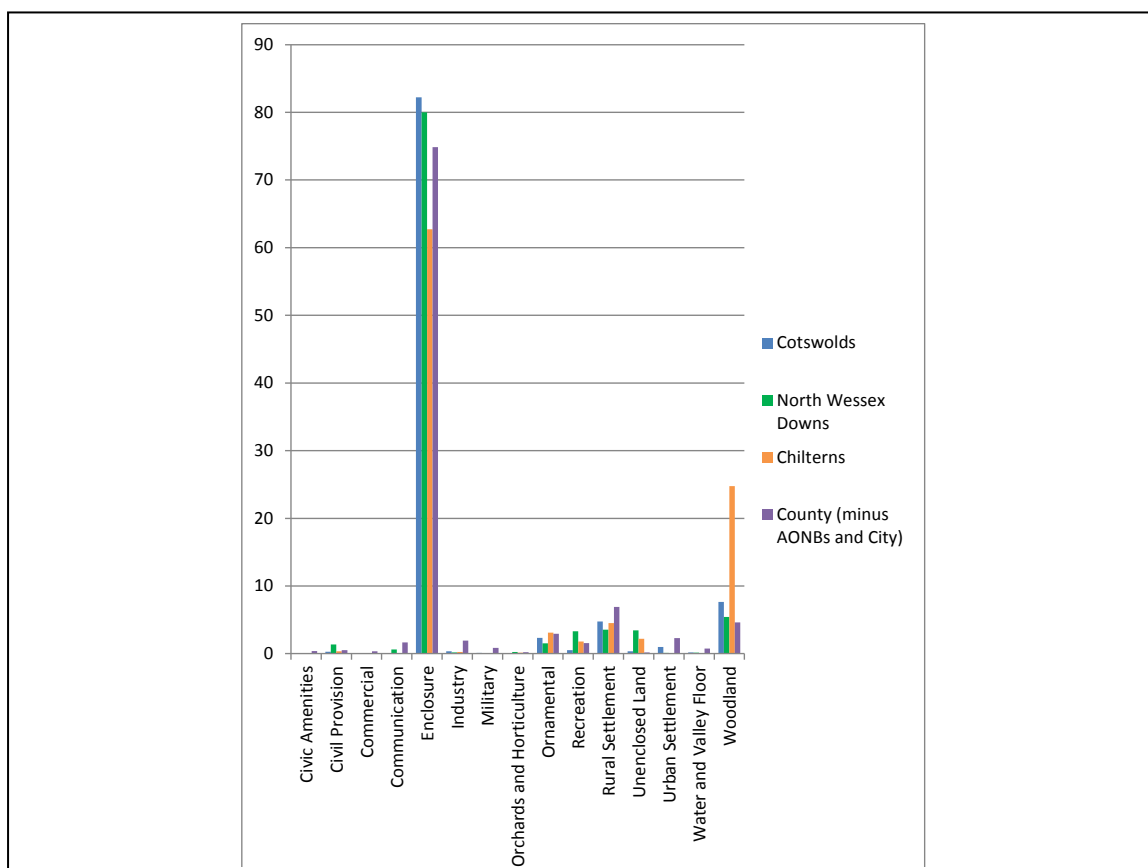
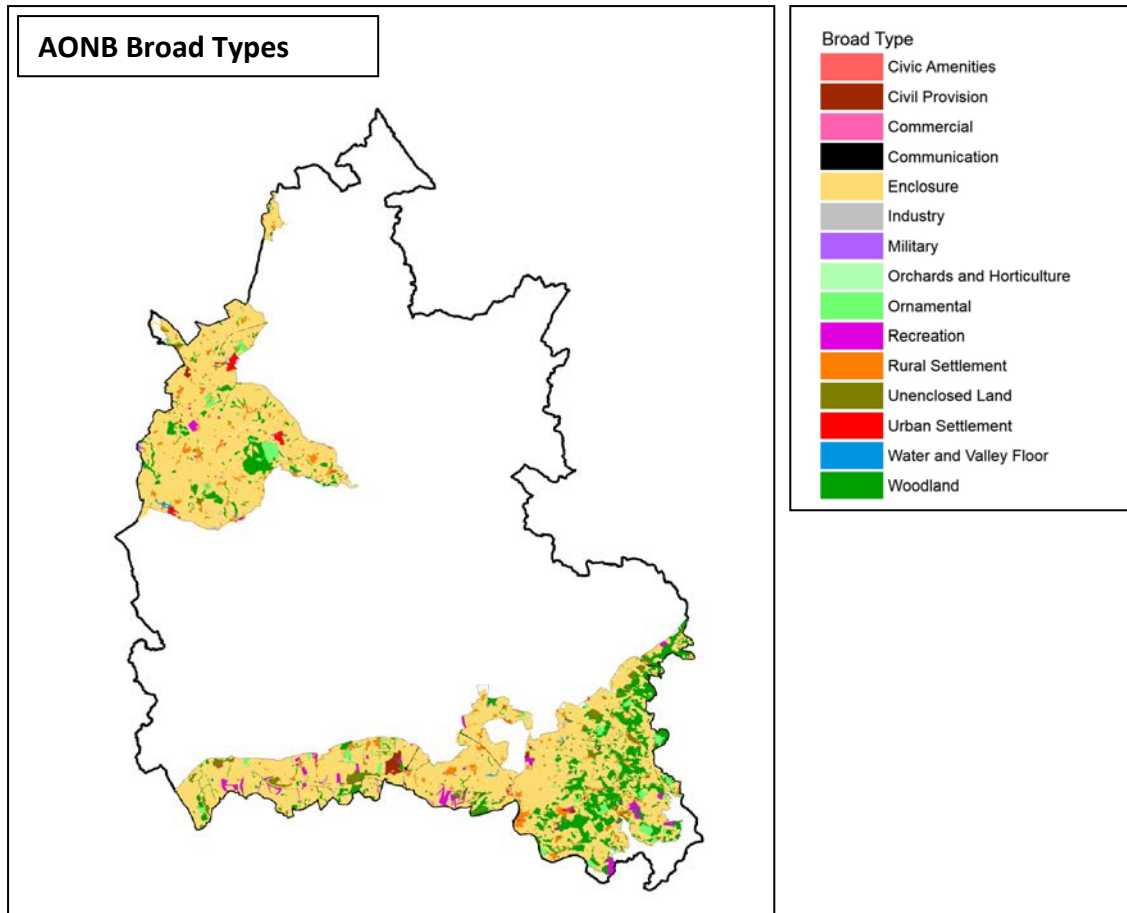
The Cotswolds is the largest AONB and comprises the widest range of landscape types. The NWDs, on average, is made up of the largest units of land characterised as the same, whilst the Chilterns has the smallest. This suggests greater variability between types in the landscape of the Chilterns. However, this variability is restricted to the fewest total number of landscape types.





Period of Current Landscape

Across all three AONBs and the rest of Oxfordshire, Modern and Post-Medieval landscapes are most common. However, variability is apparent. The Chilterns landscape most commonly dates to the Post-Medieval period, whereas Modern landscapes dominate elsewhere. This would suggest that there has been a lower level of change within the landscape in the 20th and 21st century in the Chilterns compared to elsewhere. Post-Medieval landscapes are also more common in the Cotswolds than they are elsewhere in the county. Interestingly, the North Wessex Downs has the highest proportion of landscapes attributed to the Modern period, even more than the county in general. This implies that there has been a high level of change here in the last 117 years and stands in direct contrast to the Chilterns. Modern features in the NWDs tend to be large Amalgamated Enclosures which enclosed former downland either side of the Ridgeway. Medieval landscapes survive in all AONBs and elsewhere in the county and it appears that there is no greater survivability in the AONBs. On the other hand, Prehistoric landscapes only survive in the North Wessex Downs and Chilterns and relate directly to the areas of downland which still exist in these areas.

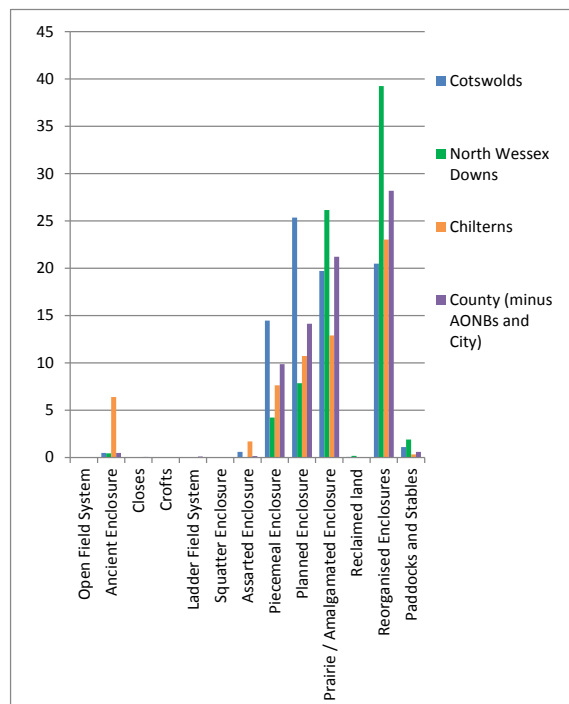




Frequency and Distribution of Broad Types

As is the case in the rest of the county, the three AONBs are dominated by Enclosures. The area covered by Enclosures in the Cotswolds and the North Wessex Downs, however, is higher than that in the County. This suggests a high prevalence of this type in these AONBs. In the Chilterns, Enclosures cover only 62.7% of the AONB, much less than in the other AONBs or the county. This is likely to be due to the high percentage of the AONB covered by Woodland – 24.75%. This Woodland sweeps in a distinct band from North-East to South-West across the AONB and represents the densest concentration of woods in Oxfordshire. Whilst far less common, Woodland remains the second most common Broad Type in the Cotswolds and the NWD. However, Rural Settlement covers a greater percentage of the rest of the county than Woodland. Indeed, Rural Settlement is less common in the AONBs than in the rest of the county, suggesting a lower population density in these areas. Unenclosed Land is almost exclusively found in the NWDs and Chilterns (other examples are recorded within Oxford City, but are not considered here). Ornamental landscapes are slightly more common in the Chilterns than elsewhere and Recreation Types are most frequent in the NWD. Combined, this information suggests that the AONBs are areas of lower population density, characterised by agricultural, open, or wooded landscapes, some of which have been used historically by country houses and parks and are used today for recreational purposes.

Enclosures

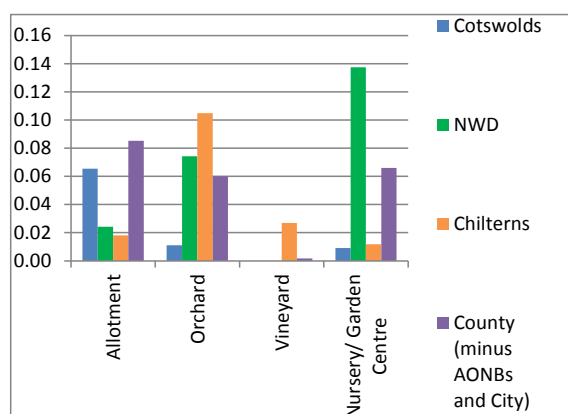


Ancient Enclosures and Assarts are most common in the Chilterns, reflecting the age of this landscape and the informal way in which it was enclosed. Piecemeal and Planned Enclosures are most common in the Cotswolds, suggesting the preservation of a Post-Medieval fieldscape which has been reorganised, primarily for agricultural purposes, since the 18th century. Conversely, the NWDs contain the highest percentage of Prairie/Amalgamated Fields, Reorganised Enclosures, and Paddocks. These tend to date to the Modern period and reflect recent reorganisations of this landscape into large fields for 20th century agriculture and for equestrian sports.

**Trajectory of Change between 1881 and 2010 (% Gain or Loss)**

	Cotswolds	NWD	Chilterns	County
Open Field System				-98.8
Ancient Enclosure	-69.8	-49.9	-60.5	-67.3
Closes				-75.8
Crofts			0.0	-61.8
Ladder Field System				-22.0
Squatter Enclosure				-47.7
Assarted Enclosure	-4.8		-34.4	-29.1
Piecemeal Enclosure	-49.4	-40.1	-45.8	-52.6
Planned Enclosure	-29.3	-76.9	-48.5	-53.7
Prairie / Amalgamated Enclosure	444.1	-12.2	44.2	153.0
Reclaimed land	∞	∞		752.5
Reorganised Enclosures	35.5	1402.9	211.5	23.8
Paddocks and Stables	3642.2	∞	269.5	5599.8

By looking at how the area covered by each type of Enclosure changed between 1881 and 2010, it is clear that there has not been any less change in the AONBs than in the rest of the county. Whilst the loss of Ancient Enclosures in the Chilterns and NWDs has been less than in the rest of the county, the Cotswolds have seen greater loss. Similarly, the rate of loss of Assarts is greater in the Chilterns than it is elsewhere and the loss of Planned Enclosures peaks in the NWDs. Where Types have become more common, the AONBs also show greater levels of change – for example, Prairie Fields in the Cotswolds and Reorganised Enclosures in all three of the AONBs have seen greater growth than in the county.

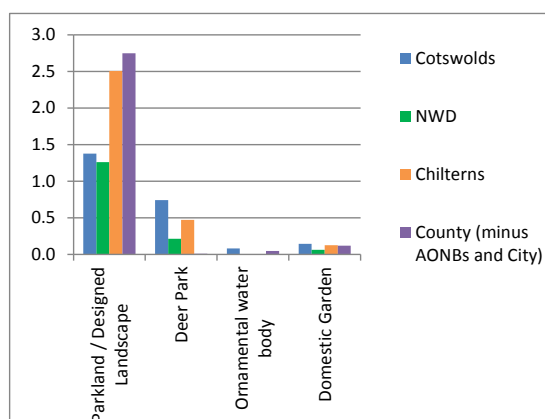
Horticulture

Allotments are most commonly found outside of the AONBs, however, all other Horticulture Types are more common in one or other of the AONBs – Orchards in the Chilterns and NWD, Vineyards in the Chilterns, and Garden Centres in the NWD. The predominance of allotments outside of the AONBs may relate to the concentration of major urban centres in the rest of the county.

**Trajectory of Change between 1881 and 2010 (% Gain or Loss)**

	Cotswolds	NWD	Chilterns	County
Allotment	-86.14	-62.4498	-21.58	-17.2364
Orchard	-89.34	-66.9739	-21.99	-71.5213
Vineyard			∞	-38.7508
Nursery/ Garden Centre	∞	∞	∞	331.5811

There has been greater loss of Allotments in all three of the AONBs than the in the rest of the county. Orchards have also decreased at a greater rate in the Cotswolds than they have anywhere else. However, Orchards have remained more stable in the Chilterns and, in general, this AONB has seen the least amount of change in these types. Garden Centres and Nurseries tend to be a feature of the modern landscape and their growth is shown across all AONBs and the wider county.

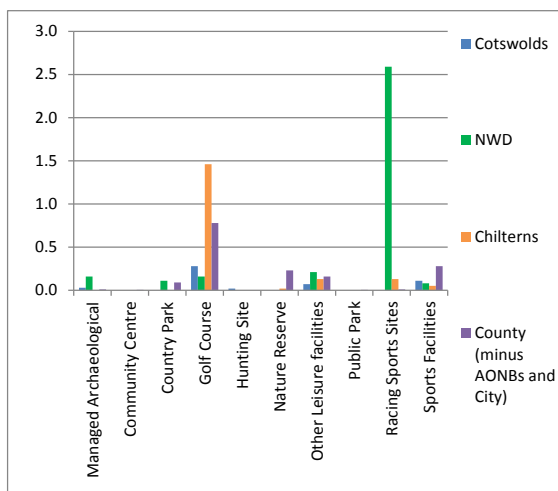
Ornamental

Whilst Ornamental Landscapes are a common type in all AONBs in Oxfordshire, they are more common outside of the AONBs. The Chilterns has the highest percentage of this type and comes close to the percentage of land covered by this type outside of the AONBs.

Trajectory of Change between 1881 and 2010 (% Gain or Loss)

	Cotswolds	NWD	Chilterns	County
Parkland / Designed Landscape	-5.19	11.49	-3.01	-10.21
Deer Park	0.00	-40.99	0.00	0.00
Ornamental water body	0.00			4.16
Domestic Garden	3.63	5.32	1263.23	14.96

With the notable exception of Deer Parks in the NWDs – which relates to changing use of landscape at Ashdown Park - Ornamental Landscapes have seen less loss in the AONBs than in the rest of the county. Large Domestic Gardens have also increased more rapidly in the Chilterns than anywhere else, suggesting that gardens and designed landscapes are of particular importance within the AONBs.

**Recreation**

Recreational Landscapes are a particularly common feature within the AONBs. Managed Archaeological Sites and Racing Sports Sites predominate in the NWDs and Golf Courses are frequently found within the Chilterns. The prevalence of this type likely reflects the attraction of these landscapes for leisure and recreational activities.

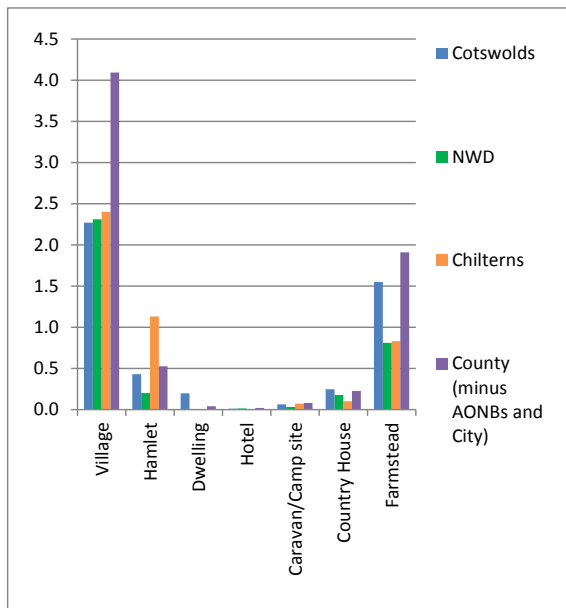
Trajectory of Change between 1881 and 2010 (% Gain or Loss)

	Cotswolds	NWD	Chilterns	County
Sports Facilities	∞	∞	∞	5280.0
Racing Sports Sites		172.7	∞	757.5
Other Leisure facilities	∞	∞	190.0	2728.0
Community Centre				∞
Country Park		∞		1828.9
Public Park				∞
Golf Course	∞	∞	∞	∞
Hunting Site	∞			
Nature Reserve			∞	∞
Managed Archaeological Site	0.0	∞		914.5

Across the AONBs and the rest of the county, Recreation Types have seen significant levels of growth since the late 19th century. For many types, such as Sports Facilities and Golf Courses, the 20th century saw their introduction to the AONBs and not just their expansion. Given the prevalence of Racing Sites in the NWDs, it is surprising that their growth has been so slight compared to the rest of the county.



Rural Settlement



Villages are far less common in the AONBs than in the rest of the county, implying a lower population density in the former. This holds true even when Hamlets, which are far more frequently found in the Chilterns than in any other part of Oxfordshire, are considered. Farmsteads are also more common elsewhere in the county, but their occurrence is also quite high in the Cotswolds. Despite the prevalence of Ornamental Landscapes in the AONBs, Country Houses are consistently found throughout Oxfordshire; this may suggest that the grounds associated with these houses tend to be larger in the AONBs than elsewhere.

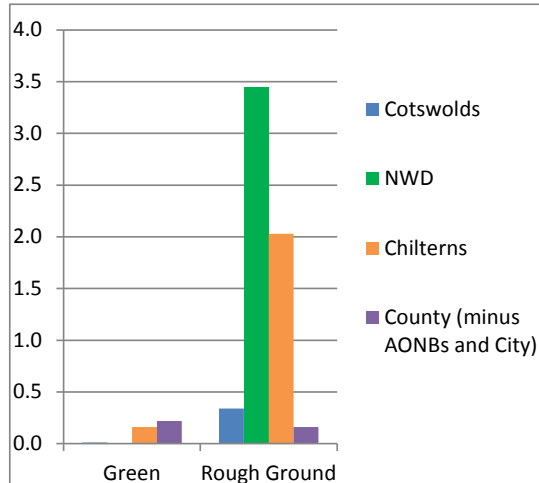
Trajectory of Change between 1881 and 2010 (% Gain or Loss)

	Cotswolds	NWD	Chilterns	County
Village	74.1	71.3	166.4	109.5
Hamlet	7.9	70.5	120.1	58.7
Dwelling	20.7			71.5
Hotel	0.0	0.0		143.7
Caravan/Camp site	∞	∞	∞	∞
Country House	15.0	14.0	90.1	-6.0
Farmstead	32.0	23.9	55.3	40.9

Throughout Oxfordshire, with the exception of Country Houses in the county, Rural Settlement Types have seen significant levels of growth since the late 19th century. The greatest change has occurred in the Chilterns AONB, which has seen the biggest increase in Villages, Hamlets, Country Houses, and Farmsteads. In general, the Cotswolds and the NWDs have experienced a lower level of growth than elsewhere. In all three AONBs, however, Country Houses have become more common, which is in contrast to elsewhere in the county where land characterised as such has decreased.



Unenclosed Land



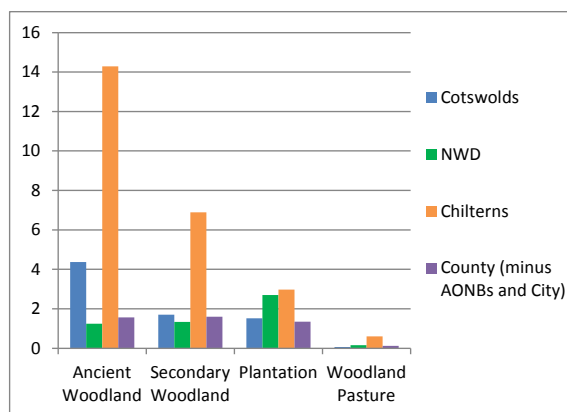
Rough Ground is more commonly found in the three AONBs than in the wider county. It is a particularly dominant characteristic of the landscapes of the NWDs and the Chilterns. Smaller amounts of Rough Ground are found in the Cotswolds. In contrast, Greens have been recorded more frequently outside of the AONBs.

Trajectory of Change between 1881 and 2010 (% Gain or Loss)

	Cotswolds	NWD	Chilterns	County
Green	0.0		0.0	-17.2
Marsh				-100.0
Rough Ground	-32.5	-73.3	-33.6	-78.7

Since the late 19th century, Marsh Types have been wholly removed from Oxfordshire. Marshland does still exist in the county, but is now managed as Nature Reserves – for example, Otmoor. Rough Ground has decreased throughout the county, with the highest rate of loss outside of the AONBs. Whilst lower than in the rest of the county, the rate of loss in the NWDs has been quite high and is much higher than in the Chilterns. Despite this, Rough Ground remains a common type in this AONB. Land characterised as Green has remained stable in the Cotswolds and the Chilterns, but has experienced some loss in the rest of the county.

Woodland



Woodland is a dominant characteristic in the Chilterns, where it accounts for almost 25% of the AONB. All Woodland Types are more common in the Chilterns and the Cotswolds AONBs than in the rest of the county. Conversely, only Plantations are more common in the NWDs and Woodland tends to be rarer in this AONB than elsewhere in Oxfordshire.

**Trajectory of Change between 1881 and 2010 (% Gain or Loss)**

	Cotswolds	NWD	Chilterns	County
Ancient Woodland	0.0	-0.4	-2.5	-4.4
Secondary Woodland	66.6	22.2	50.7	68.8
Plantation	288.8	205.2	652.4	103.8
Woodland Pasture	∞	∞	23.6	-44.2

The amount of land characterised as Ancient Woodland has remained broadly stable within the AONBs, but there has been some loss outside the AONBs. Conversely, there has been a bigger increase in Secondary Woodland in the rest of the county than in the AONBs, particularly in the NWDs where the natural expansion of woodland has only been slight. The largest gain in Plantations has been in the Chilterns AONB and, in general, the growth of this type has been greatest within the AONBs. Finally, whilst Woodland Pasture has increased in the AONBs it has become less common outside of these protected areas.



5.1.7 High Value Landscapes¹

A public survey was conducted using the Conservation Principles to capture people's opinions regarding the Historical, Aesthetic, and Communal Value of each HLC Type in Oxfordshire.

People were asked the following questions to assign a rating of 1 (Low) to 3 (High) for each value:

Historical - Do landscapes of this type link you to the past? To past events or past people?

Aesthetic - Are landscapes of this type attractive? Do they inspire you?

Communal - Are landscapes of this type important to your community, your social or religious values?

It is recognised that this a simplistic and highly subjective methodology, but it aims to develop another way of looking at historic landscapes through the eyes of the people who live and work within them.

The fourth Conservation Principle, **Evidential** Value, was assessed by the county Archaeological Team as experts in archaeological and historic building preservation.

The results of these two surveys were collated and the public survey was averaged using the Mode function. The summed total of the four values, the Conservation Value, was then divided into five categories – quintiles – these were: High (5), Medium-High (4), Medium (3), Low-Medium (2), and Low (1). These are referred to as the Conservation Categories.

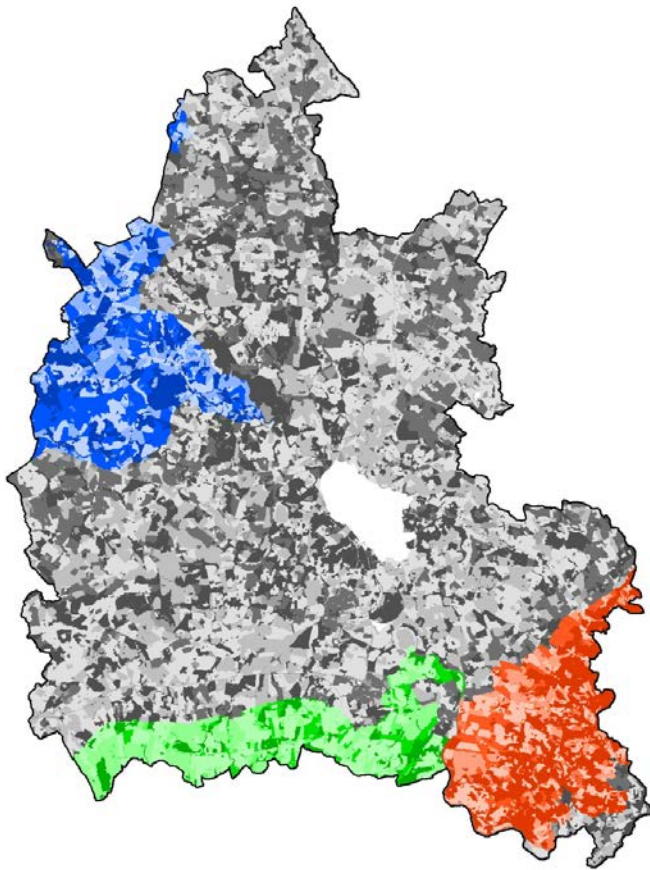
The Conservation Categories were mapped in each of the AONBs and across the County. Two maps were created: one map shows the raw categories for each HLC Type and the second shows weighted categories. To reflect the focus of *historic* landscape study, Historical and Evidential Values were weighted as 1 (Low), 3 (Medium), 6 (High), this impacted the total Conservation Value and, therefore, the Conservation Category of HLC Types.

A breakdown of Historical, Aesthetic, Communal, and Evidential Value is also given for each AONB.

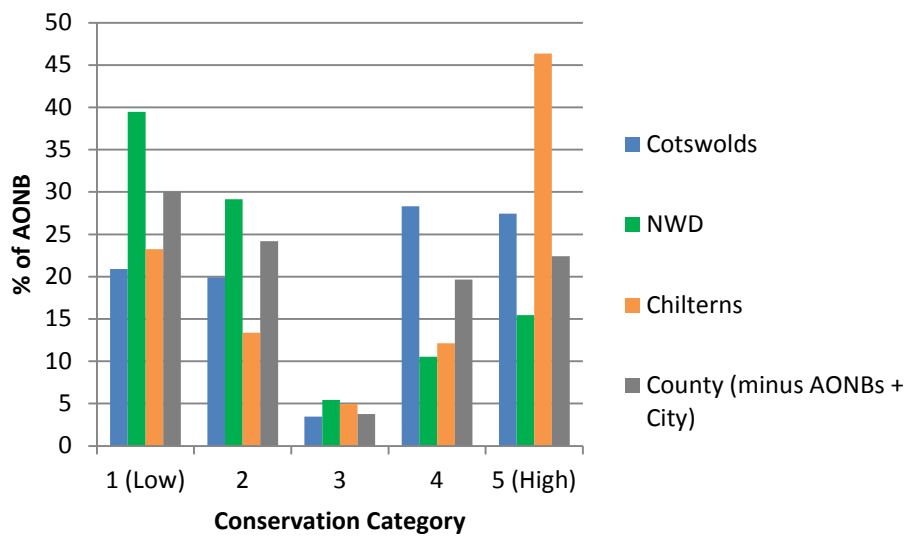
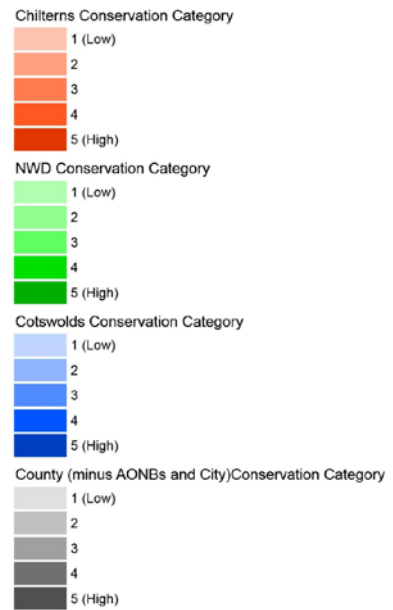
¹ English Heritage. 2008. Conservation Principles. Policies and Guidance for the sustainable management of the Historic Environment.



Non-Weighted Conservation Categories

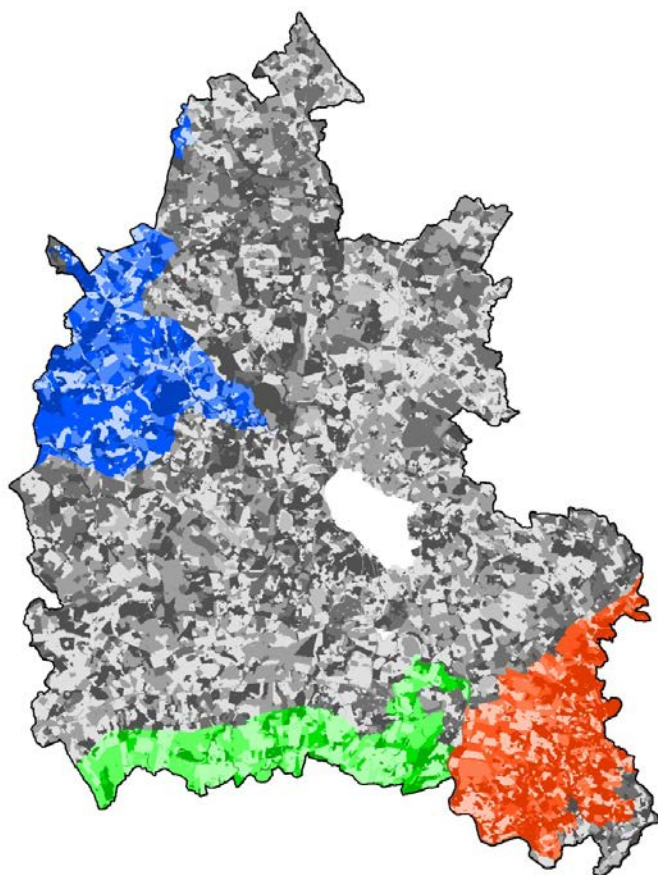


Legend



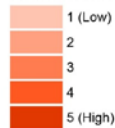


Weighted Conservation Categories

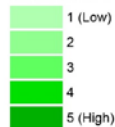


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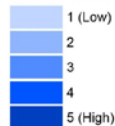
Chilterns Conservation Category



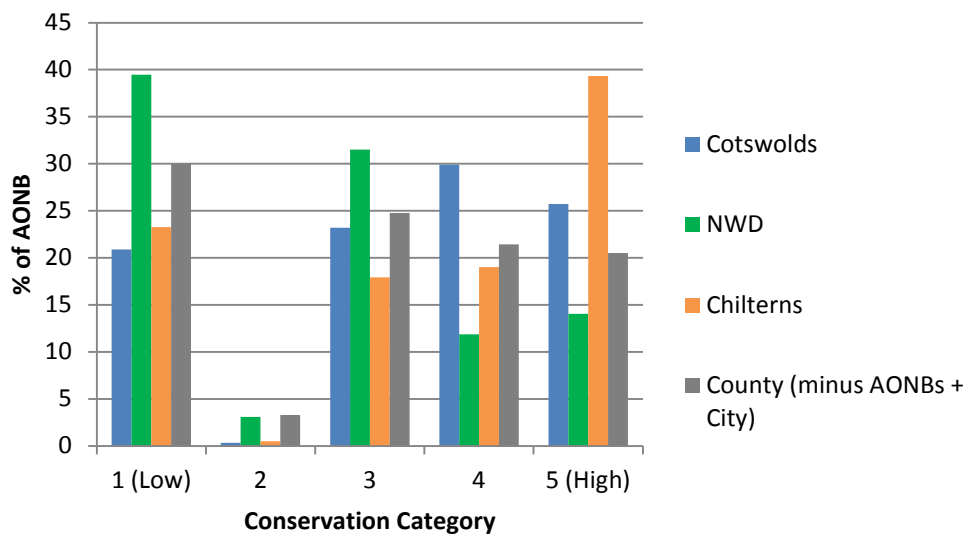
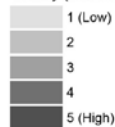
NWD Conservation Category



Cotswolds Conservation Category



County (minus AONBs and City) Conservation Category



**Non-Weighted v. Weighted Conservation Categories**

The weighting of Conservation Values applied to Historical and Evidential Values which were valued between 1 and 6, rather than 1 and 3. This reflects the *historic* nature of this project. This weighting affected the total Conservation Value of HLC Types and, in some cases, this resulted in the classification of a type within a different Conservation Category. The types affected were: Health Care Facility, Road, Bike Path/Bridleway, Prairie/Amalgamated Enclosure, Military Shooting Range, Orchard, Domestic Garden, Sports Facilities, Nature Reserve, Rural and Urban Hotel, Urban Market, Secondary Woodland.

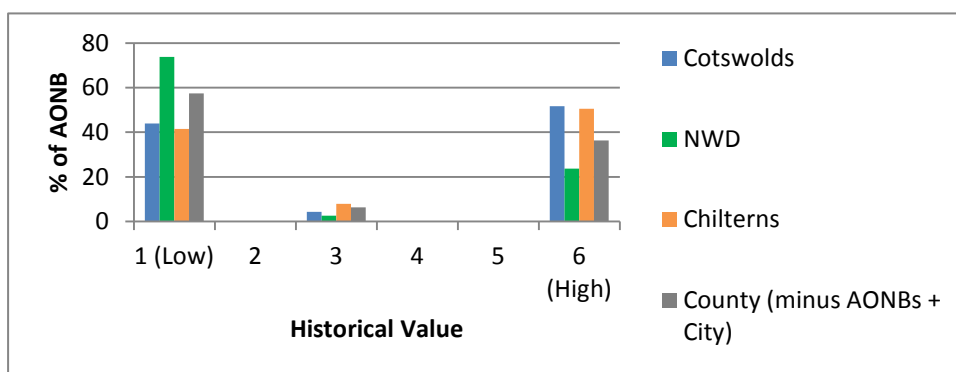
Prairie/Amalgamated Enclosures (re-categorised as Medium from Low-Medium) and Secondary Woodland (re-categorised as Medium-High from High), given their size and frequency, have the biggest impact. The former, in particular, accounts for the dramatic difference between Category 2 on the Non-Weighted and Weighted map and graph.

Distribution of Weighted Conservation Categories

Conservation Category 5, the highest category, is most commonly found in the Chilterns AONB and covers 39% of the area. This is higher than any of the other AONBs and significantly more than the 21% of the County categorised as such. This is likely to be due to the concentration of Ancient Woodland, Rough Ground, Parkland, and Ancient Enclosures within the Chilterns, all of which are Category 5. Patches of Ancient Woodland is found throughout the AONB, interspersed with Ancient Enclosure. Rough Ground is found on the north-facing scarp slope of the hills, running in a north-west to south-east line through the AONB.

The Cotswolds AONB also has a high percentage categorised as Category 5 – 26% of the AONB. Ancient Woodland in this area will account for some of this, but most of the land categorised as such will be Piecemeal Enclosure, which concentrates in this area. These irregular post-medieval fields cluster around Hamlets and Villages, also Category 5 and a common type in this AONB. Parkland/Designed Landscapes, Deer Parks, and Ancient Woodland account for the large areas of Category 5 in this AONB.

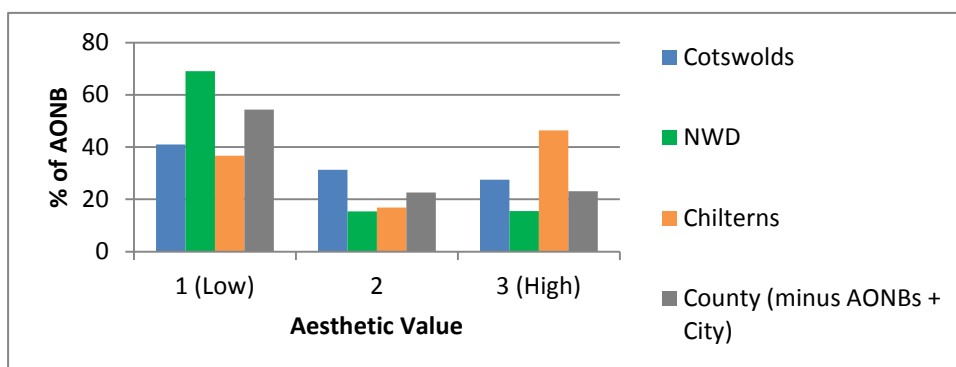
Looking at the distribution of the categories, the North Wessex Downs AONB stands out. It has a higher percentage of its area assigned a Category 1 than the County, 40% compared to 30%. This is likely to be due to the large area of Reorganised Enclosures within this AONB. Category 5 types appear to have a distinct distribution within the AONB, stringing out east-west along the northern edge and through the centre. This typically corresponds with areas of Rough Ground.



Historical Value

The Cotswolds and Chilterns AONBs have a similarly high percentage of their area categorised as Historical Value 6, 52% and 51% respectively. This indicates the concentration of types associated with historical events and people in these areas, and ties in with evidence to suggest the high preservation of medieval and post-medieval landscapes in these AONBs discussed above. Conversely, the North Wessex Downs has the highest percentage of land categorised as Historical Value 1, more so than the rest of the county. This likely reflects the extent of modern adaptation within this area, in particular in relation to modern agricultural practices and horse riding facilities. Despite this, over 20% of this AONB has been assigned the highest value. This typically relates to the open Rough Ground along the Ridgeway.

The fact that a higher percentage of the Cotswolds and Chilterns AONBs has been afforded the highest Historical Value than the wider County implies that AONB status may have had an effect, preserving those landscapes types perceived to create a link to the past. This is quite different from the results from the North Wessex Downs.





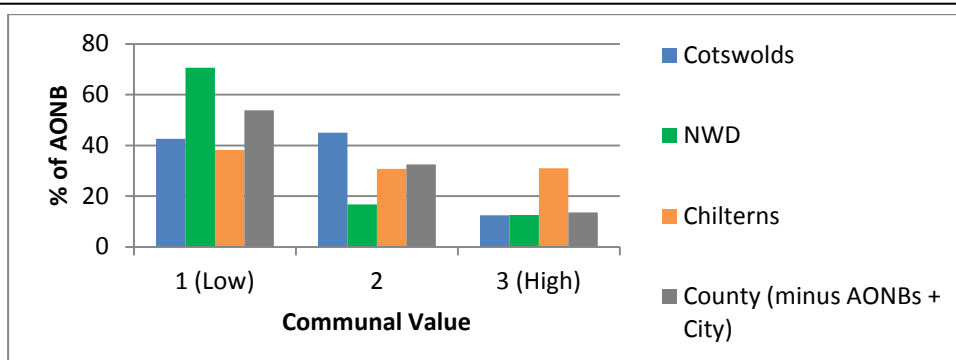
Aesthetic Value

The Chilterns AONB has a large percentage of its area covered by types assigned a high Aesthetic Value – 46% - this is higher than the other two AONBs and the rest of the County. This is likely due to the concentration of Ancient and Secondary Woodland, Ancient Enclosures, and Parkland in this AONB, all of which are rated highly for aesthetic value.

Despite ranking so highly for Historical Value, only 28% of the Cotswolds AONB has been assigned the highest Aesthetic Value. This is not much more than the 23% of the County valued as such and 41% of the AONB has been valued as 1. The concentration of types valued as 2 is likely to be due to the high occurrence of Planned Enclosures in this AONB, a type which, whilst given the highest Historical Value, was only assigned Medium Aesthetic Value.

Again the North Wessex Downs stands out, being aesthetically valued lower than the other AONBs and the County. Again this value is likely due to the presence of Reorganised Enclosures which dominate this area. This is compounded by Prairie/Amalgamated Enclosures which also frequently occur in this AONB and which are given the value of 1.

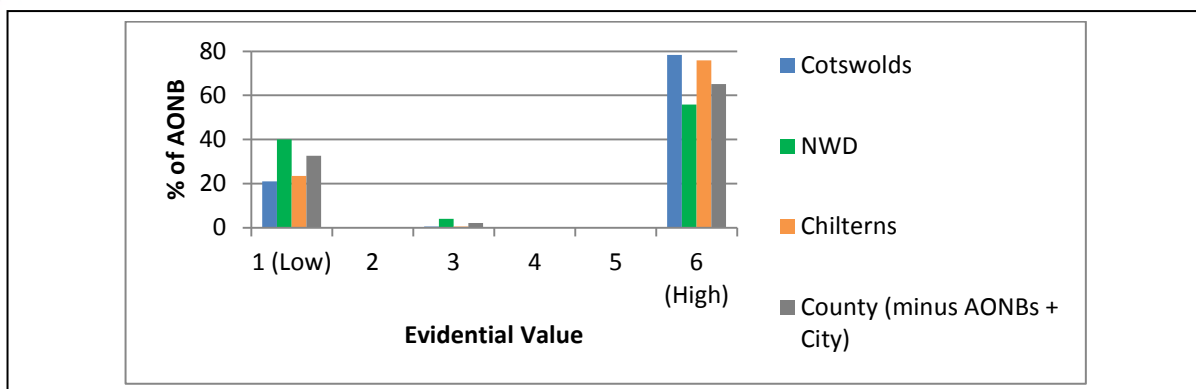
The Chilterns and, to a lesser extent, the Cotswolds do score higher Aesthetic Values than the wider County, which may be due to their AONB status, preserving those parts of the landscape thought to be pretty and inspiring.



Communal Value

Interestingly, across all the AONBs and the wider County, Communal Value has generally been rated quite low. Types with high Communal Value include Archaeological Sites, historic Military sites (e.g. Castles and Hillforts), Canals, Parkland, and Ancient Woodland – all types which are used for recreational purposes by the public. The preponderance of Ancient Woodland and Parkland in the Chilterns AONB will account for much of its high Communal Value land. Conversely, those types which have a low Communal Value include the large modern Military sites and many of the modern Enclosure types, often types which are not accessible to or of limited access to the public. These types cover a high percentage of land and, in part, explain the dominance of the lowest Communal Value category. The concentration of modern field types – Reorganised and Prairie/Amalgamated Enclosures - in the North Wessex Downs accounts for the high percentage of land assigned Communal Value 1 in this AONB.

Outside of the Chilterns, there is little difference between the amount of land assigned a high value in the AONBs and the County. This may indicate that there is perceived to be no more publically accessible land in these AONBs than in the rest of the County.



Evidential Value

A type's Evidential Value, which equates directly to its Archaeological Potential (archaeological and historical building remains), tends to be either high or low, with very few assigned a medium value.

Modern change in the North Wessex Downs Landscapes is likely to have reduced this potential, hence the high percentage of low Evidential Value types in this area. Conversely, high value types are more commonly found in the Cotswolds and Chilterns AONBs than in the rest of the county. This is likely due to a higher level of preservation of older landscapes in these areas which leave archaeological and historic building remains undisturbed. Types with high Evidential Value include: Woodland, Ancient Enclosures, historic Military sites, Religious Buildings, and Villages. Interestingly, it also includes the Ridgeway and Rough Ground types, both of which are present in the North Wessex Downs. However, these are not common enough to outweigh the effects of modern types with low Evidential Value.

**Weighted Survey Results**

HLC Type	Historical Value (Low = 1, Medium = 3, High = 6)	Aesthetic Value (Low = 1, Medium = 2, High = 3)	Communal Value (Low = 1, Medium = 2, High = 3)	Evidential Value (Low = 1, Medium = 3, High = 6)	Conservation Value	Conservation Rating	Conservation Category
Civic Amenities - Reservoir	1	2	2	1	6	Low-Medium	2
Civic Amenities - Utilities	1	1	1	1	4	Low	1
Civic Amenities - Sewerage Treatment works	1	1	1	1	4	Low	1
Civic Amenities - Waste Disposal	1	1	1	1	4	Low	1
Civil Provision - Educational Facility	6	2	3	3	14	Medium-High	4
Civil Provision - Oxford College	6	3	3	6	18	High	5
Civil Provision - Health Care Facility	1	1	3	3	8	Low-Medium	2
Civil Provision - Religious and Funerary	6	2	3	6	17	High	5
Civil Provision - Gov Office and Civic Centre	3	1	3	3	10	Medium	3
Civil Provision - Immigration Detention Centre	1	1	1	1	4	Low	1
Civil Provision - Police station	1	1	3	1	6	Low-Medium	2
Civil Provision - Prison	1	1	2	3	7	Low-Medium	2
Civil Provision - Park and Ride	1	1	2	1	5	Low-Medium	2
Commercial - Bank	1	1	1	1	4	Low	1
Commercial - Business Park	1	1	1	1	4	Low	1
Commercial - Fish Farm	1	1	1	3	6	Low-Medium	2
Commercial - Office/Commercial	1	1	2	1	5	Low-Medium	2
Commercial - Offices	1	1	2	1	5	Low-Medium	2
Commercial - Shops	1	1	2	1	5	Low-Medium	2
Commercial -Retail park	1	1	1	1	4	Low	1
Commercial -Shopping Centre	1	1	2	1	5	Low-Medium	2
Commercial- Road Side Service Centre	1	1	1	3	6	Low-Medium	2
Communication - Road	3	2	3	3	11	Medium	3
Communication - Main Road	1	1	2	1	5	Low-Medium	2
Communication -Major Road Junction	1	1	2	1	5	Low-Medium	2
Communication - Bridge	3	2	3	1	9	Medium	3
Communication - Motorways	1	1	2	1	5	Low-Medium	2
Communication -Bike Path/ bridleway	3	2	3	3	11	Medium	3
Communication -Ridgeway	6	3	3	6	18	High	5
Communication - Car Park	1	1	2	3	7	Low-Medium	2



Communication -Canals and Locks	6	3	3	1	13	Medium-High	4
Communication -Rail transport sites	6	1	3	1	11	Medium	3
Communication - Airfield (Commercial)	1	1	2	3	7	Low-Medium	2
Communication - Telecommunications	1	1	1	1	4	Low	1
Open Field System	6	3	2	6	17	High	5
Ancient Enclosure	6	3	2	6	17	High	5
Closes	6	3	2	6	17	High	5
Crofts (medieval & Post Medieval)	6	3	2	6	17	High	5
Ladder Field System	6	3	2	6	17	High	5
Squatter Enclosure	6	3	2	6	17	High	5
Assarted Enclosure	6	3	2	6	17	High	5
Piecemeal Enclosure	6	3	2	6	17	High	5
Planned Enclosure	6	2	2	6	16	Medium-High	4
Prairie / Amalgamated Enclosure	1	1	1	6	9	Medium	3
Reorganised Enclosures	1	1	1	1	4	Low	1
Enclosure - Reclaimed land	1	2	1	6	10	Medium	3
Enclosure - Paddocks and Stables	1	2	1	6	10	Medium	3
Industry - Processing industry	1	1	1	1	4	Low	1
Industry -Manufacturing	1	1	1	1	4	Low	1
Industry -Mill / Mill Complex	6	3	2	3	14	Medium-High	4
Industry -Energy Industry	1	1	1	1	4	Low	1
Industry -Extractive Works	1	1	1	1	4	Low	1
Industry -Flooded Extractive pits	1	2	2	1	6	Low-Medium	2
Industry - Depot	1	1	1	1	4	Low	1
Industry -Industrial Estate	1	1	1	1	4	Low	1
Industry -Scrap Yard	1	1	1	1	4	Low	1
Industry -Timber Yard	1	1	1	1	4	Low	1
Military - Castle	6	3	3	6	18	High	5
Military - Hillfort	6	3	3	6	18	High	5
Military - Defence Site	6	3	3	6	18	High	5
Military base	3	1	1	6	11	Medium	3
Military - Military Airfield	1	1	1	3	6	Low-Medium	2
Military - Barracks	3	1	1	1	6	Low-Medium	2
Military - Shooting Range	1	1	1	6	9	Medium	3
Military - Communications	1	1	1	1	4	Low	1
Orchard and Hort - Allotment	3	2	3	6	14	Medium-High	4
Orchard and Hort - Orchard	3	3	3	6	15	Medium-High	4
Orchard and Hort - Vineyard	1	2	1	6	10	Medium	3



Orchard and Hort - Nursery/ Garden Centre	1	1	2	6	10	Medium	3
Orchard and Hort - Urban Garden	1	2	3	3	9	Medium	3
Orn-Parkland / Designed Landscape	6	3	3	6	18	High	5
Orn -Deer Park	6	3	3	6	18	High	5
Orn -Ornamental water body	6	3	3	6	18	High	5
Orn -Domestic Garden	3	3	2	3	11	Medium	3
Recreation -Sports Facilities	1	1	3	3	8	Low-Medium	2
Recreation - Racing Sports Sites	1	1	1	3	6	Low-Medium	2
Recreation - Other Leisure facilities	1	1	2	1	5	Low-Medium	2
Recreation - Community Centre	1	1	3	1	6	Low-Medium	2
Recreation - Country Park	3	2	3	6	14	Medium-High	4
Recreation - Public Park	3	2	3	6	14	Medium-High	4
Recreation - Golf Course	1	2	1	6	10	Medium	3
Recreation - Hunting Site	1	1	1	3	6	Low-Medium	2
Recreation - Nature Reserve	3	3	3	6	15	Medium-High	4
Managed Archaeological Site	6	3	3	6	18	High	5
Rural - Village	6	3	3	6	18	High	5
Rural - Hamlet	6	3	3	6	18	High	5
Rural - Dwelling	3	2	1	6	12	Medium	3
Rural - Hotel	3	2	2	1	8	Low-Medium	2
Rural - Caravan/Chalet/ Camping site	1	1	2	6	10	Medium	3
Rural - Country House	6	2	1	6	15	Medium-High	4
Rural -Farmstead	3	2	2	6	13	Medium-High	4
Unenclosed -Green	6	3	3	6	18	High	5
Unenclosed -Rough Ground	6	3	3	6	18	High	5
Urban - Historic Urban Core	6	3	3	6	18	High	5
Urban - City	3	2	3	6	14	Medium-High	4
Urban - Town	3	2	2	6	13	Medium-High	4
Urban - Dwelling	3	2	2	3	10	Medium	3
Urban - Hotel	3	2	2	1	8	Low-Medium	2
Urban - Public House	3	2	2	3	10	Medium	3
Urban - Market	3	2	3	3	11	Medium	3
Urban - Caravan and Camp site/ chalet site	1	1	1	3	6	Low-Medium	2
Water - River	6	3	3	1	13	Medium-High	4
Water - Fresh Water Body	6	3	3	1	13	Medium-High	4
Water - Water Meadow	6	3	3	6	18	High	5
Water - Watercress Beds	6	2	1	6	15	Medium-High	4
Woodland - Ancient Woodland	6	3	3	6	18	High	5



Woodland -Secondary Woodland	3	3	3	6	15	Medium-High	4
Woodland -Plantation	1	2	2	6	11	Medium	3
Woodland -Woodland Pasture	6	3	3	6	18	High	5

Quintiles (%)	Rating	Category
0-20	Low	1
20-40	Low-Medium	2
40-60	Medium	3
60-80	Medium-High	4
80-100	High	5



5.2 Case Study 2: The Integration and Correlation of the Oxfordshire Historic Landscape Characterisation and Landscape Character Assessment datasets

5.2.1 Introduction

Historic Landscape Characterisation (HLC) and Landscape Character Assessment (LCA) share a common approach to landscape, describing and characterising landscape characteristics rather than evaluating and assigning value.² Rooted in spatial frameworks they are complementary datasets which can be used to inform and enhance one and other.³ However, created by experts in separate fields and for separate purposes, these datasets should not be expected to coincide exactly and differences between the two have as much potential to enhance our understanding of the landscape as the similarities. Thus, integration of HLC and LCA data should be carried out alongside analysis of correlation.

Landscape, defined by the European Landscape Convention as “an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors”,⁴ is a complex combination of natural, cultural/social, and perceptual or aesthetic features.⁵ Landscape Character Assessment seeks to “identify and explain the unique combination of elements and features (characteristics) that make a landscape distinctive”.⁶ LCAs depend on the definition of Landscape Description Units (LDU), the building blocks of any assessment. These are distinct, internally homogenous units comprising similar physical, biological, and historical components.⁷ Components which can be considered include: geology, landform, hydrology, air and climate, soils, land cover, land use, settlement, enclosure, land-ownership, time-depth, and cultural and perceptual factors.⁸ However, the focus tends to be on those natural and visual components, with less of an emphasis placed on historical and time-depth factors.⁹ This is where HLCs can make an important contribution.

HLC projects have developed since 1994 to better understand how the past has influenced our current landscape.¹⁰ HLC aims to “provide a framework for understanding the history of a place that can be used to guide change more intelligently”.¹¹ HLC focuses on time-depth and trajectories of change within the landscape and can feed into the land use, settlement, enclosure, and time-depth components of an LCA.

² Fairclough, G. & MacInnes, L. 2014. Landscape Character Assessment Guidance for England and Scotland. Topic Paper 5: Understanding Historic Landscape Character. English Heritage & Historic Scotland. p9.

³ Tudor, C. 2014. An Approach to Landscape Character Assessment. English Heritage & Historic Scotland. p14; Fairclough, G. & Herring, P. 2016. Lens, Mirror, Window: Interactions Between Historic Landscape Characterisation and Landscape Character Assessment. Landscape Research. Vol. 41. No. 2. p184; Fairclough & MacInnes 2014, pp. 9-10.

⁴ European Landscape Convention, Council of Europe, Florence, October 2000

⁵ Tudor 2014, p9

⁶ Tudor 2014, p8

⁷ Warnock, S. & Brown, N. 1998. Putting Landscape First. Landscape Design. pp. 44-46; Evans, N. 2008.

Monitoring Landscape Change: AONBs and Landscape Character assessment in the Malvern Hills. Landscape and Heritage Research Focus Conference, University of Worcester, 3rd November 2008. p5

⁸ Tudor 2014, p29

⁹ Fairclough & Herring 2016, p186

¹⁰ Aldred, O. & Fairclough, G. 2003. Historic Landscape Characterisation: Taking Stock of the Method. English Heritage and Somerset County Council; Clark, J., Darlington, J. & Fairclough, G. 2004. Using Historic Landscape Characterisation. English Heritage and Lancashire County Council

¹¹ Fairclough & Herring 2016, p192



The complementary nature of the datasets and the potential value they can add to each other means that some integration of the two is both highly likely and desirable. However, both HLCs and LCAs were developed by experts in their respective fields and any integration should not reduce the significance of either one. In Fairclough and Herring's recent paper, the similarities and differences between the two datasets are set out and the potential for integration explained. However, they also argue that integration will inevitably lead to the observation of important and interesting differences between HLCs and LCAs and that these should be discussed and analysed further.¹²

As part of the update to the Oxfordshire Wildlife and Landscape Study (OWLS), it has been proposed that HLC data should be used to redefine, where necessary, the boundaries of the LDUs which make up the current LCA of the county. It has also been suggested that HLC data should be used to enhance descriptions of these units.¹³ The results of this will feed into the OWLS update and form part of the analysis of HLC data in Oxfordshire.

5.2.2 Methodology

In order to use HLC data to reassess the LDU boundaries it was necessary to create a map showing the main historic landscape character types present in Oxfordshire prior to wholesale enclosure. To ensure coverage of the whole county, this map was created using the 'snapshot' map of 1797. This used the combined evidence from Rocque's 1760s map and Davis' 1790s map.

HLC types present on this map were then grouped into new categories which have significance for landscape character development. Some HLC types were re-categorised as 'Other' primarily due to the different scales used by the HLC and the LDUs: the HLC minimum polygon size was one or two hectares whilst the LDUs used a minimum of 100 hectares. Consequently, many HLC types related to polygons too small for use with the LDUs – Mill/Mill Complex, for example. HLC types present in 1797 were categorised as follows:

¹² Fairclough & Herring 2016, pp. 193-4

¹³ The OWLS update is ongoing. It is being conducted by Steven Warnock on the behalf of Oxfordshire County Council.



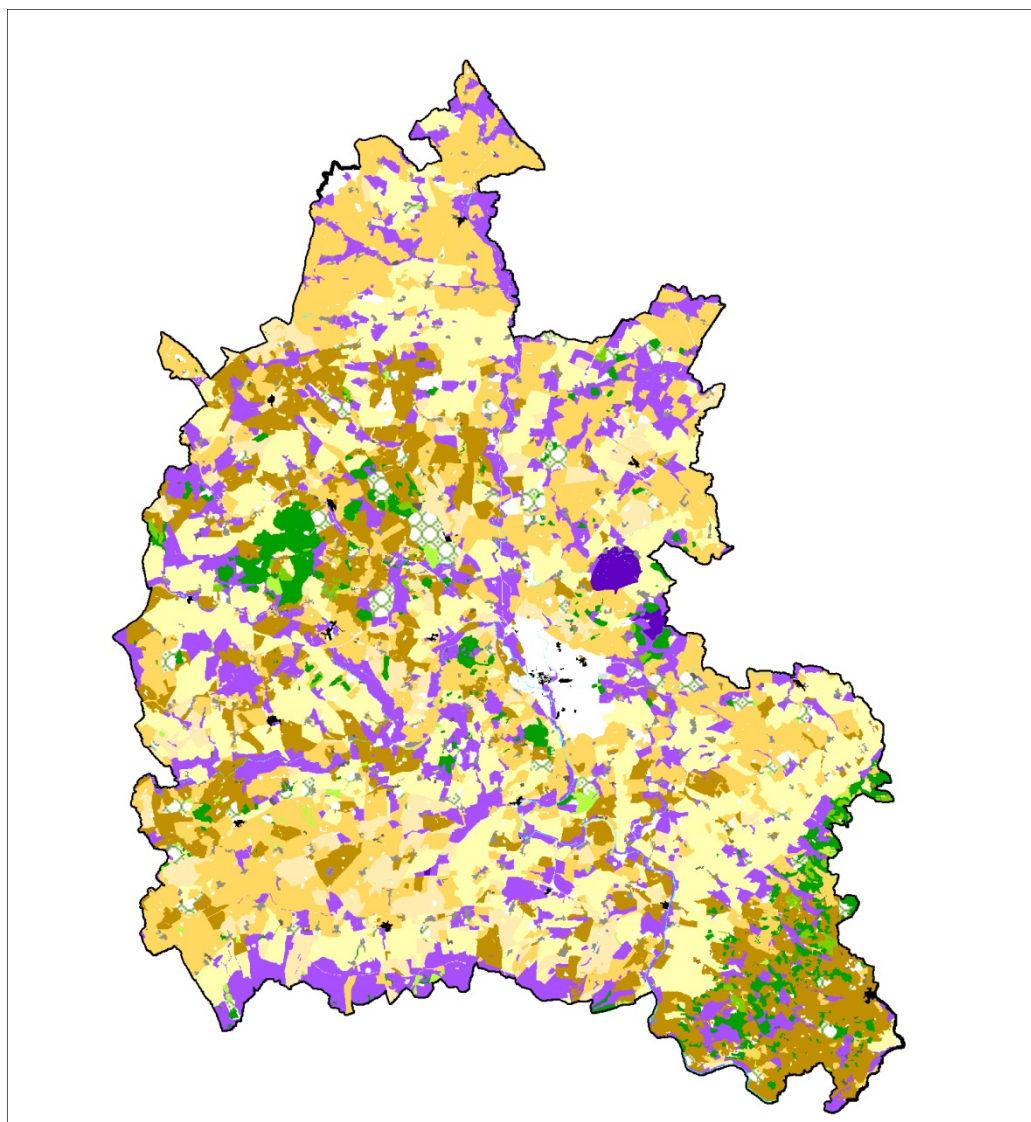
HLC for LDU Reassessment Category	HLC Type(s)
Ancient Woodland	Ancient Woodland
Woodland Pasture	Woodland Pasture
Assart	Assarted Enclosure
Secondary Woodland	Secondary Woodland, Plantation
Parkland	Parkland/Designed Landscape, Deer Park, Country House
Unenclosed	Rough Ground, Green, Water Meadow
Marsh	Marsh
River	River
Older Enclosure	Ancient Enclosure, Crofts, Closes, Ladder Field System, Squatter Enclosure, Paddocks, Prairie / Amalgamated Enclosure*, Reorganised Enclosure*
Piecemeal Enclosure	Piecemeal Enclosure
Planned Enclosure	Planned Enclosure
Open Field	Open Field System
Quarry	Extractive Works
Village	Village
Hamlet	Hamlet
Town	Bank, Burgage Plots, City, Historic Urban Core, Office, Oxford College, Processing**, Public Park**, Shop, Shop/Office, Town, Urban Garden, Urban Hotel, Urban Market
Other	Allotment, Bike Path/Bridleway, Bridge, Canal and Lock, Castle, Country Park, Domestic Garden, Education Facility, Farmstead, Fresh Water Body, Health Care Facility, Hillfort, Main Road, Managed Archaeological Site, Manufacturing, Military Defence Site, Mill/Mill Complex, Orchard, Other Leisure, Rail Transport Site, Religious and Funerary, Reservoir, Ridgeway, Road, Rural Dwelling, Rural Hotel, Urban Dwelling, Workhouse

* These two Enclosure Types in themselves are not likely to be old, but their presence suggests the existence of earlier enclosures at a site.

** In 1797, these two HLC Types are only found within Oxford; they can, therefore, be categorised as part of the urban area of the city.



5.2.3 Resulting Map



HLC for LDUs

	Ancient Woodland		Marsh		Quarry
	Woodland Pasture		River		Village
	Assart		Older Enclosure		Hamlet
	Secondary Woodland		Piecemeal Enclosure		Town
	Parkland		Planned Enclosure		Other
	Unenclosed		Open Field System		



5.3 Case Study 3: Capacity for Change “on the edge” of Oxfordshire’s major settlements

5.3.1 Introduction

This case study examines the character of a two kilometre buffer around five of Oxfordshire’s major settlements: Oxford, Banbury, Chipping Norton, Wantage, and Wallingford. It then proposes a method by which the capacity of these areas to absorb changes wrought by urban development can be measured (please note, this is an HLC Type based methodology and is not site specific).

The case study was chosen due to the increasing pressure these landscapes are facing from development and urban growth. It is hoped that HLC data can provide another tool for better managing this growth.

Current growth estimates anticipate the population of Oxfordshire to rise from 672,000 residents recorded in 2014 to 928,000 residents in 2051.¹⁴ In response to this growing population, a need to improve housing affordability, and in order to support continued economic growth, the Oxford Strategic Housing Market Assessment (SHMA) has identified a need for between 93,560 and 106,560 new homes in the county between 2011 and 2031.¹⁵ These homes will add pressure to the landscapes surrounding Oxfordshire’s current settlements and it was, therefore, desirable to assess the impact on the historic character in these areas.

It was not possible, within the time constraints of this project, to analyse the landscapes surrounding all urban areas in Oxfordshire, so five examples were selected to trial this methodology. These five settlements were chosen for two reasons. Firstly, their distribution covers all parts of Oxfordshire, with one settlement from each District of the county. Secondly, the five settlements are quite distinct from each other in nature – ranging in size, historic origin, and landscape setting – and we might, therefore, assume that the character and capacity for change on their edges will also be different.

To create the study areas around each settlement, the edge of these settlements needed to be digitised. For the towns, this was achieved using the 1:50,000 Ordnance Survey map to trace around the edge of the settlement. For Oxford, the City District boundary was used. It is appreciated that some built up areas project beyond these traced edges, the mill on the western edge of Chipping Norton, for example, but it is believed that this methodology is sufficient for the purposes of this analysis. A buffer of two kilometres was then added to the digitised limit of the settlements, creating a band around each. This band forms the basis of this research.

It is important to note that the bands created around each of the five settlements do not define the rural-urban fringes. The study areas will include some parts of the rural-urban fringe of each settlement, but it is likely that they will not include others. It was not the aim of this case study to identify the rural-urban fringe, but to simply look at the character of the landscape closest to these settlements and its ability to absorb change. However, given that these study areas will include some parts of the rural-urban fringe and will share some characteristics with it, it is useful to define the term here. The rural-urban fringe is defined as a transitional zone, a multi-functional and hybrid landscape which is often under pressure from urban growth and has to balance often conflicting

¹⁴ Population growth as predicted by Oxfordshire County Council Research and Intelligence Unit, available from www.oxfordshire.gov.uk/insight

¹⁵ Oxford Strategic Housing Market Assessment Report, prepared by G L Hearn Limited, March 2014.



developmental and environmental agendas.¹⁶ These areas are important for recreation, urban food production, provision of construction materials and other resources, urban waste disposal and treatment, power generation, bulk retail and warehousing, and housing for growing populations.¹⁷

¹⁶ Simon, D. 2008. Urban Environments: Issues on the Peri-Urban Fringe. Annual Review of Environment and Resources. Vol 33. p.167; Gallent, N., Shoard, M., Andersson, J., Oades, R. & Tudor, C. 2004. Inspiring England's urban fringes: multi-functionality and planning. Local Environment. Vol 9, Issue 3. p. 217; Gallent, N. 2006. The Rural-Urban Fringe: A new priority for planning policy? Planning Practice and Research. Vol. 21, Issue 3. Pp 383-4.

¹⁷ Simon, D. 2008. p.168; Gallent, N. & Shaw, D. 2007. Spatial Planning, area action plans and the rural-urban fringe. Journal of Environmental Planning and Management. Vol 50, Issue 5. p. 620



5.3.2 Methodology

To assess the capacity for change around five of Oxfordshire's major settlements, four stages were defined. These were: Scenario; Assessing Vulnerability and Capacity of the Historic Landscape; Assessing Significance of HLC Types; Conclusions and Capacity Modelling. This methodology has been influenced by work in Cornwall and by a current review being conducted by Historic England with regards to assessing sensitivity to change.¹⁸ The data compiled is presented in Appendix 5.

5.3.2.1 Stage 1: Scenario

Large-scale urban expansion on the fringes of existing major settlements in Oxfordshire. The scenario includes: housing, commercial sites, educational, religious, and health facilities, and supporting infrastructure.

Five individual scenarios are imagined, each relating to a different major settlement in Oxfordshire. The settlements considered were: Oxford, Banbury, Chipping Norton, Wallingford, and Wantage.

Not all HLC types were assessed; only those which met both the following criteria were included within this analysis:

- 1) The HLC type must have been identified within the two kilometre buffer study areas created around each of the major settlements analysed
- 2) The HLC type must be suitable for large-scale urban development

Potential impacts of large-scale urban expansion

Large-scale urban expansion can have both potential negative (**red**) and positive impacts (**green**); however, it is thought that capacity modelling will more frequently be used to identify those areas where potential damage or negative impacts are likely to be greatest.

Many potential impacts of urban development will affect the historic landscape whilst others will have little or no effect.¹⁹ As a starting point, however, *all* potential impacts were considered and classified as follows:

Category	Impact Code	Potential Impacts of Urban Development
Economic	1.1	Increase in employment opportunities
	1.2	Growth of retail
	1.3	Loss of local businesses
	1.4	Decrease in productive agricultural land
	1.5	Decrease in large industrial sites
	1.6	Decrease in tourism reliant on rural environment
Social (Communal and Historic)	2.0	Increase in homes
	2.1	Investment in Civic Amenities – utilities, waste, sewage
	2.2	Increase in health, education, and civil facilities

¹⁸ Cornwall Council. 2010. Historic Landscape Character and sensitivity mapping for Photo-Voltaic (Solar Farms) installations in Cornwall; Herring, P. & McOmish, D. forthcoming. Using Historic Landscape Characterisation when assessing sensitivity to change. Historic England.

¹⁹ Potentially impacts were derived from the works of Simon, D. 2008; Heimlich, R. E. & Anderson, W. D. 2001. Development at the Urban Fringe and Beyond: Impacts on Agricultural and Rural Land. Economic Research Service. United States Department of Agriculture; Bhatta, B. 2010. Analysis of Urban Growth and Sprawl in Remote Sensing Data. Pp. 17-36.



	2.3	Increase in some leisure facilities – leisure centres and gyms, in particular
	2.4	Increase in hospitality facilities – restaurants and bars etc
	2.5	Loss of other Leisure Facilities, particularly those covering large areas
	2.6	Loss of communal open spaces such as greens, recreation grounds, and land used for communal activities like fetes
	2.7	Loss of sites with perceived communal value
	2.8	Loss of / damage to historic landmarks or buildings
	2.9	Loss of sites with perceived historic value
	2.10	Damage to archaeological remains
	2.11	Loss of agricultural way of living and local produce
	2.12	Degradation of community cores by large-scale retail outlets refocusing economic activity to fringes
	2.13	Increase in house prices, pricing out local families
	2.14	Development of commuter settlements with a lack of sense of community
	2.15	Loss of settlement boundaries through sprawl, decreasing sense of communal identity
	2.16	Congestion
Environmental (Environmental, Aesthetic, and Health)	3.1	Increased accessibility to health and care facilities
	3.2	Increased pollution – noise, light, air, and litter
	3.3	Loss of perceived healthy environment contributing to mental health issues
	3.4	Increased use of cars with environmental and health impacts
	3.5	Loss of historic lanes, replaced with modern roads
	3.6	Reduction in social interaction as community suffers and commuting increases
	3.7	Mental health problems associated with loss of community
	3.8	Loss of places with high aesthetic value
	3.9	Reduction in biodiversity
	3.10	Reduction in landscape diversity creating homogenous environments
	3.11	Loss of habitats
	3.12	Subdivision and disruption of remaining habitats
	3.13	Deforestation and removal of hedgerows
	3.14	Loss of sensitive environments such as wetlands and floodplains
	3.15	Increased surface run-off, effecting flood hazard

5.3.2.2 Stage 2: Assessing Capacity of the Historic Landscape

Having identified a range of impacts which may result from large-scale urban development, the capacity of HLC Types to absorb impacts which specifically relate to the historic landscape was assessed.

These capacities were then assigned a weighted score which ranged between -0.5/-1 and -2/-4, reflecting varying degrees of negative impact: -0.5/-1 = little or no impact; -2 = likely high impact on character which can add historic value (landscapes which have environmental or aesthetic qualities which may derive from or enhance a historic landscape); -4 = likely high impact on historically important landscapes (landscapes with high historic evidential value).



Capacity	Threat	Weighted Score
Effect on Legibility and Readability of Time Depth How likely is the scenario to change the ability to read or see a landscape's history?	Loss of historic settlement boundaries through expansion Removal of hedgerows defining historic fields Removal of historic lanes and replacement with new roads Loss of Ancient Woodland or historic Enclosure types due to development Loss of sites with perceived historical value	-1 to -4
Impact on Archaeological Remains How likely is the scenario to disturb known or predicted archaeological remains?	Removal of / damage to archaeological remains through development	-1 to -4
Impact on Historic Built Structures How likely is the scenario to disturb historic built structures?	Loss of / damage to historic landmarks or buildings through redevelopment	-1 to -4
Change in Landscape Character How likely is the scenario to affect how the historic landscape contributes to the overall landscape?	Removal or loss of landscapes characteristic of an area Removal or loss of historic landscapes which are now rare in an area Removal or loss of ancient landscapes	-1 to -4
Effect on Semi-Natural Components How likely is the scenario to disturb historically significant ecosystems or landforms?	Loss of / damage to biodiversity Loss of Ancient Woodland through deforestation Loss of Rough Ground through development Loss of old hedgerows through development or landscape reorganisation Disruption to widespread historic ecosystems	-0.5 to -2
Effect on Amenity How likely is the scenario to affect amenity activity?	Pollution Loss of places of communal importance Reduction in landscape diversity Loss of Aesthetically and Environmentally important places Change of public access routes	-0.5 to -2



5.3.2.3 Stage 3: Assessing Historic Significance of HLC Types

Historic significance was suggested using two methods (see Chapter 4.5: Historic Significance Values for full details). The first used data from the HLC project to determine the occurrence, trajectory of change, biodiversity potential, and period of origin for each HLC type. The second used the results of two surveys: archaeological potential was assigned by the Oxfordshire Archaeological Team and historic, aesthetic, and communal value was assigned using the results of a public survey. For further information on these surveys, see Case Study 1: High Value Landscapes (Chapter 5.1.7).

N.B. Types which were only used within Oxford City could not be assigned a Trajectory of Change Value; however, this does not affect this analysis as none of these types fall within the five analysed buffers. Nevertheless, this may have an impact on other scenarios modelled.

Weighting

As with capacity, historic significance values were weighted, this was to reflect the likely impact on the *historic* aspect of the landscape. These weighted scores ranged from 1 to 7, with one signalling common, rapidly increasing, low biodiversity and archaeological potential, and modern types with low historic, aesthetic and communal value.

Occurrence: to differentiate between Very Rare Modern types, which have less of an impact on the historic character of a landscape, and Very Rare Medieval types which would be of more significance, the Occurrence value was further adjusted according to the Period of each type. This was done using the following formula: $(\text{Occurrence Value} \times \text{Period Value})/5$. The value was divided by five to give a number between 0 and 6, in line with the other values used.

Archaeological Potential and Historical Value: to reflect the importance of these values for historic character of a landscape, these values were weighted more heavily than Biodiversity Potential and Aesthetic/Communal Value. These were valued at 1 (low), 3 (medium), or 6 (high).

Significance	Criteria	Weighted Score
Occurrence	How rare or commonplace is an HLC type?	0 (Low) to 6 (High)
Trajectory of Change	Is an HLC Type decreasing or increasing?	1 to 7
Biodiversity Potential	What is an HLC type's potential for biodiversity?	1 to 5
Archaeological Potential	What is an HLC type's potential for preserved archaeological or historic building remains?	1 to 6
Period of Origin	What period does an HLC type tend to date to?	1 to 6
Historical Value	How well does an HLC type link people to the past?	1 to 6
Aesthetic Value	How attractive or inspiring is an HLC Type?	1 to 3
Communal Value	How important is an HLC Type to a community?	1 to 3

To avoid double-scoring between potential capacity values and historic significance values, some threats were removed from the capacity scoring. These were: Removal of / damage to archaeological remains through development, Loss of / damage to historic landmarks or buildings through redevelopment, Loss of sites with perceived historic value, and Loss of Aesthetically and Environmentally important places.



5.3.2.4 Stage 4: Results and Capacity Modelling

The total capacity to absorb change value was multiplied by the total historic significance value to give an indicator of how sensitive an HLC Type might or might not be to large-scale urban development around each of the five major settlements. This was then mapped.

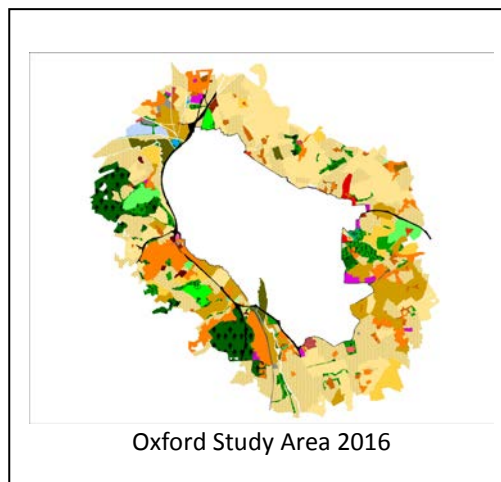


5.3.3 The Character of the Landscape around five of Oxfordshire's major settlements

5.3.3.1 Oxford

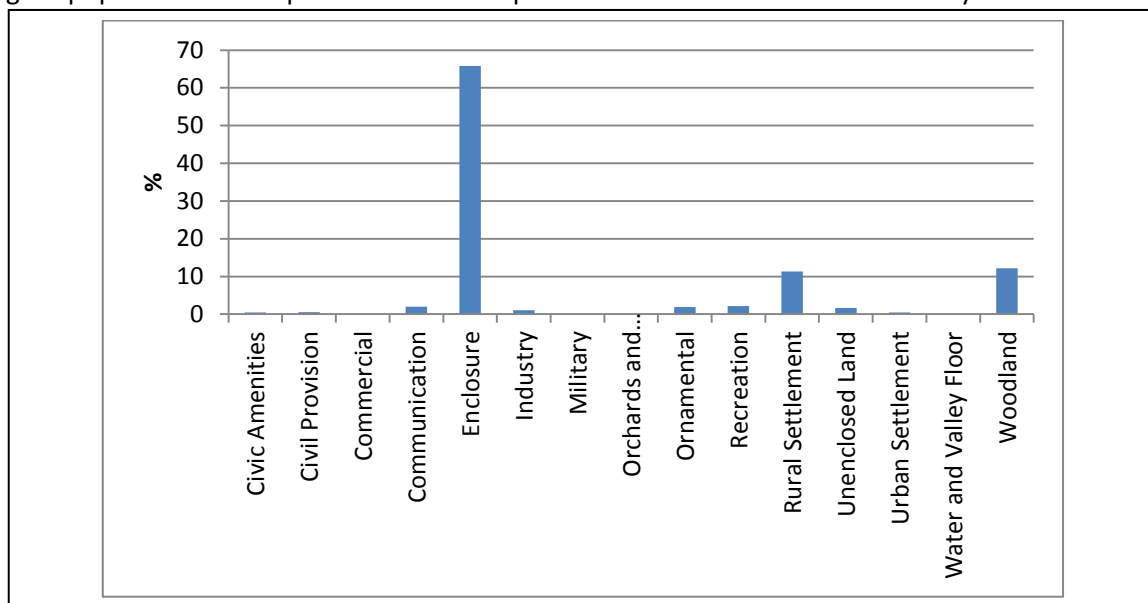
Current Landscape

The study area around Oxford covers 9018.1 hectares, the largest considered by this analysis. The current landscape is made up of land characterised into 14 Broad Types and sub-divided into 46 HLC Types. Whilst this represents the widest range of Types from around the five settlements analysed, this appears to be a consequence of the size of the study area. If the size of the area is accounted for then the area around Oxford represents the least diverse landscape of the five study areas: an average of 5.1 HLC types per 1000 hectares.



Enclosures form the most common Broad Type, accounting for 65.8% of the area. Military sites are the least common, with no examples identified. Compared to the county as whole, where 73.8% of the land area is covered by enclosures, the percentage of fields is low surrounding Oxford. This may reflect the mixed use of this area which acts as a transition between the countryside and the major urban centre in the county, Oxford. Almost 80% of the Enclosures identified are characterised as either Reorganised or Prairie/Amalgamated Enclosures, both of which tend to date to the 20th and 21st century and indicate high levels of adaptation of the agricultural environment in the modern period. Alongside this there has been some survival, albeit at a lower frequency than in the county generally, of older Enclosure types: Crofts and Ancient Enclosures have been identified and Piecemeal Enclosures account for 13.7% of all fields identified, covering 9% of the landscape.

The mixed use of this area is supported by the high percentage of the land characterised as Rural Settlement. In the county, 6.2% of the land is characterised as the Broad Type Rural Settlement, but 11.4% of the area surrounding Oxford is characterised as such. This may indicate that there is a higher population in this part of the landscape than in the wider rural area. It may also indicate that





settlements are of a lower density, with larger properties creating larger settled areas. Interestingly, out of the five study areas analysed, Rural Settlement is the most common in the land surrounding Oxford. This might not be surprising given the attraction of Oxford for settlement. What might be surprising, however, is that the distinction between the study areas is not greater – Rural Settlement represents 11.4% of the Oxford study area but also accounts for 9.6% of the land surrounding Wallingford and 8.8% surrounding Wantage.

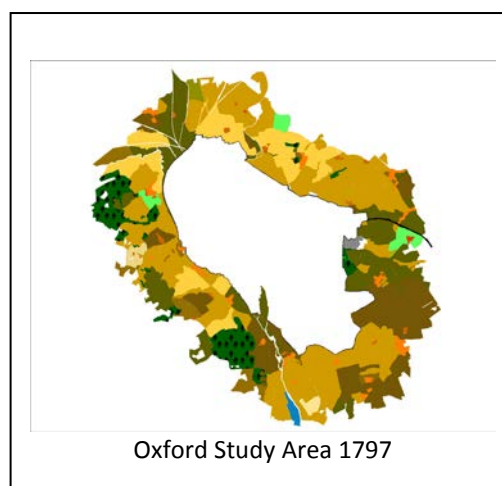
There is a noticeably high percentage of land characterised as Woodland – 12.2% of the land surrounding Oxford compared to 6.7% in the county as a whole. This reminds us that, whilst this area may have a large population, it is still characteristically rural in its appearance. The percentage of Woodland in the Oxford study area is significantly higher than in the other study areas, none of which exceed 5.2%, and it might be that this is a consequence of the Oxford Green Belt, preserving more wooded spaces in the area around Oxford. The main areas of woodland are Wytham and Bagley Woods.

All other Broad Types represent less than 4% of the study area each. Despite its proximity to a large urban population, Recreation types cover a higher percentage of the land around Wantage and Civic Amenities and Communication Types cover more land around Banbury. This leaves the Oxford study area dominated by fields, villages, and woods.

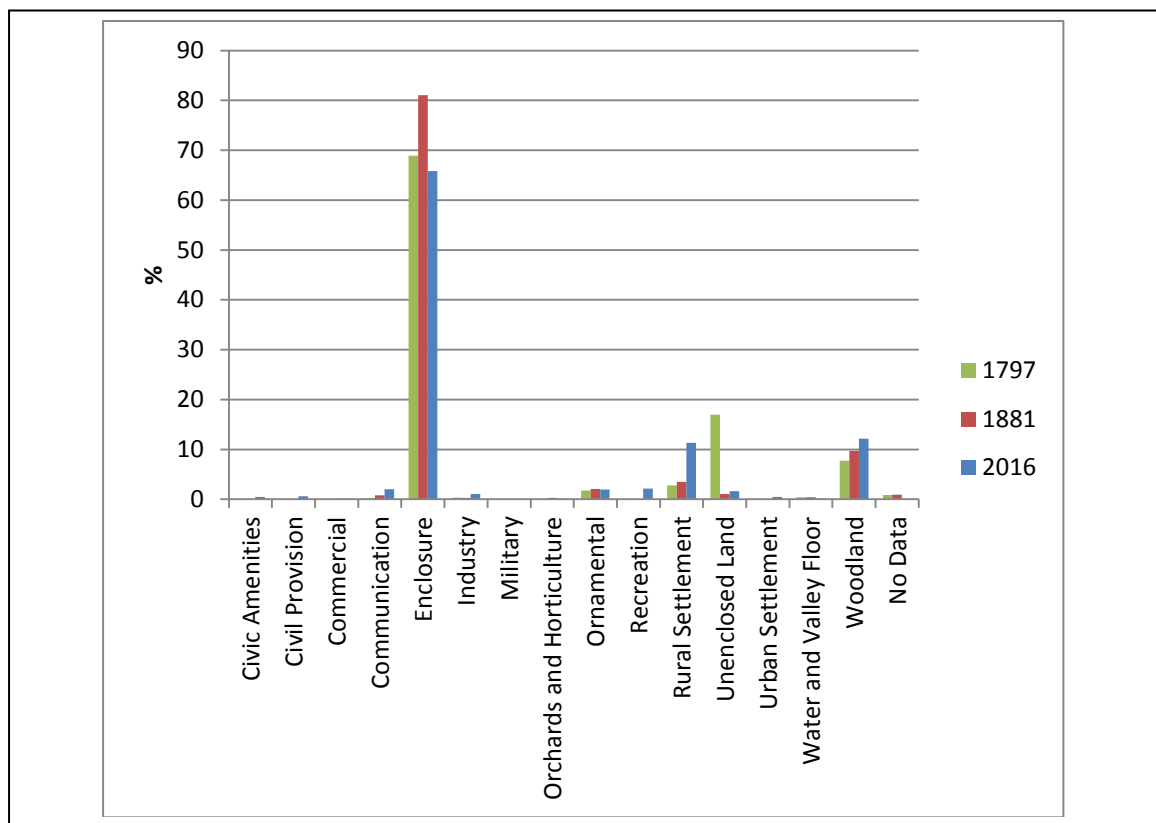
Historic Landscape

By the close of the 18th century, 17% of the landscape surrounding Oxford remained Unenclosed, whilst 68.9% had been put to fields. In the wider county and amongst the other study areas considered, this is the smallest percentage of land covered by Enclosures in 1797. The majority of these fields were small and irregular and likely created by piecemeal agreement. However, some more regular fields suggestive of Planned Enclosure did exist by this time (11.7% of the land). Open Fields were still in use, and 15.8% of the land has been identified as such. One hundred years later, in 1881, even more of the landscape was Enclosed (81%), leaving just 1% Unenclosed. Both

Piecemeal and Planned Enclosures had been reduced, altered to create Reorganised and Prairie/Amalgamated Enclosures to suit changing farming regimes. Between 1797 and 1881, the coverage of Woodland increased from 7.7% to 9.7%, the highest percentage recorded in the wider county and the study areas, largely due to the natural expansion of Secondary Woodland and the creation of Plantations. Rural Settlement also grew, from 2.8% to 3.5%, seemingly due to an increase in the number and size of farms during this period.



Oxford Study Area 1797



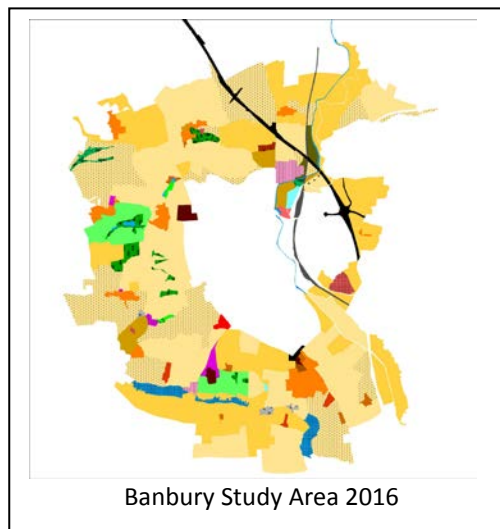


5.3.3.2 Banbury

Current Landscape

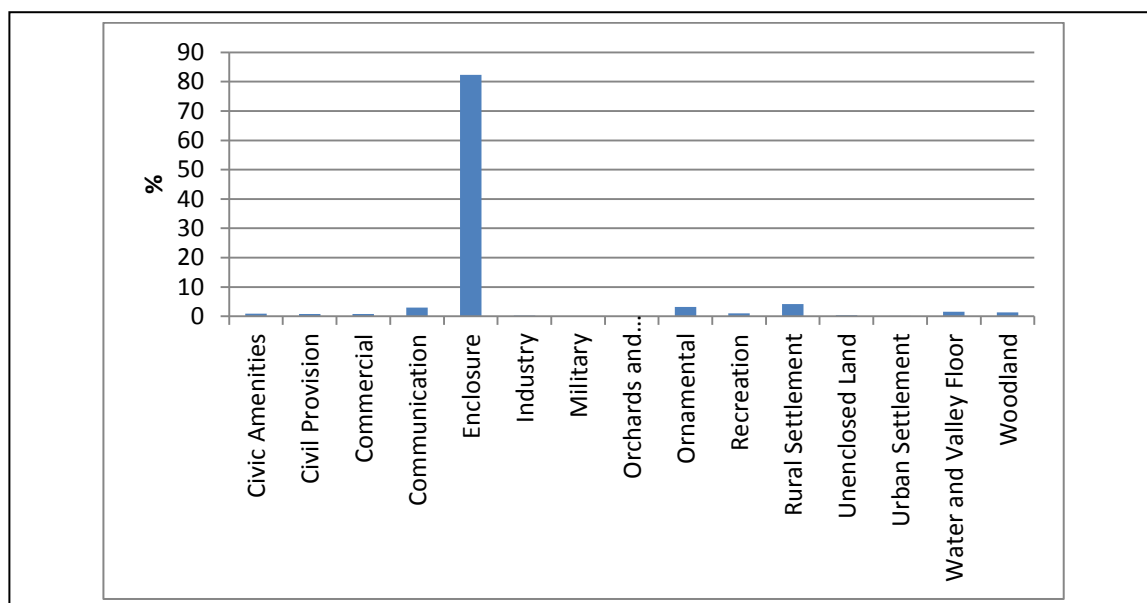
The study area around Banbury covers 4346.7 hectares and is made up of land characterised into 13 Broad Types and sub-divided into 33 HLC Types. If the size of the study area is factored into the equation then the Banbury study area is more diverse than that around Oxford and around Wallingford, with an average of 7.6 HLC types per 1000 hectares.

Enclosures are the most common Broad Type and represent 82.3% of the total area. Military and Orchard and Horticultural Types are the least common. At 82.3%, the percentage of land characterised as Enclosures is very high, higher than the county's 73.8% and higher than all but the area around Chipping Norton, which records 84.3%. This indicates the highly agrarian character of the land around Banbury and may suggest either a lower population in this area or more compact settlements. Enclosures tend to be the type Prairie/Amalgamated, accounting for 40.5% of all fields identified and covering one third of the study area. This suggests that there has been a significant level of adaptation of the landscape to facilitate modern farming regimes. Interestingly, Planned Enclosures are the second most common type of field identified – 33.5% - and cover 27.5% of the study area. This is almost twice the percentage of the county covered by this type. Given the high degree of modern adaptation, the high frequency of this post-medieval type may suggest that there was a concentration of this type in this area in the 18th and 19th century and that the high number of these fields today is not just a matter of survival. Conversely, there is a distinct lack of older field types in this study area; there are no Ancient Enclosures and only 2.1% of fields identified are characterised as Piecemeal, covering 1.7% of the landscape (9.5% of Oxfordshire is characterised as Piecemeal Enclosure).



Banbury Study Area 2016

The percentage of land characterised as Rural Settlement is lower in the Banbury study area than in the county as a whole and in the Oxford, Wallingford, and Wantage study areas – just 4.2% of the





landscape. This supports the suggestion that the area around Banbury is predominantly agricultural, with either a low population or few settlements but with dense occupation. Despite the dominance of agriculture, farms are rarer in this study area than in the wider county, accounting for just 0.4% of the land compared to 1.7% of the county. With the high percentage of land characterised as Prairie fields this suggest a landscape dominated by a few farms with large land holdings. Other major landowners are important in this landscape too – Ornamental Parkland accounts for 2.4% of Oxfordshire, but represents 3.2% of the Banbury study area, the highest percentage of all the study areas analysed here.

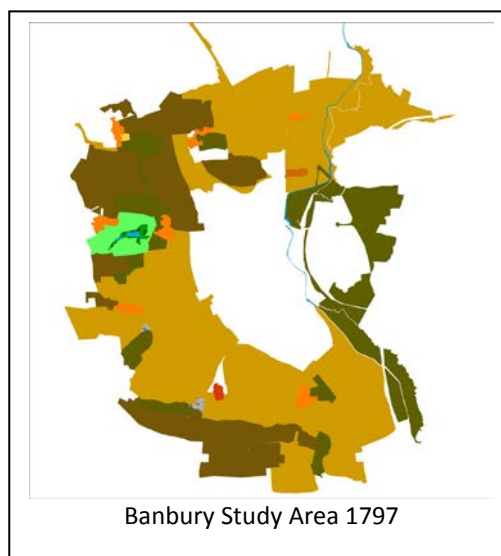
Woodland accounts for only 1.4% of the landscape, far lower than the 6.7% recorded in the county and higher only than the amount recorded in the study area around Wallingford (0.6%). It is possible that this relates to the dominance of modern agricultural landscapes which may have cleared woodland to optimise farming.

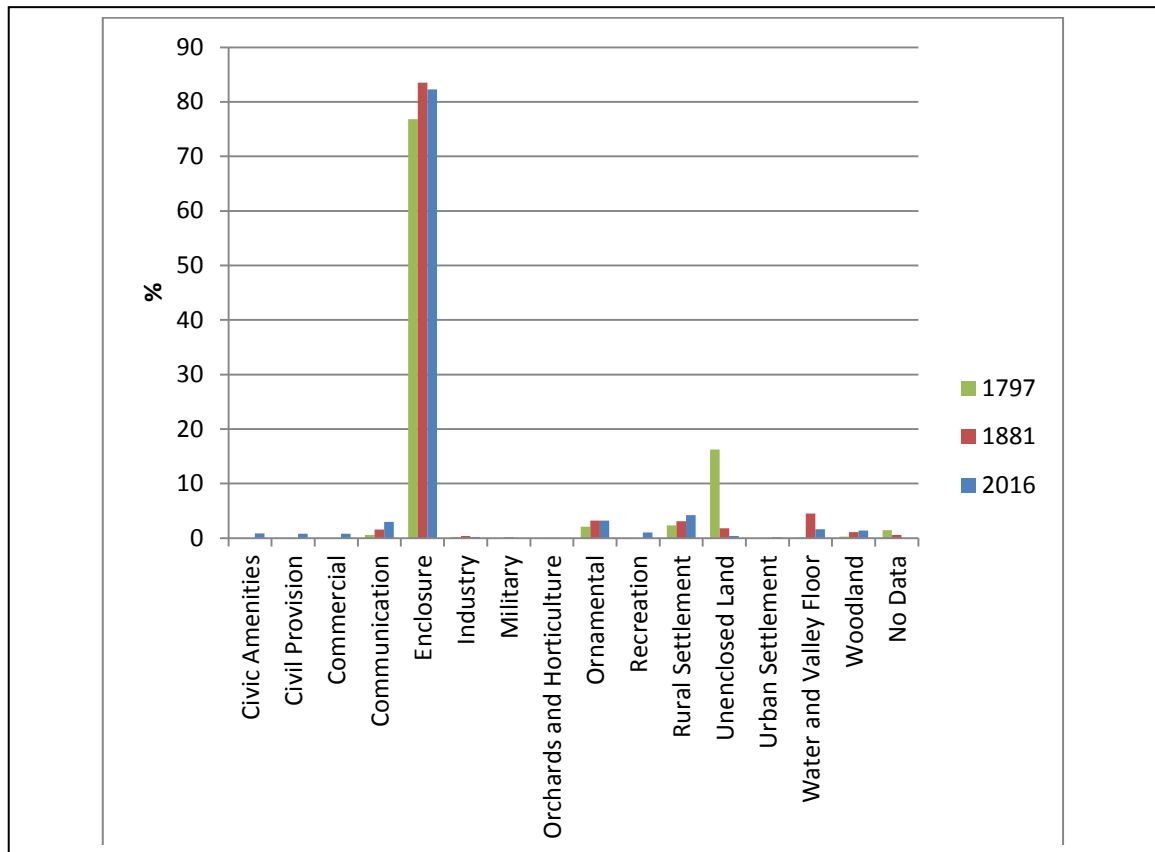
Communication Types stand out around Banbury, with more land characterised as this type than any of the other study areas and the county as a whole – 3% in total. The prevalence of this type seems due to the presence of the M40 motorway which cuts through the landscape to the east of Banbury, and its major road junctions, a railway line and a canal. Thus, the Banbury Study area, whilst a predominantly agricultural environment with few Rural Settlements, is particularly well-connected to the rest of the country by a range of transport links.

Historic Landscape

In 1797, 16.2% of the Banbury study area remained Unenclosed and 76.8% had been turned to fields. This is more than in the county as a whole, where only 71.8% of the land comprised of Enclosures at this time. Open Fields covered 21.5% of the landscape, but Piecemeal Enclosures were the most common (55.3% of the land). Interestingly, Planned Enclosure covered only 0.1% of the land, the smallest amount recorded in the wider county and amongst the other case study areas at this time. By 1881, Enclosures covered 83.5% of the land, similar to the percentage seen in the rest of the county (82.8%) and the biggest growth was in Planned Enclosure, which now covered 53.8% of the area. From the lowest amount of Planned Enclosure, the land around Banbury, by 1881,

had a higher concentration of this field type than any of the other case study areas. The growth of Planned Enclosures went hand in hand with the reorganisation and amalgamation of earlier fields, removing all Open Fields, reducing Piecemeal Enclosures to just 5.3% of the landscape and leaving only 1.8% of the land Unenclosed. In 1797, Woodland covered a very small amount of the study area – 0.3% - and, whilst it did increase in the 19th century, Woodland remained far scarcer in this area than in the county as a whole. Rural Settlement also covered less land here than in the county, just 2.4% in 1797, growing to 3.1% in 1881 (the county saw growth from 2.8% to 3.5%). As in the Oxford study area, growth of farms accounts for much of this change, but Country Houses also contributed, becoming more common around Banbury (0.5% of the area) than in the county (0.2%) in 1881.





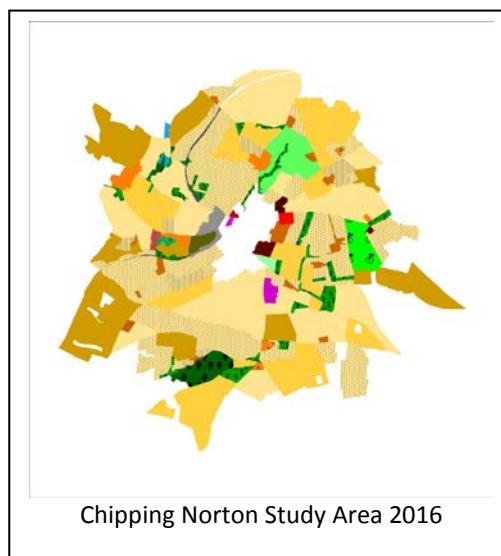


5.3.3.3 Chipping Norton

Current Landscape

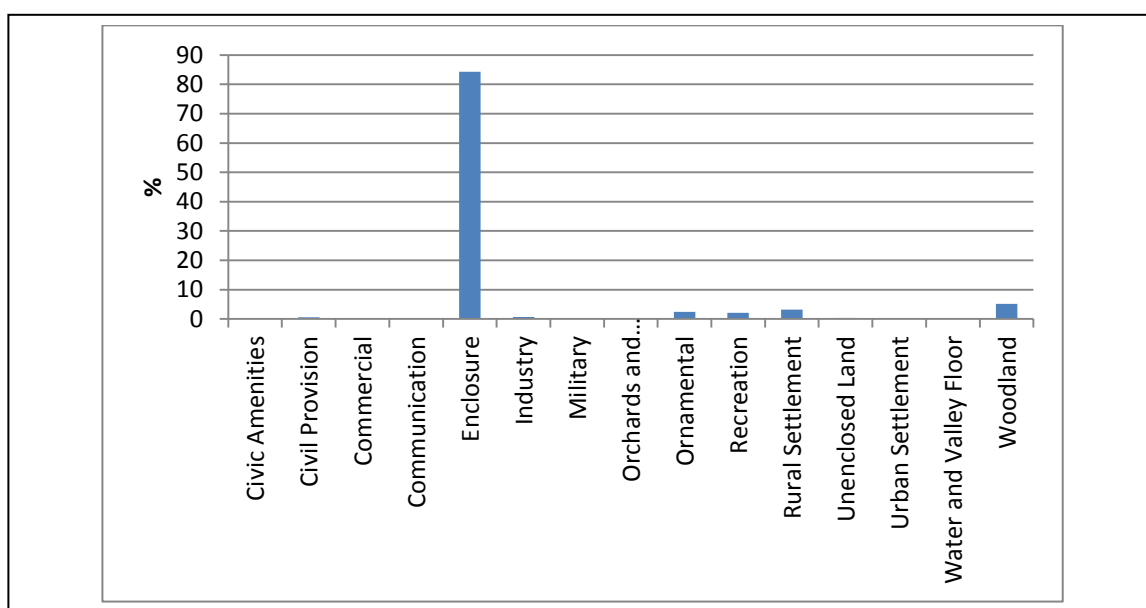
The study area around Chipping Norton covers 3017 hectares, the smallest study area considered, and is made up of land characterised into 13 Broad Types and sub-divided into 27 HLC Types. If the small size of the study area is factored into the equation then the Chipping Norton study area is one of the most diverse analysed, with an average of 8.9 HLC types per 1000 hectares.

Enclosures are the most common Broad Type, representing 84.3% of the total area, and Commercial and Military types are the least common, with no examples of either recorded. The characterisation of 84.3% of the area as Enclosures represents the highest percentage of this type observed in any of the other study areas and in the county as a whole. This might indicate that the area around Chipping Norton is the least populated of the areas analysed. Over half of the Enclosures identified are Reorganised or Prairie/Amalgamated fields, indicating a level of modern agricultural adaptation. However, there is a high percentage of Piecemeal Enclosures – 17.7% compared to 12.9% in the wider county and 2.1% in the area around Banbury – and Planned Enclosures are also more common here than in the county. This implies that there has been a high degree of preservation of older agricultural landscapes. There is also a noticeable concentration of Paddocks in this area, 2.8% of the land has been characterised as such compared to just 0.9% of the county.



Chipping Norton Study Area 2016

Rural Settlement covers 3.2% of the area around Chipping Norton, almost half of the county's 6.2%. This, along with the high percentage of Enclosures, does suggest that this is a lowly populated area. Interestingly, Farmsteads cover more land than Villages – 1.5% of the landscape compared to 1.3% - the only study area where this occurs. On this evidence it would seem that agriculture is a very significant part of this landscape.

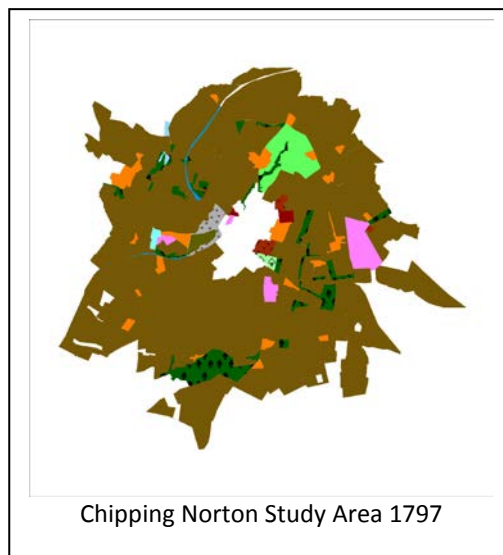


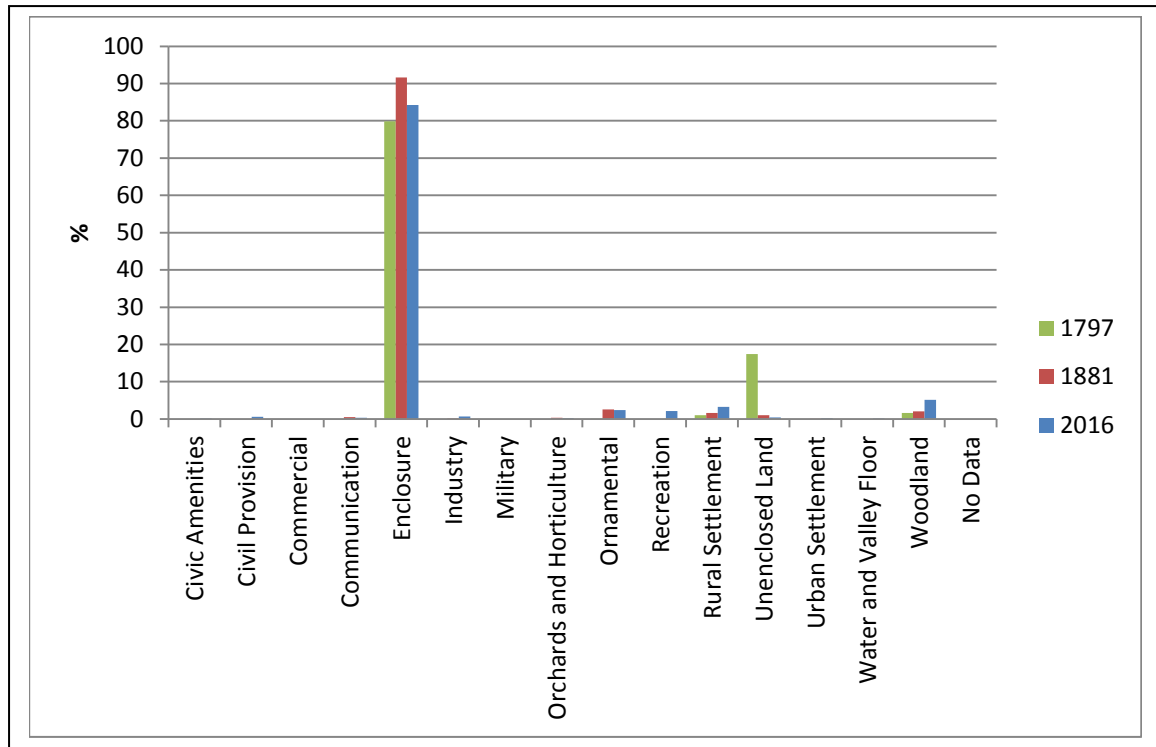


Woodland covers 5.2% of the area, lower than the figure for Woodland in the whole county and in the Oxford study area, but higher than that observed around Banbury. Woodland is the second most common type in this area and all other types cover less than 3.2% of the land each. This leaves Chipping Norton dominated by its fields, dotted with numerous farms and only a few villages.

Historic Landscape

At the end of the 18th century, 17.4% of the landscape around Chipping Norton remained unenclosed, the highest percentage of the study areas analysed and higher than the 17.1% recorded in the county as a whole. At the same time, 79.8% of the area comprised of Enclosures, more than the county's 71.8%, but middle of the range when considering the study areas, which varied between 68.9% around Oxford and 88.9% around Wallingford. Open Fields covered just 6.6% of the area, the smallest amount recorded in the study areas and the county at this time. Planned Enclosures made up almost twice as much of the landscape as they did in the wider county, but were significantly less common than in the area around Wantage. There is a distinct concentration of enclosures of older types – namely Ancient and Piecemeal Enclosures, which, combined, encompassed 59.4% of the landscape. This is the highest percentage of these types of fields recorded in any of the study areas, although Banbury is comparable with 55.3%. Very few of the Ancient Enclosures survived by 1881, but more of the Piecemeal Enclosure endured. The increase of Planned Enclosures from 13.9% to 37.4% and the appearance of Reorganised Enclosures, which covered 17.6% of the land in 1881, is likely to account for much of the loss of the older fields. Those few Open Fields were also removed at this time. Woodland saw some increase over this period, from 1.7% in 1797 to 2.1% in 1881, but this is slight compared to the wider county. This growth relied on the natural expansion of Ancient Woodland as Secondary Woodland. Interestingly, the frequency of Farmsteads in this landscape over and above Villages seems to be a feature of the modern period only. In 1797, Villages covered 0.8% of the land, growing to 0.9% in 1881. Farmsteads, however, accounted for 0.2% of the land in 1797 and expanded to 0.7% by 1881. Thus, whilst Villages were more common than Farms in the late 19th century landscape, the rate of growth of Farmsteads far exceeded that of Villages. The continuation of this into the 20th century explains the dominance of Farmsteads in the present day.







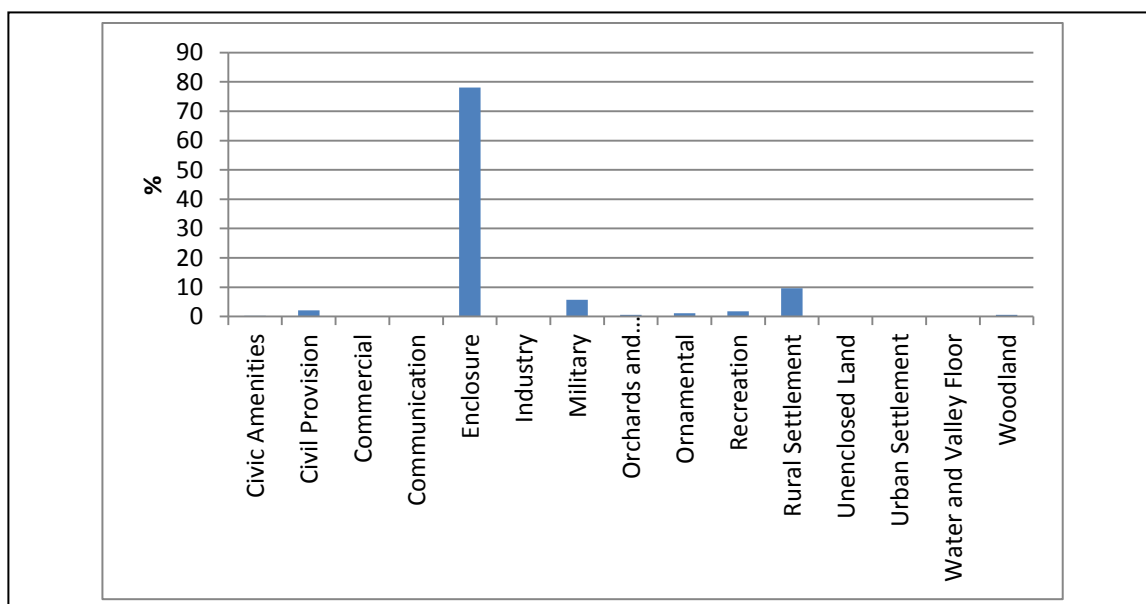
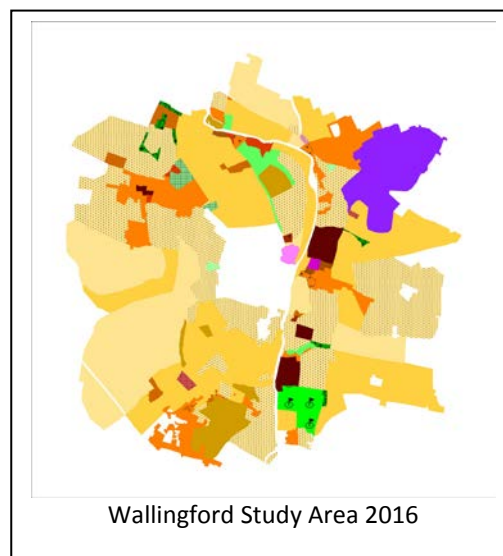
5.3.3.4 Wallingford

Current Landscape

The study area around Wallingford covers 3599.7 hectares and is made up of land characterised into 10 Broad Types and sub-divided into 24 HLC Types. If the size of the study area is factored into the equation then the Wallingford study area is the least diverse analysed, with an average of 6.7 HLC types per 1000 hectares.

Enclosures are the most common Broad Type identified, representing 78.1% of the study area. No examples of Communication, Industry, Unenclosed Land, Urban Settlement, or Water and Valley Floor Types have been identified. The characterisation of 78.1% of the land as Enclosures is higher than the amount across the county generally and in the Oxford study area, but less than the amount identified around the other towns considered. This is surprising as it might have been expected that the low diversity of types in this area could have been accounted for if there was a high percentage of land covered by Enclosures. The low occurrence of Enclosures appears to be due to concentrations of Rural Settlement and Military types in this area. Looking more closely at those Enclosures, it is unusual for there to be such a high percentage of Planned Enclosures – at 36.9% this is much higher than the wider county, which records 19.3% of the land characterised as such, and is even higher than Banbury. This high frequency of Planned Enclosures coincides with a lack of older fields – there are no Ancient Enclosures and only 4.2% of the land is characterised as Piecemeal Enclosure – which may indicate extensive post-medieval reorganisation of the landscape. Reorganised and Prairie/Amalgamated Fields are more common than the Planned Enclosures, but they remain an important feature of this landscape.

Rural Settlement types are particularly common in this study area, covering 9.6% of the land. This is markedly higher than the 6.1% recorded in the county and is higher than any of the other study areas, bar Oxford with 11.4%. Villages dominate this type and, despite the higher percentage of land





covered by this Broad Type, Farmsteads cover a smaller percentage of the land here than they do in the county as a whole. Combined with the lower percentage of Enclosures, this is likely to indicate a higher population than the other towns analysed, which is concentrated into a series of villages set within predominantly modern agricultural landscapes and farmed from a few farms.

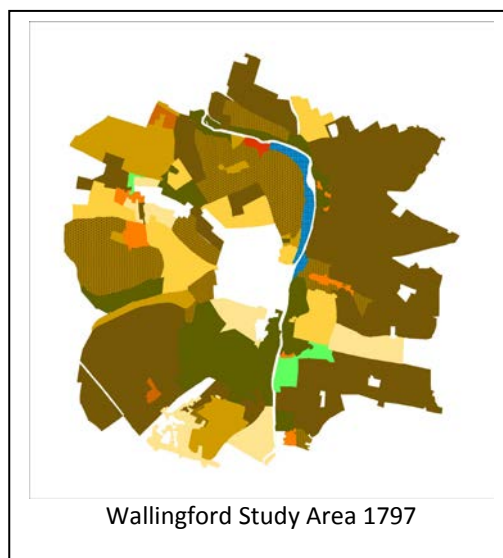
The Wallingford study area has the smallest percentage of Woodland recorded out of the five areas analysed, just 0.6% of the land. This is not only far less than the other study areas but is also significantly less than the 6.7% recorded in the wider county.

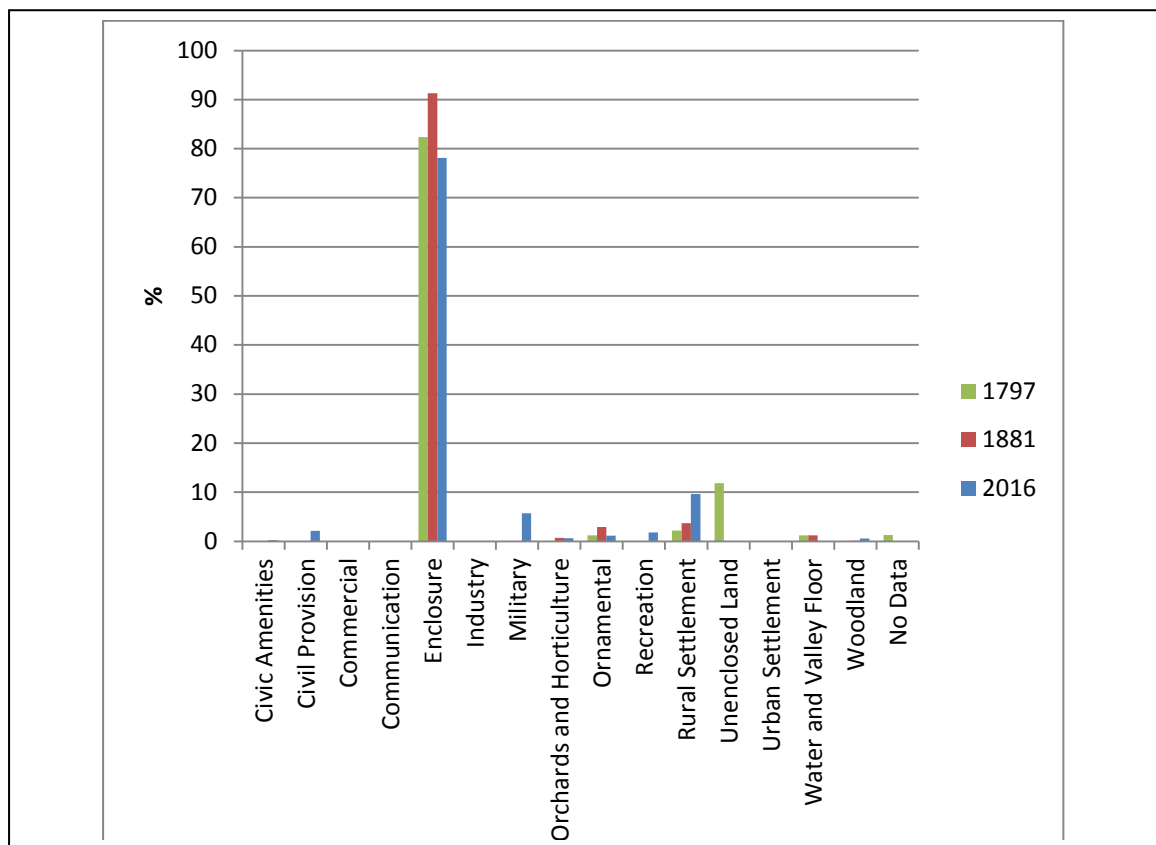
A density of Rural Settlement likely contributes to the lower percentages of land covered by Enclosure and Woodland, and it is probable that sites characterised by Military types also contributes to this. Land occupied by the military covers 5.7% of the area around Wallingford, the most recorded in any of the study areas and more than the 0.6% recorded in the county as a whole. This land, RAF Benson airfield, is, therefore, a dominant component in the landscape around Wallingford.

Historic Landscape

In 1797, the area around Wallingford had one of the highest percentages of land covered by Enclosures, with 82.3% of the land characterised as such and just 11.8% Unenclosed. These Enclosures included the highest concentration of Open Fields from the study areas analysed – 44.7% of the land. Older field types were identified, but in smaller numbers than elsewhere, and there was some Planned Enclosure by this time – 8.4% of the land, compared to 7% recorded in the county as a whole. Interestingly, 6.9% of the land was characterised as Prairie Enclosures, a very high figure for this date. Within one hundred years, land covered by Enclosures had increased to 91.3%, significantly higher than the county's 82.8%, but less than Chipping Norton's 91.7% and Wantage's 91.8%.

The biggest change by 1881 was the complete removal of the Open Fields and the rapid growth of Planned Enclosures – now covering 51.6% of the study area, second only to the Banbury study area. Reorganised and Prairie Enclosures had also expanded, with the latter accounting for 19.3% of the land, second only to Wantage. This development of agricultural land was at the expense of Unenclosed Land, which by 1881 represented only 0.07% of the study area. Woodland had grown from 0% to 0.13%, a slight increase, but far less than that observed elsewhere. Rural Settlement around Wallingford in 1797 covered 2.2% of the land, only higher than the percentage recorded at Chipping Norton. However, by 1881 this had grown to 3.7% and represented the highest percentage of all the study areas and the county as a whole. This growth seems to be due to the expansion of Villages and an increase in Farmsteads, the growth of the former being at a scale not seen elsewhere.





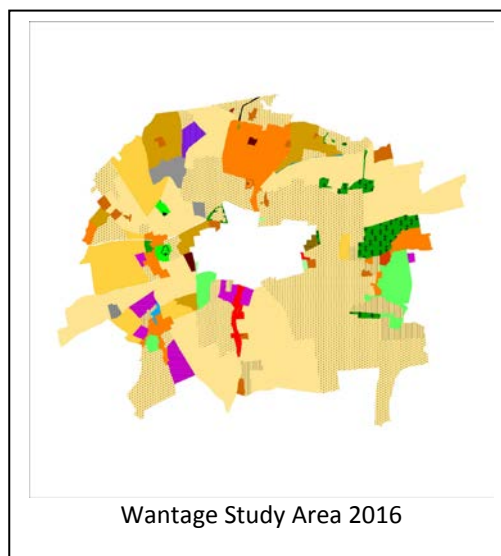


5.3.3.5 Wantage

Current Landscape

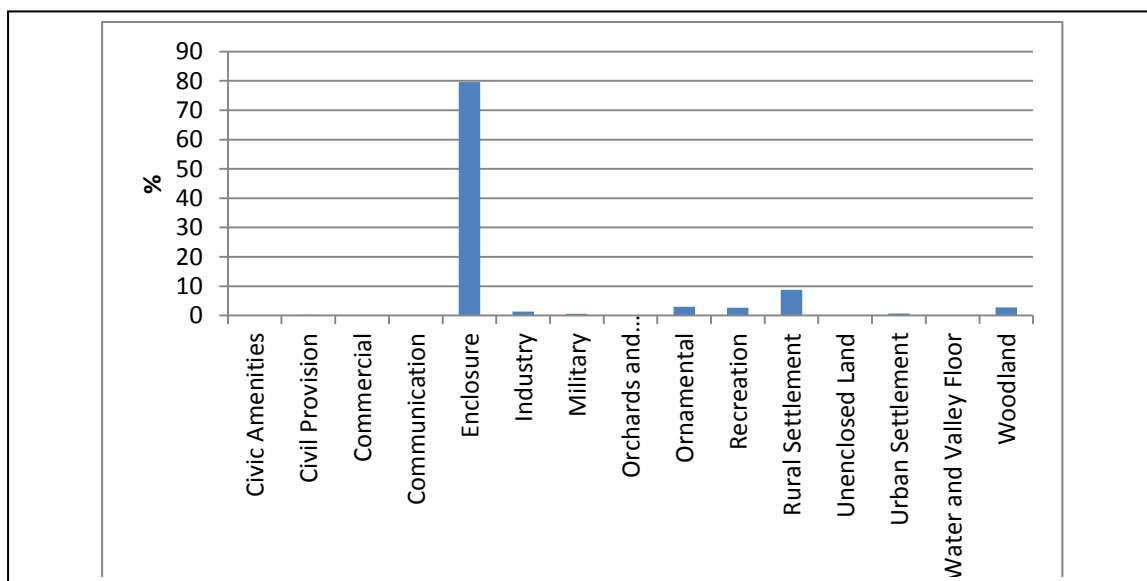
The study area around Wantage covers 3131.6 hectares and is made up of land characterised into 13 Broad Types and sub-divided into 30 HLC Types. If the size of the study area is factored into the equation then the Wantage study area is the most diverse analysed, with an average of 9.6 HLC types per 1000 hectares.

Enclosures are the most common Broad Type identified, representing 79.5% of the study area. No examples of Civic Amenities or Communication Types have been identified. The characterisation of 79.5% of the land as Enclosures is higher than the percentage of land identified as such in the county as a whole and in the Oxford and Wallingford study areas. It is less, however, than the percentages recorded around Chipping Norton and Banbury. The majority of these Enclosures – 80.4% - are Reorganised or Prairie/Amalgamated Enclosures, suggesting that most of the agricultural landscape is modern. This is a much higher figure than observed elsewhere where the combined percentage of land covered by these Enclosure types tends to be between 45% and 52%. Correspondingly, older fields – such as Piecemeal at 6.2% and Planned at 9.5% - are rarer. There is a concentration of Paddocks in this area, the highest recorded amongst the study areas, and these also tend to date to the modern period.



Rural Settlements cover a higher percentage of the land in Wantage study area than they do across the whole county, totalling 8.8% of the area. This suggests a concentration of population; however, that this figure is lower than those recorded in the Oxford and Wallingford study areas implies a moderate population for this type of landscape. Similarly, Villages are more common in this area than they are in the wider county, but cover an area akin to that seen around Wallingford.

Like many of the other study areas, with the exception of the area around Oxford, Woodland is far



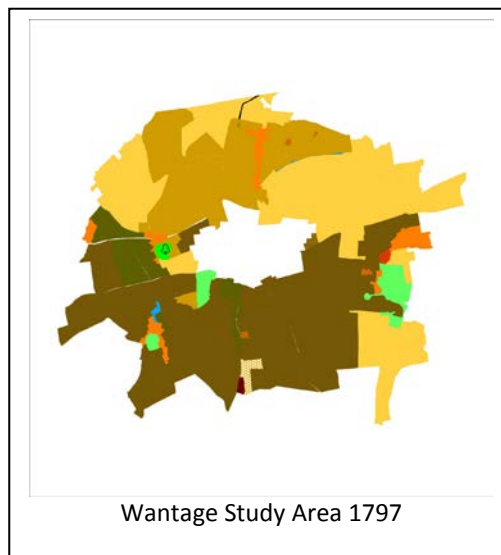


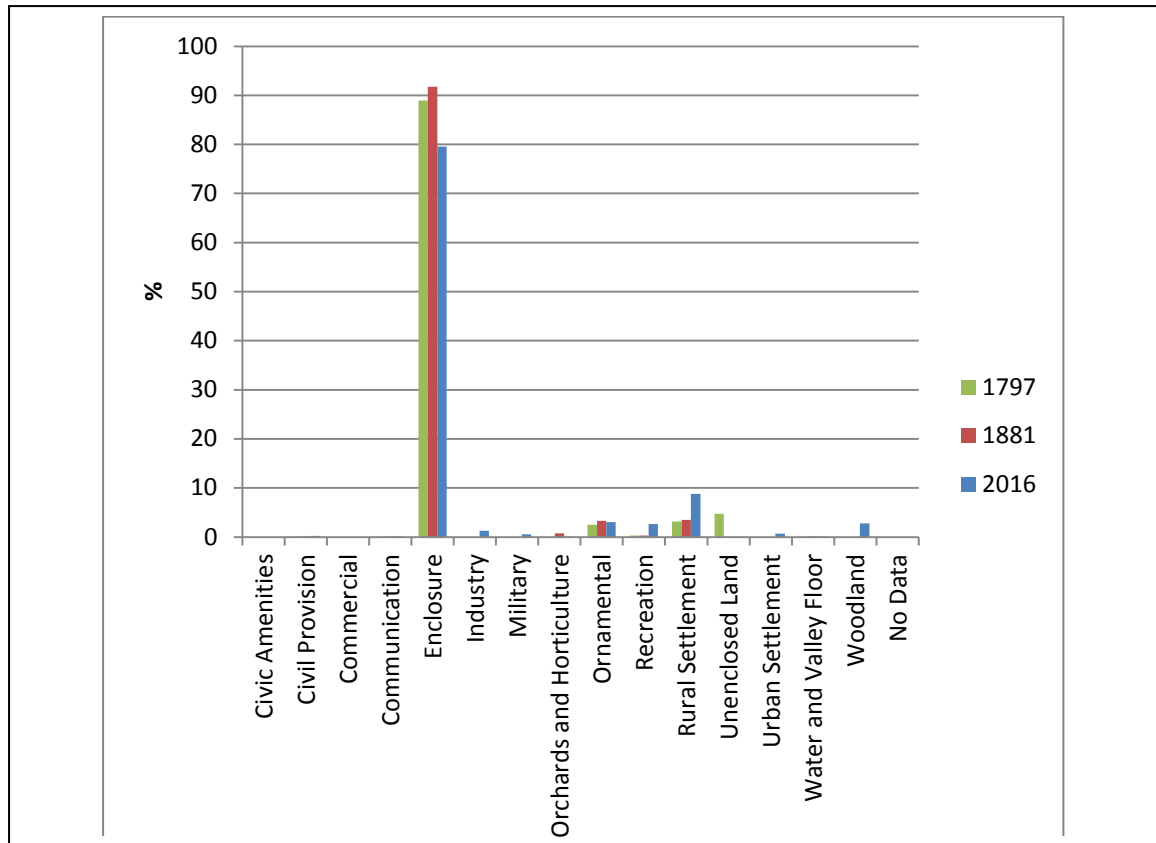
less common here than in the wider county, with just 2.7% of the land characterised as such. Ornamental Landscapes, on the other hand, are more common. Just over 3% of the Wantage study area is characterised as Ornamental, comprised entirely of Parkland/Designed Landscapes. This compares to 2.7% of the county and is higher than all of the other study areas considered. There is also a high percentage of land covered by Recreation types compared to the other study areas. This is due to the large amount of land taken up by horse racing sites.

Historic Landscape

In both 1797 and 1881, the percentage of the land around Wantage characterised as Enclosures was the highest observed in any of the study areas and in the county – 88.9% and 91.8%, respectively. This left just 4.7% of the land Unenclosed in 1797 and 0.02% in 1881, the lowest percentages recorded. In 1797, more than a third of the study area was covered by Open Fields, more than the county and all of the study areas bar Wallingford. Interestingly, 31.3% of the area was covered by Planned Enclosures, significantly more than anywhere else – Chipping Norton study area is the next highest with just 13.9%. Conversely, the percentage of older fields was at their lowest in this area. This may indicate little enclosure of the medieval Open Fields until the Planned Enclosures of the later 18th century. By 1881, most of the Open

Fields had been removed, but 4.6% remained, representing the only survival of this type in any of the study areas at this time. This contrasts the 25.2% of the county covered by this type in 1881 and indicates that those open fields nearest to major settlements were removed at an earlier date than those further out into the countryside. At this time, Prairie/Amalgamated Enclosures are the most common, covering 37.5% of the land, the highest percentage recorded. These and the Reorganised Enclosures, covering 22.3% of the land, had extensively rearranged the agricultural landscape, in part accounting for the dramatic loss of the Open Fields and the reduction in Piecemeal and Planned Enclosures – the latter of which now only covered 19.8% of the land. A strange facet of the historic landscape around Wantage is the absence of any land characterised as Woodland in either 1797 or 1881, this no doubt has an influence on the scarcity of this type in the current landscape. Rural Settlement in the Wantage study area is the highest observed in the county and in the other study areas in 1797, accounting for 3.2% of the land. However, this only increased to 3.5% by 1881 and represents the slowest rate of growth observed. As in the current landscape, Ornamental Types, comprising Parkland/Designed Landscapes, is the highest amongst the study areas in both 1797 and 1881. It also experience more growth than this type in the wider county over this period, growing from 2.5% to 3.3% compared to 2.8% to 3% in the county.







5.3.4 Results

Please note this methodology was developed using HLC Types, individual sites/parts of the landscape were not consulted. Consequently, any conclusions must bear this in mind and should cross-reference with other datasets and resources for meaningful results in specific parts of the county.

HLC Type in Urban Fringe	Impact of Urban Development Value	Significance Value	Sensitivity to Urban Development Value	Sensitivity to Urban Development Rating	Sensitivity to Urban Development Category
Civic Amenities - Reservoir	-7	14.0	-98	Low-Medium	2
Civic Amenities - Sewerage Treatment Works	-7.5	9.0	-67.5	Low	1
Civic Amenities - Utilities	-8	8.0	-64	Low	1
Civic Amenities - Waste Disposal	-5	8.0	-40	Low	1
Civil Provision - Educational Facility	-14	17.8	-249.2	Medium	3
Civil Provision - Gov Office and Civic Centre	-10.5	14.0	-147	Low-Medium	2
Civil Provision - Health Care Facility	-12.5	13.0	-162.5	Low-Medium	2
Civil Provision - Park and Ride	-5	9.0	-45	Low	1
Civil Provision - Religious and Funerary	-20	26.0	-520	High	5
Commercial - Business Park	-5	8.0	-40	Low	1
Commercial - Shopping Centre	-5	9.0	-45	Low	1
Communication - Main Road	-6	9.0	-54	Low	1
Communication - Bike Path/bridleway	-12.5	19.0	-237.5	Medium	3
Communication - Canals and Locks	-15.5	26.0	-403	Medium-High	4
Communication - Major Road Junction	-5	9.0	-45	Low	1
Communication - Motorways	-5	9.0	-45	Low	1
Communication - Rail transport sites	-14	19.0	-266	Medium-High	4
Ancient Enclosure	-17	30.6	-520.2	High	5
Crofts (medieval & Post Medieval)	-18	31.0	-558	High	5
Enclosure - Reclaimed land	-5.5	11.0	-60.5	Low	1
Enclosure - Paddocks and Stables	-12.5	14.8	-185	Medium	3
Piecemeal Enclosure	-16	29.8	-476.8	High	5
Planned Enclosure	-14.5	27.8	-403.1	Medium-High	4
Prairie / Amalgamated Enclosure	-11	13.2	-145.2	Low-Medium	2
Reorganised Enclosures	-10	15.2	-152	Low-Medium	2
Industry - Extractive Works	-6	9.0	-54	Low	1
Industry - Flooded Extractive pits	-8	13.0	-104	Low-Medium	2
Industry - Industrial Estate	-5	7.8	-39	Low	1
Industry - Mill / Mill Complex	-12.5	27.0	-337.5	Medium-High	4
Military - Military Airfield	-12	11.8	-141.6	Low-Medium	2



Military - Shooting Range	-9	20.0	-180	Low-Medium	2
Orchard and Hort - Allotment	-14.5	27.0	-391.5	Medium-High	4
Orchard and Hort - Nursery/ Garden Centre	-9	16.0	-144	Low-Medium	2
Orn -Domestic Garden	-12.5	20.0	-250	Medium	3
Orn-Parkland / Designed Landscape	-19	31.2	-592.8	High	5
Managed Archaeological Site	-13.5	35.0	-472.5	High	5
Recreation - Country Park	-11	22.0	-242	Medium	3
Recreation - Golf Course	-13.5	15.8	-213.3	Medium	3
Recreation - Hunting Site	-7	10.0	-70	Low-Medium	2
Recreation - Nature Reserve	-14	23.0	-322	Medium-High	4
Recreation - Other Leisure facilities	-6	10.0	-60	Low	1
Recreation - Racing Sports Sites	-11.5	12.0	-138	Low-Medium	2
Recreation -Sports Facilities	-14.5	13.0	-188.5	Medium	3
Rural - Caravan/Chalet/ Camping site	-9	15.0	-135	Low-Medium	2
Rural - Country House	-19	26.0	-494	High	5
Rural - Dwelling	-10	20.0	-200	Medium	3
Rural - Hamlet	-17.5	26.4	-462	High	5
Rural - Hotel	-10.5	25.8	-270.9	Medium-High	4
Rural - Village	-16.5	25.8	-425.7	Medium-High	4
Rural -Farmstead	-16	21.6	-345.6	Medium-High	4
Unenclosed -Green	-18	30.0	-540	High	5
Unenclosed -Rough Ground	-17	33.6	-571.2	High	5
Urban - City	-10	21.4	-214	Medium	3
Urban - Dwelling	-10	22.0	-220	Medium	3
Urban - Town	-11	20.4	-224.4	Medium	3
Water - Fresh Water Body	-11	23.0	-253	Medium-High	4
Water - River	-15	34.0	-510	High	5
Water - Water Meadow	-10	31.0	-310	Medium-High	4
Woodland - Ancient Woodland	-18	33.4	-601.2	High	5
Woodland -Plantation	-13	16.8	-218.4	Medium	3
Woodland -Secondary Woodland	-17	23.2	-394.4	Medium-High	4
Woodland -Woodland Pasture	-15.5	29.0	-449.5	High	5

Quintiles

-601.2	100%
-444.74	80%
-251.8	60%
-182	40%
-68	20%
-39	0

Quintiles (%)	Sensitivity Rating	Sensitivity Category
0-20	Low	1
20-40	Low- Medium	2
40-60	Medium	3
60-80	Medium- High	4
80-100	High	5



5.3.4.1 Capacity for Change: Oxford Study Area

In the two kilometre buffer around Oxford there are broadly four areas of high sensitivity to urban development. These are: Shotover and Wytham Hills, Bagley Wood, and the unenclosed Rough Ground beside the River Thames as it flows into the north-western edge of Oxford District.

The land at Wytham Hill comprises large areas of Ancient Woodland (Wytham Great Wood, Marley Wood, Oaken Holt and Bean Wood), Parkland/Designed Landscapes (Wytham Park), a Country House (Wytham Abbey), a Village (Wytham), and some Piecemeal Enclosures around Tilbury Farm. Many of these types typically date to the Medieval or Post-Medieval period, and the former is certainly the case here at Wytham, ensuring historic legibility. Furthermore, with little modern interventions, these types frequently have high potential for archaeological or historic building remains. In addition, Parkland, Ancient Woods, and Villages all have high Aesthetic and Communal Value. At Shotover Hill there is greater diversity of HLC Types and therefore of sensitivity to urban development. The areas of high sensitivity relate to the Parkland of the 18th Century Shotover Park, Ancient Woodland at Brasenose Wood, 19th Century Piecemeal Enclosures and Woodland Pasture on Thorn Hill and stretching south towards Blenheim, and the Hamlet of Littleworth. As at Wytham Hill, the preservation of older parts of the landscape means there is higher archaeological potential and historic legibility in these areas. Similarly, the occurrence of Ancient Woodland and Parkland landscapes means that this area has high Aesthetic and Communal Value. The third area of high sensitivity, Bagley Wood, is almost entirely fixed on this Ancient Woodland, with the addition of the hamlet of Boars Hill to the west. This, by virtue of being Ancient woodland, scores highly for Aesthetic and Communal value. However, it should be used to illustrate the limitations of this methodology, as Bagley Wood is privately owned and, unlike the more accessible Wytham Wood which is also private, access is controlled. Its Communal Value, therefore, is unlikely to be high. Moving on to the final area of high sensitivity, the open ground either side of the River Thames in the area of Wolvercote, different but equally sensitive HLC types predominate. Here it is the Rough Ground beside the river which would be particularly sensitive to urban development. This land, before the construction of the Oxford bypass, was the northern extent of Port Meadow, a large expanse of open meadow having common rights mentioned in the Domesday Book that are still maintained today. This landscape has high Communal Value and is frequented by walkers, naturalists, people using the river for recreation, and many other groups. As a riverine landscape it has high biodiversity potential and is aesthetically pleasing.

In between these areas of high sensitivity are scattered various Hamlets, Villages, and Farmsteads – for example Boars Hill, Elsfield, and Nineveh Farm – the former of which is rated as High whilst the latter two are rated Medium-High. The sensitivity of these types to urban development is due to various factors. Often originating in the medieval period these types often contain a number of historic buildings. Furthermore, the importance of these settlements and farms in the medieval and post-medieval organisation of the landscape means that they are significant contributors to historic legibility. The sense of community is also high in these types, often being associated with small populations with discrete concepts of identity. They are also frequently perceived to be pretty and aesthetically pleasing.

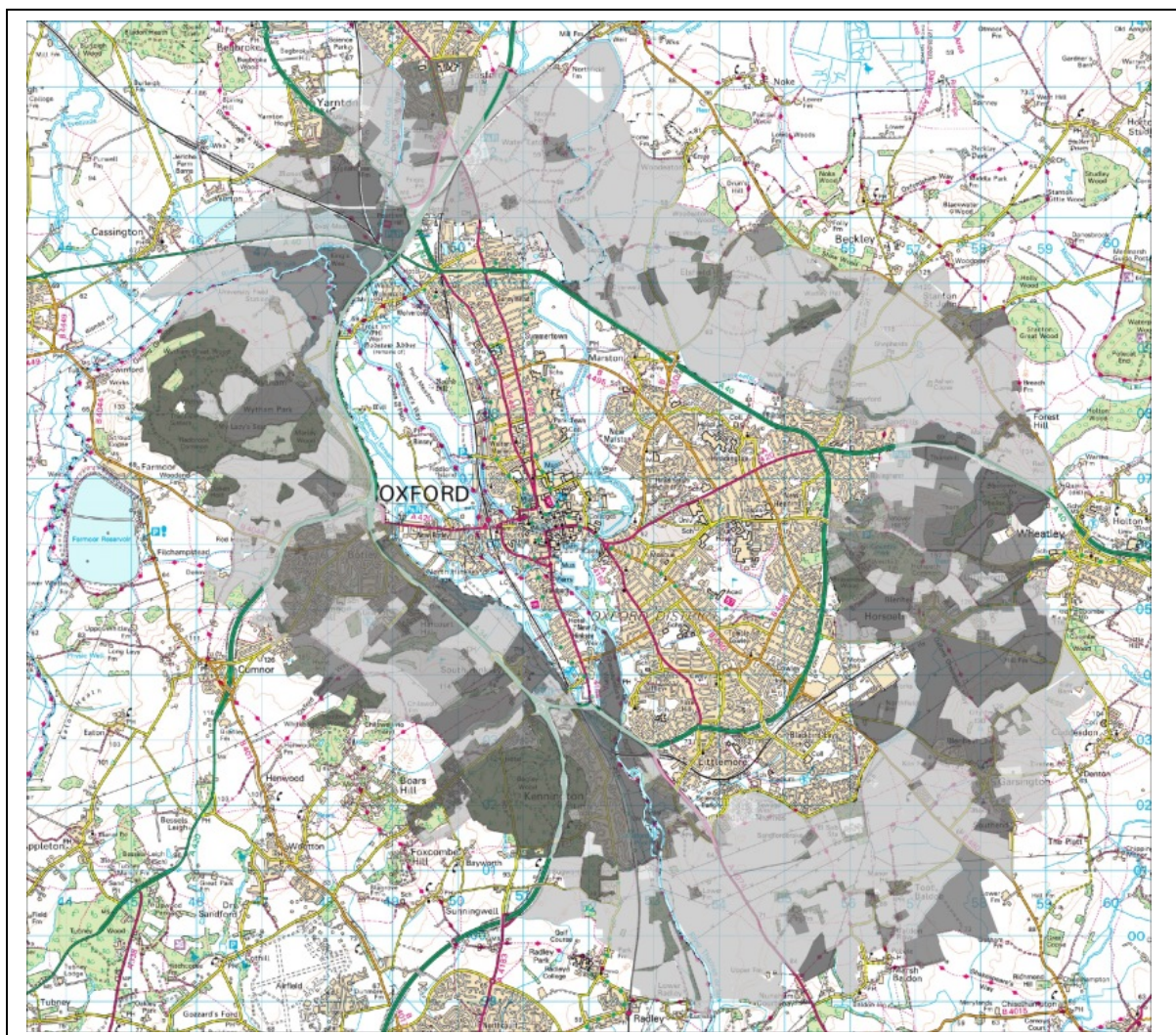
To illustrate how these values must be used in conjunction with site specific data, the Oxford Case Study Area was overlaid with the Archaeological Constraint Layer created by the County Council's Archaeology Team. This layer shows sites identified as having archaeological potential.

Whilst a number of Constraint Areas do coincide with those identified as of high sensitivity to urban development, for example the undated linear system observed on Wytham Hill and the Iron Age

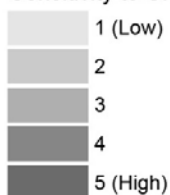


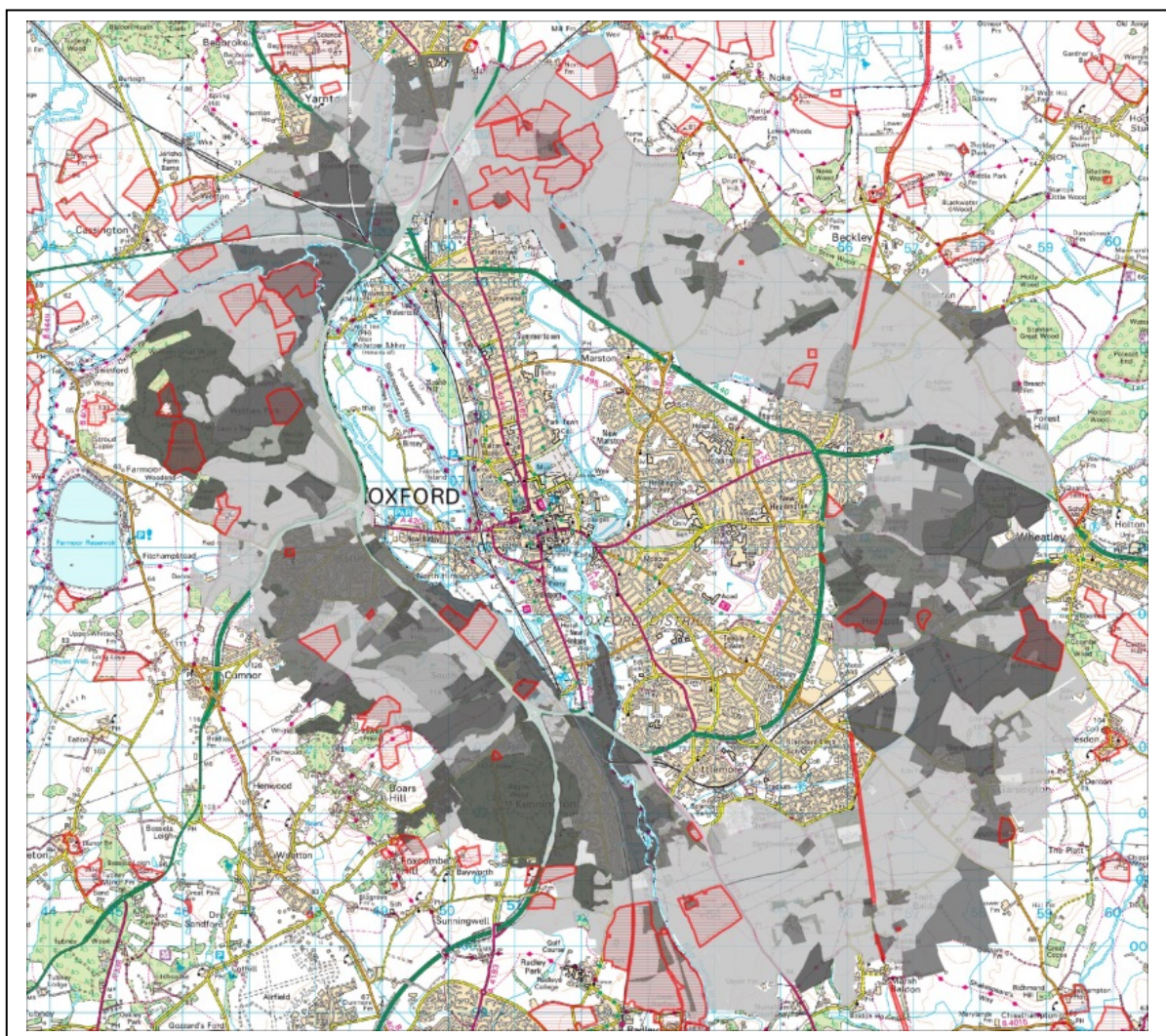
settlement on the southern edge of Bagley wood, others do not. The high priority archaeological area of a Roman settlement and pottery production site at Lower Farm north of Radley, for example, lies within an area of 19th century Reorganised Enclosures, a type which has a sensitivity rating of Low-Medium. The differences between these two datasets derive from both the criteria used to assess their significance and, crucially, their scale. The Archaeological Constraints Layer is site specific and highlights how data at this scale can enrich the county-wide type based methodology used here and, indeed, its essential contribution to the question of sensitivity.

The incorporation of such site specific data – Archaeological Constraints, Historic Environment Records Assets, Scheduled Monuments, SSSIs, etc. – into this capacity modelling could be achieved using a GIS. The benefits of combining these two scales are clear and it is suggested that this forms the next generation of historic landscape capacity for change assessments.

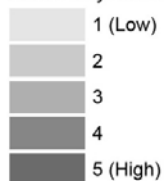


Sensitivity to Urban Development Category

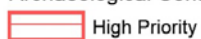




Sensitivity to Urban Development Category



Archaeological Constraint Areas





5.3.4.2 Capacity for Change: Banbury Study Area

A noticeable pattern around Banbury is the clustering of Medium-High sensitivity HLC types around High Sensitivity types. High Sensitivity types in this area are: Parkland/Designed Landscapes, Country Houses, Hamlets, Religious and Funerary sites, Rough Ground, and Piecemeal Enclosures. The dominant Medium-High type is Planned Enclosure, which is widespread in this study area.

The largest areas of high sensitivity are the park and gardens around the medieval Wroxton Abbey and Wykham Park. The extensive gardens and grounds at Wroxton date to the early 18th century and are open to the public. Both parks have seen post-medieval landscaping, but may have older, medieval origins. The age and size of these sites means that they contribute to the historic legibility of the area and there is a high potential for preserved archaeological remains and historic structures. As publically or partly publically accessible sites they also have high Communal Value. The mix of trees, plants, grassed areas, and monumental structures/statues makes these sites additionally aesthetically pleasing. Country Houses are smaller, but similarly historic sites with high sensitivity to urban development. Around Banbury these include the post-medieval properties of Broughton Grange, Bloxham Grove, and Cotefield House. Two hamlets have been identified – Nethercote and Little Bourton, the latter of which dates back to the 13th century. With small populations, Hamlets often have a high sense of community and are thought of as pretty parts of the countryside. The age of Little Bourton, in particular, means that there are likely to be a number of buildings of historic interest. Furthermore, the settlement will have been influential in organising the surrounding landscape and consequently preserves historic legibility. A small area of high sensitivity is found immediately north of the town, on Hardwick Hill. This land is characterised as Religious and Funerary and comprises a crematorium and cemetery. Sites such as this, even if dating to the modern period, are of strong Historic Value and connect people to the past. Due to this link these sites are important for communities. Archaeological remains may have been impacted, but equally, burials of archaeological importance and buildings of historic significance may form part of the site. Some small areas of Rough Ground survive beside the Oxford Canal. As a type, Rough Ground is thought to be highly sensitive to urban development due to their age, their untouched nature, and their environmental and aesthetic appeal. In this context, however, their sensitivity should be mitigated by the fact that this Rough Ground is not prehistoric in date, but likely relates to the construction of the canal in the 1770s. Finally, there are a few examples of surviving Piecemeal Enclosures. Compared to other case study areas, these are quite rare, forming small patches around Hardwick Gorse and Broughton. As remnants of the medieval and post-medieval landscape these are highly sensitive to urban expansion. Their rarity in this area makes them even more so.

Surrounding these areas of High sensitivity are widespread Planned Enclosures, rated as of Medium-High sensitivity. Many of these fields form large blocks which dominate the character of a particular area. Such blocks include: the land between Great and Little Bourton, surrounding the village of Horley, a very regular patch running along the north side of Bloxham Grove Road, and around Overthorpe and Twyford Bridge. Although these fields date to the post-medieval periods (these examples are 19th century) they are deemed less sensitive to urban development due to reduced Aesthetic Value and some reorganisation of earlier fields at their time of creation. Whilst Piecemeal Enclosures are quite rare in this study area, Planned Enclosures are more common, more so than in other areas. At a more local scale, therefore, these fields will be less sensitive to urban development than they are currently rated.



Sensitivity to Urban Development Category

- 1 (Low)
- 2
- 3
- 4
- 5 (High)

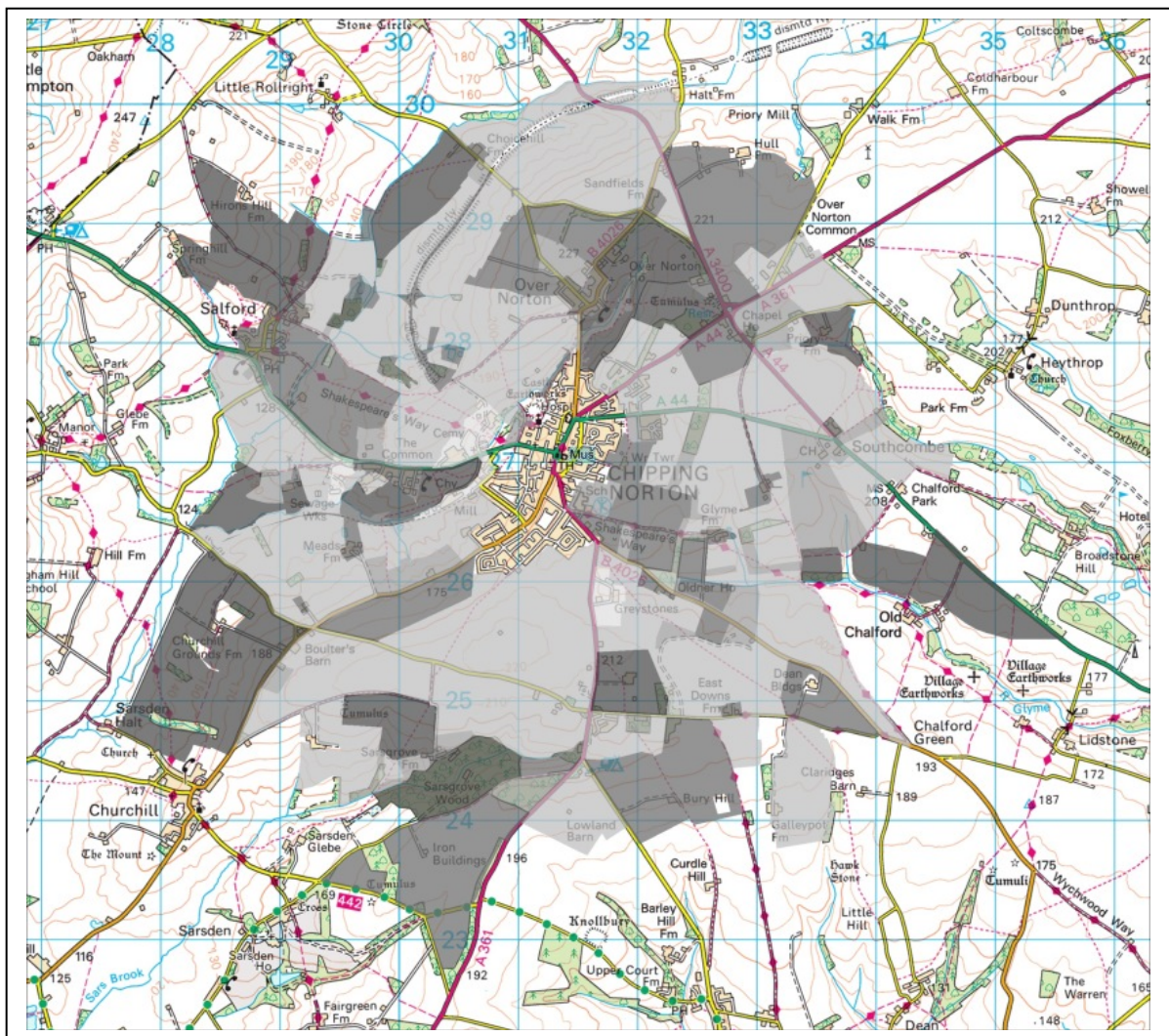


5.3.4.3 Capacity for Change: Chipping Norton Study Area

Areas of High Sensitivity to urban development in the Chipping Norton study area are typically Piecemeal Enclosures. Other sensitive types present are: Parkland/Designed Landscapes, Rough Ground, and Ancient Woodland. As elsewhere, Planned Enclosures are the most common type with Medium-High sensitivity.

Piecemeal Enclosures are typically found away from the town of Chipping Norton, separated from the settlement by large areas of 19th and 20th century Reorganised Enclosures. Two of the largest areas are found around Salford and to the north of Churchill. Both of these areas date to the late 18th or 19th centuries. Two earlier patches of Piecemeal fields have been identified around Priory Farm, north-east of Chipping Norton, and west of the town near Old Chalford. The fields around Priory Farm are particularly important for the historic landscape as they overlie the remains of Cold Norton Priory, a 12th century religious foundation, and Cold Norton Deserted Medieval Village. The fields around Old Chalford preserve dog-legs in their boundaries which may indicate that they were formed by enclosing the medieval open field strips on the edge of the settlement. The age of these fields and their visible traces of medieval landscapes make them important for historic legibility in the area. Their preserved archaeological remains also increase their significance. As in other study areas, the largest single site afforded High sensitivity is a Designed Landscape – Over Norton Park. This park extends down to the brook which forms the north-eastern boundary of Chipping Norton. It has been in the Dawkins' (of Richard Dawkins fame) family since the 1720s. The park's age and aesthetic value make it an important part of this landscape. The status of the park and associated house along with its age mean that it is likely to have influenced the development of the land surrounding it. The association with such an eminent modern scientist may also add to its perceived Historic Value. An interesting and rarer HLC type afforded a high sensitivity rating and found within this study area is the Rough Ground of Chipping Norton Common to the west of the town. Rough Ground is particularly rare in this part of Oxfordshire and, as such, this remnant of a post-medieval (possibly medieval) landscape is of wider significance. This piece of land has preserved its form from at least the late 19th century, if not the late 18th century. It is worth noting that the paths marked on the 1st Edition OS are still in the same place today, criss-crossing the common. Also traversing the common is a visible medieval trackway. In the late 19th century, the common was briefly used as a golf course. Historically and to this day, this land has been used by the community. The legibility of the medieval and post-medieval landscape at this site is clear, as is its enduring importance for the local people. Finally, there is one piece of Ancient Woodland in the study area, Sarsgrove Wood. The extent of this wood has not changed in the last 130 years and looks very much like the wood shown on Davis' Map in 1797. At the heart of this wood lies the Dower House of Sarsden house, a 17th century manor. The wood itself contributes to the historic character of the area and the addition of a post-medieval house only increases this. With little modern intervention, this wood preserves historic legibility and would likely preserve any archaeological remains.

Scattered throughout the study area are Planned Enclosures, rated as Medium-High sensitivity. Interestingly, these fields do not dominate the landscape in the same way as they do around Banbury. This is due to the higher preservation of Piecemeal Enclosures in this study area. Four larger blocks of these fields are found south and east of Sarsgrove Wood, east of Over Norton, and south of Salford. An unusual observation in this study area is the general lack of Villages, which are also rated as Medium-High sensitivity. Salford and Over Norton are the exceptions, both of which have a number of Grade II Listed Buildings.



Sensitivity to Urban Development Category

- 1 (Low)
- 2
- 3
- 4
- 5 (High)



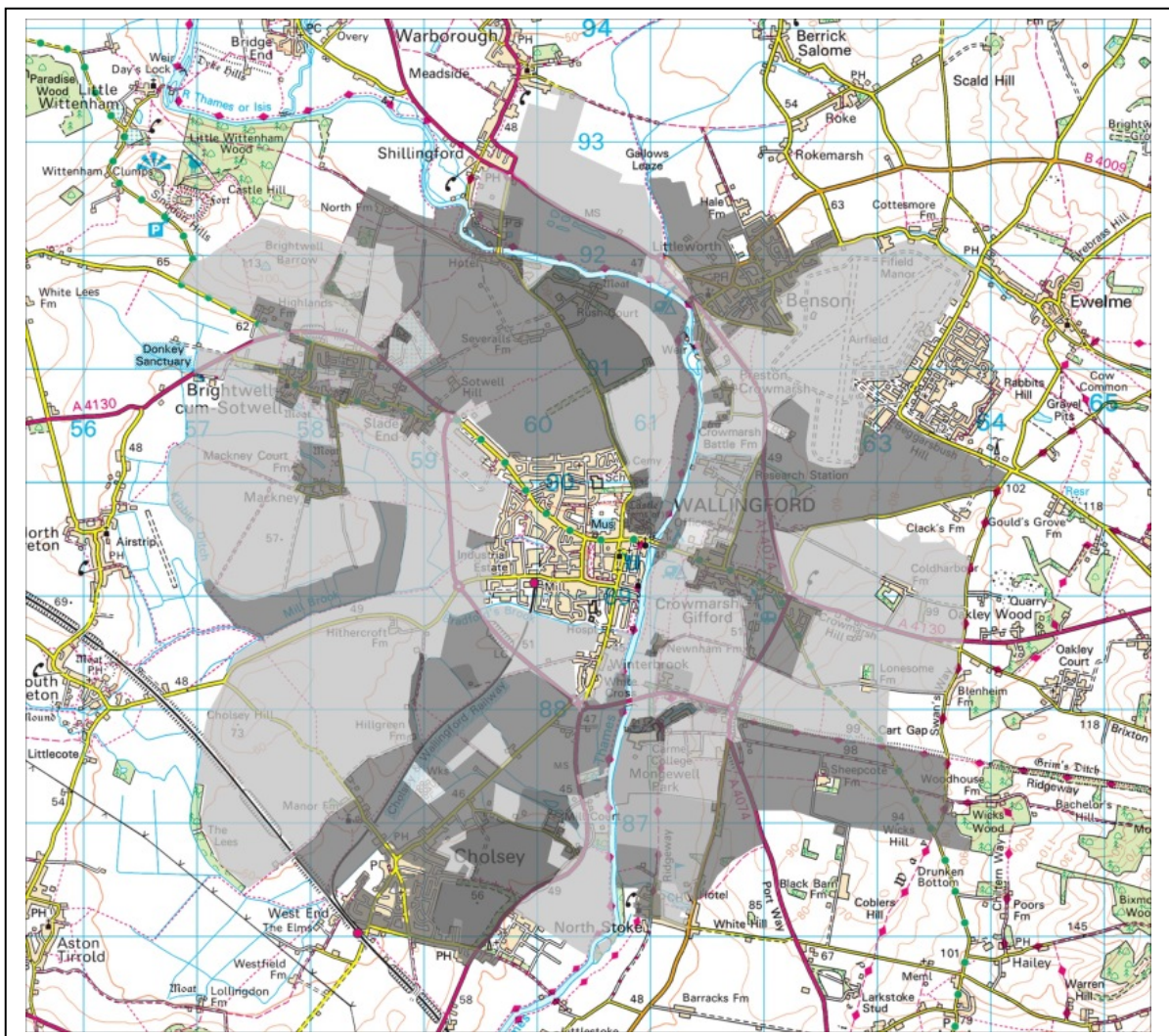
5.3.4.4 Capacity for Change: Wallingford Study Area

In the Wallingford Study Area, HLC types with the highest sensitivity to urban development are: Parkland/Designed Landscape, Hamlet, Religious and Funerary site, Managed Archaeological Site, and Piecemeal Enclosure. These are, in the main, found to the north of Wallingford around Rush Court and to the south around Mongewell and Mill Court.

One of the most sensitive parts of the landscape is the site of Wallingford Castle, an impressive medieval and post-medieval fortification, whose ruins on the very edge of the town are open to the public. As an historic site of national importance with extensive archaeological and standing building remains it is a significant part of the historic landscape of this area. Furthermore, its historic influence will have shaped and formed the surrounding landscape, preserving historic legibility. Its use by the people of Wallingford and by tourists also makes it a valuable community asset. Immediately to the north of the castle lies another area of high sensitivity, Wallingford Cemetery. This type has high Historical and Archaeological value as sites often preserve historical buildings and archaeological remains and serve as a personal link to the past – through remembered events and people. The nature of these sites means that modern intervention is limited and the impact on remains low. This type also ranks highly for Community Value, with cemeteries often being important places for people from all walks of life to come and pay their respects.

The remaining areas of higher sensitivity are found further from the town. Rush Court House and its surrounding Parkland along with the adjacent Shillingford House form a cluster to the north of Wallingford. Rush Court House is now used as a Care Home and has seen extensive modern remodelling and building work; however there are standing remains of the older Rush Court and moats and gardens associated with the medieval manor. This site preserves historic legibility in the landscape and was likely to have influenced the organisation of the surrounding area. Furthermore, as older parts of the landscape, modern alterations have been limited and archaeological and historic building potential remains high. To the south of Wallingford there is a second cluster, between the Hamlets of Mongewell and Mill Court. The small settlements themselves are highly valued for their Community potential and are rated highly for their Aesthetics. Mill Court, however, is a modern settlement and an exception to the more common medieval and post-medieval Hamlets. Its preservation of archaeological and historical remains will be lower than Mongewell's and it is likely to have reduced, rather than preserved, historic legibility. Around these settlements are a number of Piecemeal Enclosures, which typically date to the post-medieval period or earlier. Those on the eastern edge of Cholsey, for example, date to the 18th or early 19th century.

Beyond these areas of highest sensitivity there are large swathes of Medium-High sensitivity. These blocks are larger than those discussed above and are typically either Villages or Planned Enclosures. As has been mentioned, small settlements tend to be important for local identity and community and often thought of as attractive. They also frequently have an historic core which could date back to the medieval period and preserve buildings of historic importance. It was around these settlements that agricultural landscapes were first laid out and these older villages are, therefore, important for our understanding of the historic landscape. The Planned Enclosures, unlike the Piecemeal Enclosures, are generally further away from these settlements and typically relate to Parliamentary Enclosure Acts of the late 18th and 19th centuries - most of the examples here date to the latter. The uniform appearance of these fields and their more recent date has led to these fields being afforded a lower sensitivity value than Piecemeal Enclosures. However, a lack of modern adaptation means that there is still the potential for archaeological remains to exist. In addition, the Parliamentary Acts of Enclosure were an important and influential event in the English countryside and the physical remains of these do contribute to the historic character of a place.



Sensitivity to Urban Development Category

- 1 (Low)
- 2
- 3
- 4
- 5 (High)



5.3.4.5 Capacity for Change: Wantage Study Area

In the two kilometre buffer area around Wantage there is relatively little land assigned a high sensitivity to urban development rating when compared to the other study areas looked at by this case study. Those areas which are rated as such tend to be found between the south-west and north of the town, with one outlying area to the east. HLC types with high sensitivity to urban development in this study area are: various Piecemeal Enclosures, two Parkland/Designed Landscapes, a Country House, Woodland Pasture, and a small piece of land characterised as Croft. These latter two types are very rare rural types in the county.

Piecemeal Enclosures around Wantage have typically been assigned an 18th or 19th century date and are found north and west of the town. The largest blocks are to the east of Grove and around Little Woodhill. A smaller area between Challow Park and Segsbury Road housing development preserves an excellent dog-leg – a probable fossil of the open field system strips. Across Oxfordshire, Piecemeal Enclosures are closely associated with post-medieval settlements and farms and are typically found adjacent to these. The examples around Wantage follow this pattern and show where some of the earliest fields were created from the medieval open fields and commons. They are, therefore, important for our understanding of historic farming and landscape organisation/ownership.

Two Parkland/Designed Landscapes have been identified, but these are quite different in nature. The first is The Ham, immediately south of Wantage. The house and grounds are shown on the 1st Edition OS and the building is listed and dates to the mid-18th century. The boundaries of the park have largely been maintained since at least the 19th century. The second is the eastern outlier of high sensitivity – Lockinge House and the associated village of East Lockinge. The house was built in the mid-18th century and the village was mostly rebuilt as a model village in the mid-19th century by the occupants of the house, the Lord and Lady Wantage. The village is, therefore, part of the designed landscape centred on the Lockinge Estate. In the second example, the influence of the estate owner on the organisation of the landscape is unusually clear, but it is expected that most, if not all, sites of this type exerted control and influence over the way in which the surrounding landscape was managed. This type is key to understanding historic landscapes and historic events and preserves legibility to a high degree. The lack of modern intervention at sites of this type means that archaeological potential remains high. Furthermore, as open and landscaped grounds these sites have high biodiversity potential and high Aesthetic Value. To the northern end of Lockinge Estate lies Barton House, a Country House. This house was previously the Rectory for East Lockinge, built after the Old Rectory, which stood in the estate, was pulled down in the late 18th century. As a historic building in itself this house has importance for our understanding of the historic landscape. As part of the process of the creation of the Locking Estate and East Locking village it has increased significance for the area.

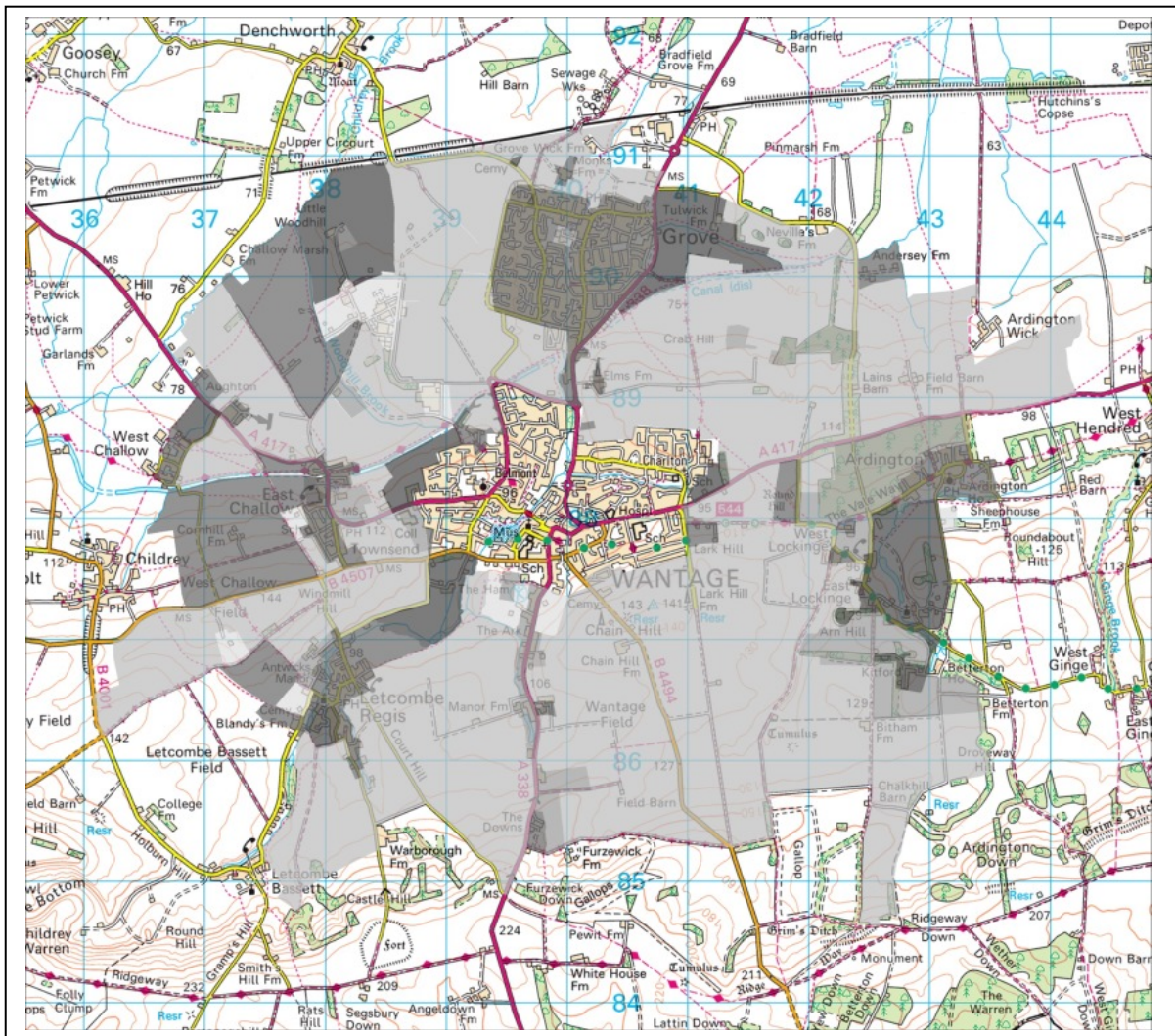
Woodland Pasture is a rare type in Oxfordshire, but has been identified on the western edge of the village of East Challow. This HLC type is more commonly associated with former parkland, but in this case is the site of a former orchard. The orchard, predating the late 19th century, was quite extensive and lay along most of this edge of the village. Few trees remain, giving the appearance of a Woodland Pasture. The boundaries of the orchard are better preserved. Orchards were an important feature for villages in Oxfordshire, providing communities with a food source and becoming important places for the village to come together. Whilst the Orchard has been removed, the Woodland Pasture does preserve much of the site's earlier character.

The Crofts have been identified on the eastern edge of Charlton, once a separate village, but now joined to Wantage by housing developments. They encompass agricultural fields and a small modern



cricket field. In the 19th century, this land was part of a series of noticeably irregular and distinct fields south of Whitehorns Farm. In one of these fields stood a large agricultural building, which survives to this day. The distinct nature of these fields arranged around an isolated agricultural building has led to their interpretation as possible Crofts. These are a post-medieval agricultural feature, but are sometimes older and medieval in origin. As mentioned, the building, along with some of the original field boundaries, survive. The creation of the cricket field will have had little impact on the site and the construction of the pavilion will only have slightly disturbed one part of the fields. Any archaeological remains are highly likely to survive. Additionally, as a post-medieval or medieval type this site preserves historic legibility in this part of the landscape.

The areas of Medium-High sensitivity to urban development generally follow the same distribution pattern as the High Sensitivity areas. This is due to the position of the villages around Wantage which have dictated the organisation of the historic landscape. These villages themselves are of historic importance, with places like Letcombe Regis containing houses dating to the 17th and 18th centuries and a church with 12th century features. As discussed above, Piecemeal Enclosures tend to cluster around these villages and beyond those lie the remnants of the Planned Enclosures of the 19th century. The largest area of these regular fields is to the west of East Challow.



Sensitivity to Urban Development Category

- 1 (Low)
- 2
- 3
- 4
- 5 (High)



5.4 Case Study 4: HLC and Other Archaeological/Historical Data

5.4.1 Introduction

This case study investigates the relationship between HLC data and other spatial datasets relating to the historic environment.

Research Questions:

- Can any patterns be observed between the distribution of Archaeological and Historical Data held by the Oxfordshire County Council Archaeology Team and Historic Landscape Character Types?
- Are Heritage Assets more frequently found on land characterised by certain Broad or HLC Types?
- How does the distribution of Heritage Assets compare to the distribution of Scheduled Monuments (SM)?
- Is there a relationship between Historic Landscape Character and the type of archaeological investigation or 'Event' requested by the Planning Archaeologists?
- Is there a relationship between development type and Historic Landscape Character?

5.4.2 Methodology

Four datasets held by the Oxfordshire County Council Archaeology Team – Heritage Assets²⁰ recorded on the Historic Environment Record (HER); Scheduled Monuments (SM); Archaeological Events; and Consultation requests made to the Planning Archaeologists – along with the British Museum's Portable Antiquities Scheme dataset were compared with the HLC dataset. Within MapInfo, two fields were appended to each of the data tables to record Broad and HLC Type. Using the Update Column function, these fields were populated using a spatial join query. This returned the Broad and HLC Type of the HLC polygon within which the record from the second dataset was located – the heritage asset or excavation, for example. These updated tables were then exported to Excel for analysis.

A major limitation of this method is the use of point data within the HER and Events datasets. This reduces heritage assets and archaeological investigations to single points. A more robust approach would be to use polygons which detail extents. Polygons were recorded by the SM and Consultation datasets.

With regards to the HER data, a significant bias is created by the recovery of archaeology through development. Development, such as the creation of new housing estates and new roads, requires archaeological investigation, therefore, identified heritage assets are biased towards those landscape character types which have seen development. Settlement types, in particular, are affected. Consequently, many of the patterns observed are likely to represent patterns of archaeological recovery rather than meaningful patterns of landscape use or demarcation in the past.

²⁰ Defined by the National Planning Policy Framework (NPPF) as: "A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing)." 2012. p. 52.



5.4.3 Results: HER and HLC Correspondence All Heritage Assets

Heritage Assets by Broad Type		
BroadType	Count	%
Civic Amenities	45	0.18
Civil Provision	1381	5.58
Commercial	302	1.22
Communication	509	2.06
Enclosure	6643	26.83
Industry	460	1.86
Military	68	0.27
Orchards and Horticulture	83	0.34
Ornamental	774	3.13
Recreation	340	1.37
Rural Settlement	8951	36.15
Unenclosed Land	182	0.73
Urban Settlement	4139	16.71
Water and Valley Floor	265	1.07
Woodland	621	2.51



PRN 9208
Barrow in
an
Enclosure
south of
Churn Hill

The majority of Heritage Assets recorded in Oxfordshire are found within settlements – predominantly Rural Settlements. This is likely, in part, to reflect the high frequency of interventions within these types. However, it also likely reflects the long history of occupation on the site of some settlements in Oxfordshire. Unsurprisingly, given their predominance in the county, a large percentage of Heritage Assets have been found within Enclosures. Assets have rarely been recorded on sites used by Civic Amenities and by the Military. The former is likely due to the scarcity of sites of this type in the county. The latter may relate to the date of the military sites, which predates widespread archaeological investigation, the exclusion of some sites from aerial surveys, and the lack of activity on these sites in recent years which would require archaeological work.

Heritage Assets by HLC Type

Much could be said about the relationship between Heritage Assets and HLC Types, but these are just a few observations. The majority of Heritage Assets recorded in Oxfordshire are found within the HLC Type Villages. Significantly more are found in Villages than in Towns and Cities, in part due to the division of urban settlements into more HLC Types, spreading out the assets between a greater number of types, but also due to the number of Villages and the age of Villages in Oxfordshire. A high percentage of Assets have been recorded within Reorganised Enclosures, which will reflect the predominance of this type within the county, but may also reflect the higher level of activity in these fields which may have disturbed archaeological deposits. Interestingly, fewer Assets have been identified in Ancient Woodland than in Secondary Woods or Plantations. This might be an indication of the age of some of these Ancient Woods which may have prevented human activity in the past, but is also likely to be due to the protection of these woods which has prevented interventions which would identify Heritage Assets.



HLType	Count	%
Civic Amenities - Reservoir	5	0.020
Civic Amenities - Sewerage Treatment Works	4	0.016
Civic Amenities - Utilities	17	0.069
Civic Amenities - Waste Disposal	19	0.077
Civil Provision - Educational Facility	320	1.292
Civil Provision - Gov Office and Civic Centre	54	0.218
Civil Provision - Health Care Facility	36	0.145
Civil Provision - Oxford College	815	3.291
Civil Provision - Park and Ride	3	0.012
Civil Provision - Police station	4	0.016
Civil Provision - Religious and Funerary	149	0.602
Commercial - Bank	8	0.032
Commercial - Business Park	64	0.258
Commercial - Office/Commercial	22	0.089
Commercial - Offices	23	0.093
Commercial - Shops	153	0.618
Commercial - Retail park	7	0.028
Commercial- Road Side Service Centre	1	0.004
Commercial -Shopping Centre	24	0.097
Communication - Airfield (Commercial)	8	0.032
Communication - Bridge	9	0.036
Communication - Car Park	7	0.028
Communication - Main Road	44	0.178
Communication - Road	223	0.901
Communication - Telecommunications	1	0.004
Communication -Canals and Locks	122	0.493
Communication -Major Road Junction	12	0.048
Communication -Motorways	22	0.089
Communication -Rail transport sites	56	0.226
Communication -Ridgeway	5	0.020
Ancient Enclosure	147	0.594
Assarted Enclosure	25	0.101
Closes	3	0.012
Crofts (medieval & Post Medieval)	4	0.016
Enclosure - Paddocks and Stables	72	0.291
Enclosure - Reclaimed land	12	0.048
Ladder Field System	11	0.044
Piecemeal Enclosure	949	3.832
Planned Enclosure	1046	4.224
Prairie / Amalgamated Enclosure	1723	6.958
Reorganised Enclosures	2651	10.705
Industry - Depot	1	0.004
Industry - Processing Industry	3	0.012
Industry -Extractive Works	76	0.307
Industry -Flooded Extractive pits	202	0.816
Industry -Industrial Estate	122	0.493

Industry -Manufacturing	17	0.069
Industry -Mill / Mill Complex	38	0.153
Industry -Timber Yard	1	0.004
Military - Castle	7	0.028
Military - Defence Site	25	0.101
Military - Hillfort	5	0.020
Military - Military Airfield	30	0.121
Military - Shooting Range	1	0.004
Orchard and Hort - Allotment	38	0.153
Orchard and Hort - Nursery/ Garden Centre	15	0.061
Orchard and Hort - Orchard	9	0.036
Orchard and Hort - Urban Garden	21	0.085
Orn -Deer Park	30	0.121
Orn -Domestic Garden	31	0.125
Orn -Ornamental water body	15	0.061
Orn-Parkland / Designed Landscape	698	2.819
Managed Archaeological Site	29	0.117
Recreation - Country Park	20	0.081
Recreation - Golf Course	75	0.303
Recreation - Nature Reserve	19	0.077
Recreation - Other Leisure facilities	66	0.267
Recreation - Public Park	31	0.125
Recreation - Racing Sports Sites	31	0.125
Recreation -Sports Facilities	69	0.279
Rural - Caravan/Chalet/ Camping site	23	0.093
Rural - Country House	236	0.953
Rural - Dwelling	56	0.226
Rural - Hamlet	673	2.718
Rural - Hotel	23	0.093
Rural - Village	7080	28.591
Rural -Farmstead	860	3.473
Unenclosed -Green	11	0.044
Unenclosed -Rough Ground	171	0.691
Urban - Caravan and Camp site/ chalet site	3	0.012
Urban - City	433	1.749
Urban - Historic Urban Core	3030	12.236
Urban - Hotel	11	0.044
Urban - Market	11	0.044
Urban - Public House	15	0.061
Urban - Town	636	2.568
Water - Fresh Water Body	33	0.133
Water - River	206	0.832
Water - Water Meadow	25	0.101
Water - Watercress Beds	1	0.004
Woodland - Ancient Woodland	176	0.711
Woodland -Plantation	183	0.739
Woodland -Secondary Woodland	239	0.965
Woodland -Woodland Pasture	23	0.093



5.4.4 Results: HER and HLC Correspondence Barrows

Barrows by Broad Type

BroadType	Count	%
Civic Amenities	5	0.770416
Civil Provision	8	1.232666
Commercial	5	0.770416
Communication	3	0.46225
Enclosure	436	67.18028
Industry	44	6.779661
Military	2	0.308166
Ornamental	12	1.848998
Recreation	20	3.081664
Rural Settlement	17	2.619414
Unenclosed Land	22	3.389831
Urban Settlement	28	4.31433
Water and Valley Floor	1	0.154083
Woodland	46	7.087827



PRN 9208
Barrow in
an
Enclosure
south of
Churn Hill

Barrows within Oxfordshire have most frequently been found within Enclosures. Whilst this undoubtedly reflects the dominance of this Type within the county, it is also likely to reflect the types of landscapes preferred for the construction of barrows – land which is now preferred for agricultural use. The high number of barrows found within Woodland suggests that the barrows identified are often upstanding and surviving monuments which can be seen despite the presence of trees and without archaeological intervention. Conversely, barrows have also been found in some numbers on Industrial sites and it is likely that many of these have been damaged or removed by Industrial activity. Interestingly, barrows have also frequently been found within Settlements, indicating the diversity of landscapes marked by barrows.

Barrows by HLC Type

As with other Heritage Asset types, barrows have most commonly been identified within Reorganised and Prairie Enclosures, the most common HLC Types in Oxfordshire. Consequently, this correspondence may merely reflect the frequency of this HLC Type. The generally modern date and high intensity of agriculture on land of these HLC Types, however, may also affect the number of barrows identified. A large number of barrows have been found and removed during gravel extraction, with the sites now occupied by lakes and ponds. Barrows have also been found within Settlement contexts, particularly during the construction of residential developments within Towns and Villages. In most cases, the barrows are likely to have been destroyed.



HLCType	Count	%
Civic Amenities - Waste Disposal	5	0.770416
Civil Provision - Educational Facility	7	1.078582
Civil Provision - Oxford College	1	0.154083
Commercial - Business Park	2	0.308166
Commercial - Shops	1	0.154083
Commercial -Shopping Centre	2	0.308166
Communication -Canals and Locks	1	0.154083
Communication -Ridgeway	2	0.308166
Ancient Enclosure	17	2.619414
Enclosure - Paddocks and Stables	13	2.003082
Ladder Field System	1	0.154083
Piecemeal Enclosure	34	5.238829
Planned Enclosure	98	15.10015
Prairie / Amalgamated Enclosure	110	16.94915
Reorganised Enclosures	163	25.11556
Industry -Extractive Works	5	0.770416
Industry -Flooded Extractive pits	34	5.238829
Industry -Industrial Estate	5	0.770416
Military - Military Airfield	2	0.308166
Orn -Deer Park	2	0.308166
Orn -Domestic Garden	4	0.616333
Orn-Parkland / Designed Landscape	6	0.924499
Managed Archaeological Site	1	0.154083
Recreation - Golf Course	1	0.154083
Recreation - Nature Reserve	2	0.308166
Recreation - Public Park	1	0.154083
Recreation - Racing Sports Sites	13	2.003082
Recreation -Sports Facilities	2	0.308166
Rural - Dwelling	1	0.154083
Rural - Hamlet	3	0.46225
Rural - Village	12	1.848998
Rural -Farmstead	1	0.154083
Unenclosed -Rough Ground	22	3.389831
Urban - City	3	0.46225
Urban - Historic Urban Core	3	0.46225
Urban - Town	22	3.389831
Water - Water Meadow	1	0.154083
Woodland - Ancient Woodland	15	2.311248
Woodland -Plantation	16	2.465331
Woodland -Secondary Woodland	14	2.157165
Woodland -Woodland Pasture	1	0.154083

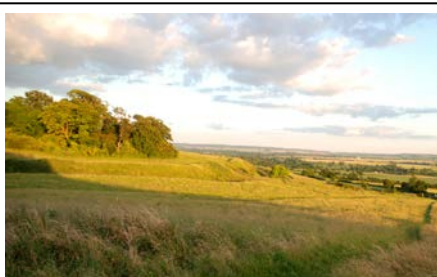


5.4.5 Results: HER and HLC Correspondence Prehistoric Fortified Sites

Prehistoric Fortified Sites by Broad Type

BroadType	Count	%
Enclosure	19	57.58
Military	1	3.03
Ornamental	2	6.06
Recreation	7	21.21
Woodland	4	12.12

Prehistoric Fortified Sites – including hill forts and promontory forts – have most often been recorded within Enclosures. Given the rural nature of Oxfordshire, this is perhaps not surprising. A large number have been recorded as Recreational Sites as they are often Managed Archaeological Sites. The single hill fort on land characterised as Military is Sinodun Camp which has been characterised as a Hill Fort, reflecting that this is still the dominant character of the current land use. The relatively high number of hill forts identified within Woodland is likely due to the size of these monuments which allows their identification even when covered by trees. Also, as can be seen at Sinodun Hill, trees have often been allowed to populate some sites due to their unsuitability for arable farming.



PRN 3153
Sinodun
Hill Camp,
HLC Type
Military –
Hill Fort

Prehistoric Fortified Sites by HLC Type

In Oxfordshire, prehistoric fortified sites are often identified within Prairie Fields or Amalgamated Enclosures and it is possible that the obstacle these monuments present to farming has affected the size of the field around them. Of course, given the prevalence of this HLC Type, it may just be a factor of their commonality in Oxfordshire. Hillforts, such as Segsbury Camp and Alfred's Castle, are also often Managed Archaeological Sites and are characterised as such. Tadmorton Camp is also on land characterised as Recreational, but it is on part of a Golf Course. As has been mentioned, hill forts in Oxfordshire often lie on land characterised as Woodland, in part this is due to the natural encroachment of trees onto these sites due to their unsuitability for other activities, this is reflected at three hill forts which lie on land characterised as Secondary Woodland. The lack of Settlement character types likely reflects the sort of topography favoured for the location of hill forts, which has not often been favoured for settlement.



HLCType	Count	%
Enclosure - Paddocks and Stables	1	3.03
Piecemeal Enclosure	2	6.06
Planned Enclosure	3	9.09
Prairie / Amalgamated Enclosure	8	24.24
Reorganised Enclosures	5	15.15
Military - Hillfort	1	3.03
Orn-Parkland / Designed Landscape	2	6.06
Managed Archaeological Site	6	18.18
Recreation - Golf Course	1	3.03
Woodland - Ancient Woodland	1	3.03
Woodland -Secondary Woodland	3	9.09



5.4.6 Results: HER and HLC Correspondence Roman Villas

Roman Villas by Broad Type

BroadType	Count	%
Enclosure	61	74.39
Industry	2	2.44
Ornamental	1	1.22
Recreation	3	3.66
Rural Settlement	9	10.98
Unenclosed Land	1	1.22
Urban Settlement	2	2.44
Woodland	3	3.66

Roman Villas in Oxfordshire tend to have been found within Enclosures and have rarely been found within Ornamental Landscapes or on Unenclosed Land. They have often been found within Rural Settlements and are also known from Urban Settlements. The correspondence with Enclosures is likely to be, in part, a result of the dominance of this type in the county, but may also reflect the agrarian nature of villas and the continuity of certain parts of the county as agricultural landscapes. This will mostly have been determined by geological and hydrological factors, but historical factors may have had an effect. The lack of villas within Ornamental Landscapes is interesting and may reflect the low level of interventions within these often old landscapes.



Roman Villas by HLC Type

Roman Villas have been most frequently recorded within Reorganised Enclosures, which, given their common occurrence across the county, might not be surprising. Reorganised Enclosures tend to have been intensively farmed since the Post-Medieval period and this will also have increased the likelihood of identifying villas within them. Scatters of tile, including box flue tiles, frequently used to identify villa sites, are often brought to the surface by ploughing action and will, therefore, often be found where agricultural activity is high. This may explain why far fewer villas have been found within Ancient Enclosures and even within Piecemeal Enclosures, which tend to be older and less intensively farmed. It is interesting that three villas have been identified at current farms, which, whilst not suggesting continuity of the site from the Roman period, may suggest continuity of land use over 2000 years.



HLCType	Count	%
Ancient Enclosure	3	3.66
Enclosure - Paddocks and Stables	1	1.22
Piecemeal Enclosure	10	12.20
Planned Enclosure	11	13.41
Prairie / Amalgamated Enclosure	14	17.07
Reorganised Enclosures	22	26.83
Industry -Extractive Works	1	1.22
Industry -Flooded Extractive pits	1	1.22
Orn -Domestic Garden	1	1.22
Managed Archaeological Site	1	1.22
Recreation - Golf Course	1	1.22
Recreation -Sports Facilities	1	1.22
Rural - Country House	2	2.44
Rural - Hamlet	1	1.22
Rural - Village	3	3.66
Rural -Farmstead	3	3.66
Unenclosed -Rough Ground	1	1.22
Urban - Town	2	2.44
Woodland - Ancient Woodland	1	1.22
Woodland -Secondary Woodland	1	1.22
Woodland -Woodland Pasture	1	1.22



5.4.7 Results: HER and HLC Correspondence Findspots

Findspots by Broad Type

BroadType	Count	%
Civic Amenities	10	0.27
Civil Provision	423	11.43
Commercial	112	3.03
Communication	172	4.65
Enclosure	1646	44.49
Industry	100	2.70
Military	17	0.46
Orchards and Horticulture	29	0.78
Ornamental	61	1.65
Recreation	91	2.46
Rural Settlement	394	10.65
Unenclosed Land	42	1.14
Urban Settlement	373	10.08
Water and Valley Floor	117	3.16
Woodland	113	3.05

Findspots – where finds only have been reported – have most frequently been reported from land characterised as Enclosures. This reflects the nature of fields and agricultural activity which exposes finds. Interestingly, more than 20% of findspots have been recorded from within settlements, probably during activities which involve the excavation of earth – for example, building work or gardening. Finds from settlements also indicate the age of some of Oxfordshire’s towns and villages, but also demonstrates successive phases of earlier occupation. Finds have also commonly been found in places characterised as Civil Provision – most of which are found within settlements. The recovery of finds from these places is likely due to similar activities and reasons as elsewhere in settlements.

Findspots by HLC Type

Unsurprisingly, given their frequency across the county, findspots have tended to have been recorded from Reorganised and Prairie Enclosures. The action of ploughing and accessibility of these fields will also have led to a high recovery rate. Villages are also frequently the location of findspots, with object found during large-scale development projects and through small-scale projects conducted by individuals in their own homes. The high frequency of findspots recorded within Oxford Colleges is likely to reflect the use of the type “Findspot” to refer to archaeological investigations within the city and is not, therefore, likely to represent a concentration of finds, per se. This will also have affected findspots recorded on land characterised by the types City, Market, Public House, and some of the Communication Types. Interestingly, a number of finds have been identified from rivers in Oxfordshire – for example, various Roman and Iron Age artefacts found below Days Lock in the River Thames near Little Wittenham (PRN 2394)



HLCType	Count	%
Civic Amenities - Reservoir	1	0.027
Civic Amenities - Sewerage Treatment Works	3	0.081
Civic Amenities - Utilities	4	0.108
Civic Amenities - Waste Disposal	2	0.054
Civil Provision - Educational Facility	96	2.595
Civil Provision - Gov Office and Civic Centre	26	0.703
Civil Provision - Health Care Facility	4	0.108
Civil Provision - Oxford College	264	7.135
Civil Provision - Park and Ride	1	0.027
Civil Provision - Religious and Funerary	32	0.865
Commercial - Bank	2	0.054
Commercial - Business Park	7	0.189
Commercial - Office/Commercial	12	0.324
Commercial - Offices	11	0.297
Commercial - Shops	76	2.054
Commercial - Retail park	1	0.027
Commercial - Shopping Centre	3	0.081
Communication - Airfield (Commercial)	4	0.108
Communication - Bridge	3	0.081
Communication - Car Park	4	0.108
Communication - Main Road	11	0.297
Communication - Road	125	3.378
Communication - Canals and Locks	7	0.189
Communication - Major Road Junction	3	0.081
Communication - Motorways	12	0.324
Communication - Rail transport sites	2	0.054
Communication - Ridgeway	1	0.027
Ancient Enclosure	35	0.946
Assarted Enclosure	2	0.054
Closes	1	0.027
Enclosure - Paddocks and Stables	11	0.297
Enclosure - Reclaimed land	1	0.027
Piecemeal Enclosure	241	6.514
Planned Enclosure	265	7.162
Prairie / Amalgamated Enclosure	439	11.865
Reorganised Enclosures	651	17.595
Industry - Depot	1	0.027
Industry - Extractive Works	14	0.378
Industry - Flooded Extractive pits	51	1.378
Industry - Industrial Estate	24	0.649

Industry - Manufacturing	5	0.135
Industry - Mill / Mill Complex	5	0.135
Military - Castle	2	0.054
Military - Defence Site	5	0.135
Military - Hillfort	3	0.081
Military - Military Airfield	7	0.189
Orchard and Hort - Allotment	19	0.514
Orchard and Hort - Nursery/ Garden Centre	3	0.081
Orchard and Hort - Orchard	2	0.054
Orchard and Hort - Urban Garden	5	0.135
Orn - Deer Park	6	0.162
Orn - Domestic Garden	1	0.027
Orn - Parkland / Designed Landscape	54	1.459
Managed Archaeological Site	10	0.270
Recreation - Golf Course	17	0.459
Recreation - Nature Reserve	8	0.216
Recreation - Other Leisure facilities	19	0.514
Recreation - Public Park	11	0.297
Recreation - Racing Sports Sites	3	0.081
Recreation - Sports Facilities	23	0.622
Rural - Caravan/Chalet/ Camping site	4	0.108
Rural - Country House	3	0.081
Rural - Hamlet	39	1.054
Rural - Hotel	1	0.027
Rural - Village	297	8.027
Rural - Farmstead	50	1.351
Unenclosed - Green	1	0.027
Unenclosed - Rough Ground	41	1.108
Urban - City	150	4.054
Urban - Historic Urban Core	94	2.541
Urban - Hotel	3	0.081
Urban - Market	2	0.054
Urban - Public House	5	0.135
Urban - Town	119	3.216
Water - Fresh Water Body	8	0.216
Water - River	104	2.811
Water - Water Meadow	5	0.135
Woodland - Ancient Woodland	38	1.027
Woodland - Plantation	25	0.676
Woodland - Secondary Woodland	46	1.243
Woodland - Woodland Pasture	4	0.108





5.4.8 Results: Scheduled Monuments

SMs by Broad Type

BroadType	Count	%
Civil Provision	6	1.90
Commercial	7	2.22
Communication	7	2.22
Enclosure	158	50.00
Industry	2	0.63
Military	7	2.22
Ornamental	15	4.75
Recreation	16	5.06
Rural Settlement	46	14.56
Unenclosed Land	12	3.80
Urban Settlement	9	2.85
Water and Valley Floor	4	1.27
Woodland	27	8.54

SMs in Oxfordshire are most frequently found on land characterised as Enclosures. Civic Amenity and Horticultural Types do not have any recorded SMs. The second most common landscape type where SMs are recorded is Rural Settlement, with 46 monuments. In contrast, Urban Settlements record only 9 SMs. Woodlands also figure quite highly, with 8.5% of SMs found on land characterised as wood. The high number of SMs on recreational land is partly due to the Recreation HLC Type Managed Archaeological Site, which account for 10 of the 16 SMs recorded on recreational land. Most of the SMs recorded on land characterised as Communication are found on Airfields – 5 of the 7 – and a further 4 are recorded on Military Airfields. In fact a number of airfields are SMs themselves – e.g. RAF Upper Heyford and RAF Bicester.



PRN 2249
King's Men
Stone
Circle,
Rollright
Stones

SM by HLC Type

SMs tend to be found within Enclosures, in particular Reorganised and Planned Enclosures. Examples in the latter include Callow Hill Villa and Knollbury Camp Hillfort. SMs are also found in large numbers in Rural Settlements, mostly within Villages, but also within Hamlets and on Farms, such as Highlands Farm Palaeolithic site. More than 60% of SMs found within Woodland were found within Ancient Woodland, far more than the 26% found in Secondary Woodland. This includes the moated ringwork in Ardley Wood and earthworks in Friarhampstead Wood. A few SMs are recorded within the Historic Urban Core of some of Oxfordshire's towns, where they usually form elements of the historic centre – Eynsham's market cross and Oxford's city walls, for example.



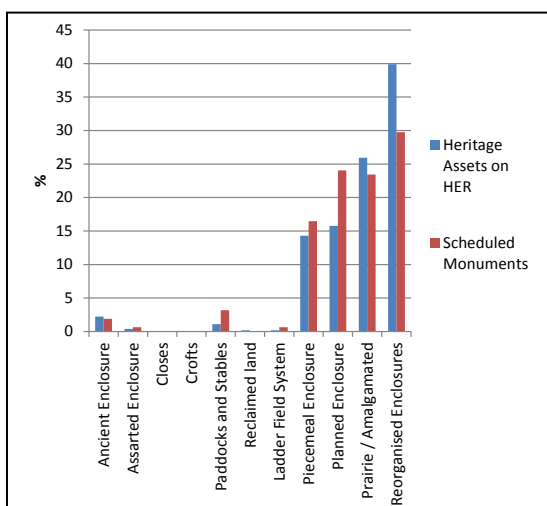
HLType	Count	%
Civil Provision - Educational Facility	3	0.95
Civil Provision - Gov Office and Civic Centre	1	0.32
Civil Provision - Oxford College	2	0.63
Commercial - Business Park	5	1.58
Commercial - Shops	1	0.32
Commercial - Shopping Centre	1	0.32
Communication - Airfield (Commercial)	5	1.58
Communication - Rail transport sites	1	0.32
Communication - Ridgeway	1	0.32
Ancient Enclosure	3	0.95
Assarted Enclosure	1	0.32
Enclosure - Paddocks and Stables	5	1.58
Ladder Field System	1	0.32
Piecemeal Enclosure	26	8.23
Planned Enclosure	38	12.03
Prairie / Amalgamated Enclosure	37	11.71
Reorganised Enclosures	47	14.87
Industry - Manufacturing	1	0.32
Industry - Mill / Mill Complex	1	0.32
Military - Castle	1	0.32
Military - Defence Site	1	0.32
Military - Hillfort	1	0.32
Military - Military Airfield	4	1.27
Orn - Deer Park	3	0.95
Orn - Ornamental water body	1	0.32
Orn - Parkland / Designed Landscape	11	3.48
Managed Archaeological Site	10	3.16
Recreation - Country Park	2	0.63
Recreation - Golf Course	1	0.32
Recreation - Other Leisure facilities	1	0.32
Recreation - Racing Sports Sites	1	0.32
Recreation - Sports Facilities	1	0.32
Rural - Country House	4	1.27
Rural - Dwelling	1	0.32
Rural - Hamlet	11	3.48
Rural - Village	24	7.59
Rural - Farmstead	6	1.90
Unenclosed - Rough Ground	12	3.80
Urban - Historic Urban Core	4	1.27
Urban - Town	5	1.58
Water - River	4	1.27
Woodland - Ancient Woodland	17	5.38
Woodland - Plantation	3	0.95
Woodland - Secondary Woodland	7	2.22

Comparing the distribution of Heritage Assets and SMs

SMs more commonly tend to be found within Enclosures than Heritage Assets – 50% of SMs are located within fields compared to just 26.8% of Heritage Assets. Interestingly, SMs are more frequently found within fields which tend to be of an older date than those fields containing Heritage Assets – 16.5% in Piecemeal Enclosures, and 24.1% in Planned Enclosures. It is possible that the presence of SMs preserves older fields due to legal protection which hinders modern large-scale and intensive agricultural regimes which often remove field boundaries. Conversely, the intensive farming of Reorganised and Prairie fields is more likely to recover evidence of Heritage Assets.

Heritage Assets are found more frequently within Settlements than SMs – 52.9% compared to 17.4%. This is likely due to the identification of Heritage Assets through development which requires archaeological investigation. In contrast, SMs are often upstanding monuments, which are not only less likely to be identified by development but are also likely to deter development projects.

SMs are more often found within Woodland than Heritage Assets. Again, this is likely due to the different nature of these monuments – with SMs being more easily identified in wooded environments – and lower levels of development and archaeological investigation in these areas which might identify Heritage Assets.



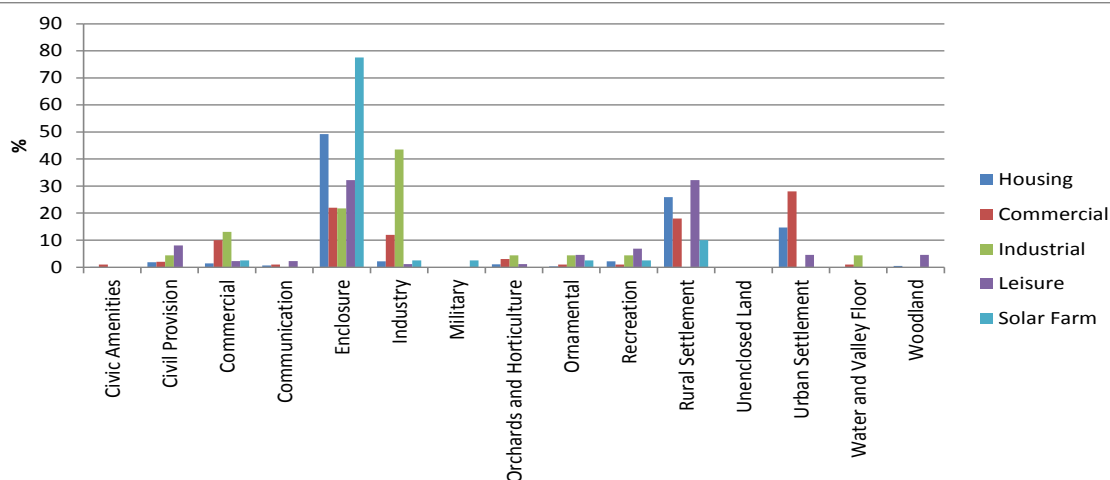


5.4.9 Results: Consultations

Consultations by Broad Type

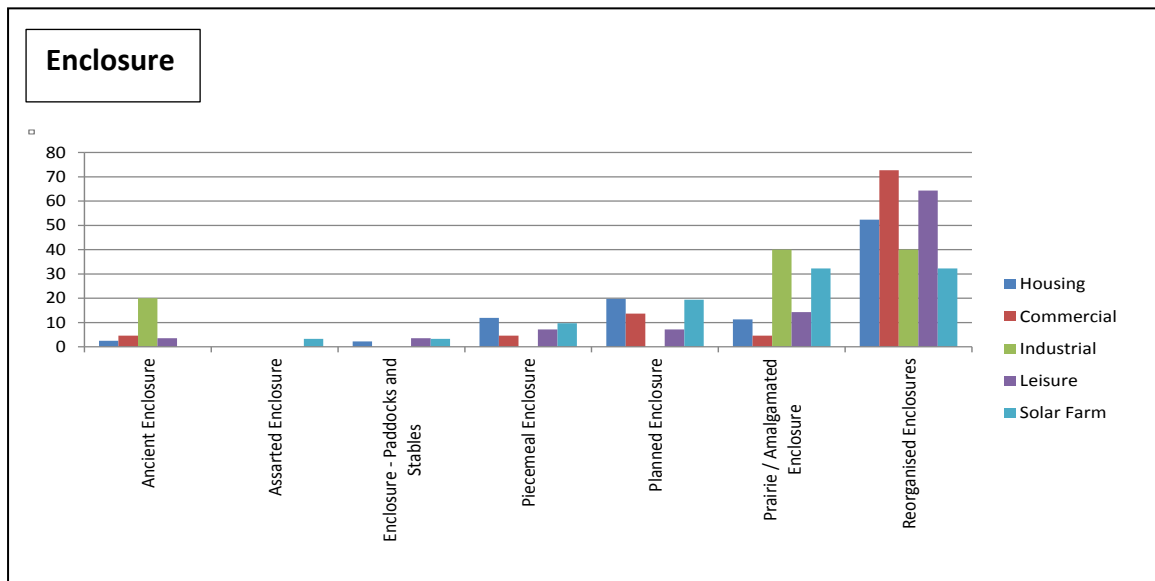
BroadType	Count	%
Civic Amenities	4	0.20
Civil Provision	59	2.92
Commercial	36	1.78
Communication	10	0.49
Enclosure	659	32.56
Industry	53	2.62
Military	2	0.10
Orchards and Horticulture	17	0.84
Ornamental	29	1.43
Recreation	34	1.68
Rural Settlement	765	37.80
Unenclosed Land	1	0.05
Urban Settlement	328	16.21
Water and Valley Floor	5	0.25
Woodland	22	1.09

A Consultation refers to any request for information or advice made to the Archaeology Team ahead of the development of an area. The majority of Consultations are made in relation to land characterised as Rural Settlement and Urban Settlement. This mirrors the large number of Events recorded within settlements and reflects development and redevelopment within built areas. Land characterised as Enclosure is the second most frequently consulted upon type. Conversely, Unenclosed Land is the least consulted upon type, with only one Consultation recorded. This suggests very little development on landscapes of this type.



Consultations for Housing, Commercial, Industrial, Leisure and Solar Farm Developments

Analysis shows that there is a correlation between Development Type and Landscape Character. Solar Farm Consultations are almost exclusively found within Enclosures, but never in Woodland. Housing Development (multiple properties) requests tend to be made within Enclosures or Rural Settlements – reflecting the use of both green and brownfield sites. Consultations for Commercial Development tend to be made within settlements, but are also found within Enclosures and on Industrial sites. Industrial Consultations tend to be made for land already characterised as Industrial, whilst Leisure Consultations are made in Rural Settlements and Enclosures, implying expansion.



It is apparent that Consultations for different Development Types favour different types of field. Reorganised Enclosures are most frequently enquired about, which reflects their commonality in Oxfordshire, but there are other, more interesting, observations to be made. Solar Farm Developments equally prefer Prairie Fields and Reorganised Enclosures, whereas Housing Developments are far less likely to use Prairie Fields, possibly due to their tendency to be located deep within agricultural areas. Conversely, the settlement edge location of Piecemeal and Reorganised Enclosures may explain the number of Housing Development Consultations within these types and, similarly, the number of Leisure and Commercial Consultations. Like the Solar Farms, Industrial Consultations equally prefer the large and modern fields, with a single example recorded from an Ancient Enclosure.

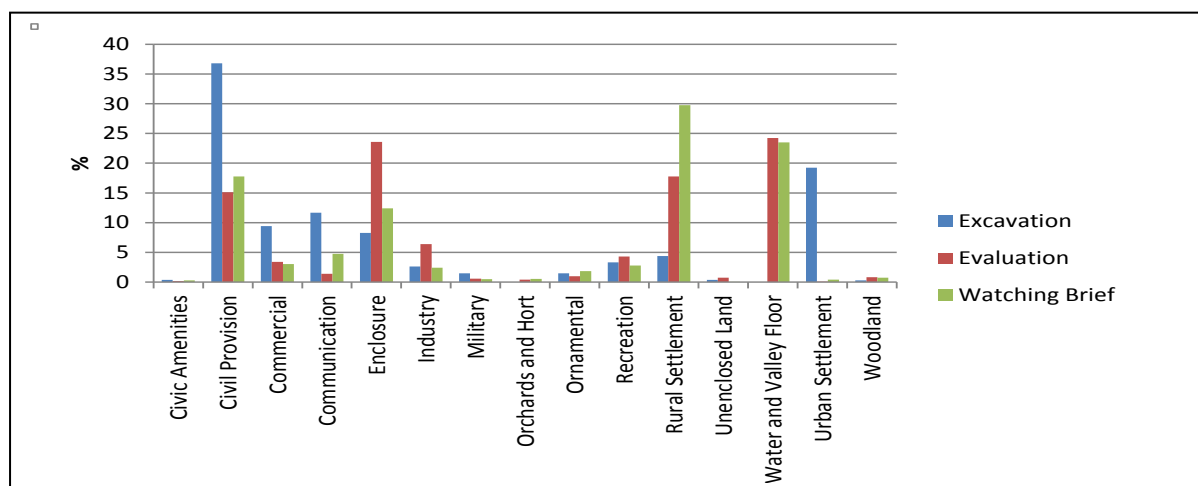


5.4.10 Results: Archaeological Events

Events by Broad Type

BroadType	Count	%
Civic Amenities	15	0.25
Civil Provision	1296	21.69
Commercial	309	5.17
Communication	345	5.77
Enclosure	1018	17.04
Industry	195	3.26
Military	52	0.87
Orchards and Horticulture	31	0.52
Ornamental	98	1.64
Recreation	193	3.23
Rural Settlement	959	16.05
Unenclosed Land	37	0.62
Urban Settlement	1335	22.34
Water and Valley Floor	34	0.57
Woodland	49	0.82

An Event is defined as any archaeological intervention of recording action. The majority of Events occur within Urban Settlements. This concentration is even greater if those events carried out on land characterised as Civil Provision, usually found within settlements, are also considered. Given the extensive coverage of Enclosures in Oxfordshire – 74% of the county – the low number of Events recorded within this type – just 17% - stands out. It suggests that the majority of development which requires archaeological investigation or recording has since been built on or that existing built up areas are a focus of development. This is likely to be a consequence of the concentration of Heritage Assets in Urban and Rural Settlements and high rates of development and redevelopment in these areas. It is also likely to have contributed to the high number of Assets identified within Settlement environments.

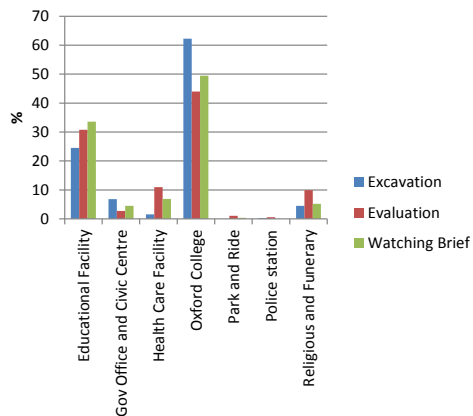


Excavation, Evaluation, and Watching Briefs

Analysis shows that Excavation is the most commonly required archaeological intervention within Urban Settlements and on land characterised as Civil Provision, including schools, hospitals, and churches. Evaluations are more frequently requested within Enclosures and in Water and Valley Floor types and Watching Briefs are usually conducted within Rural Settlements.

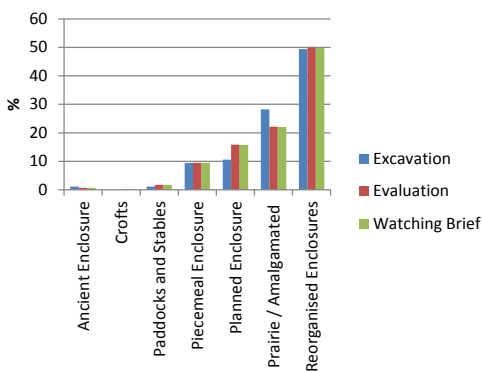


Civil Provision



Land characterised as Civil Provision accounts for more than 20% of all Events, a very high percentage for a Broad Type which only covers 5.9% of the county. The majority of these events occur at or on land owned by Oxford Colleges – 62% of Excavations, 44% of Evaluations, and 49% of Watching Briefs. These high figures will be affected by historic work recorded at these locations which biases the data, but it is also likely to reflect the large number of archaeological investigations required during works on these historic institutions.

Enclosure



Whilst Evaluations are by far the most common type of investigation required in Enclosures, the distribution of the different Event types across the various Enclosure Types is quite even. Almost 50% of each Event Type conducted within Enclosures has been carried out in Reorganised Enclosures. This reflects the dominance of this Enclosure Type, but also their position, which is often close to settlement and infrastructure.

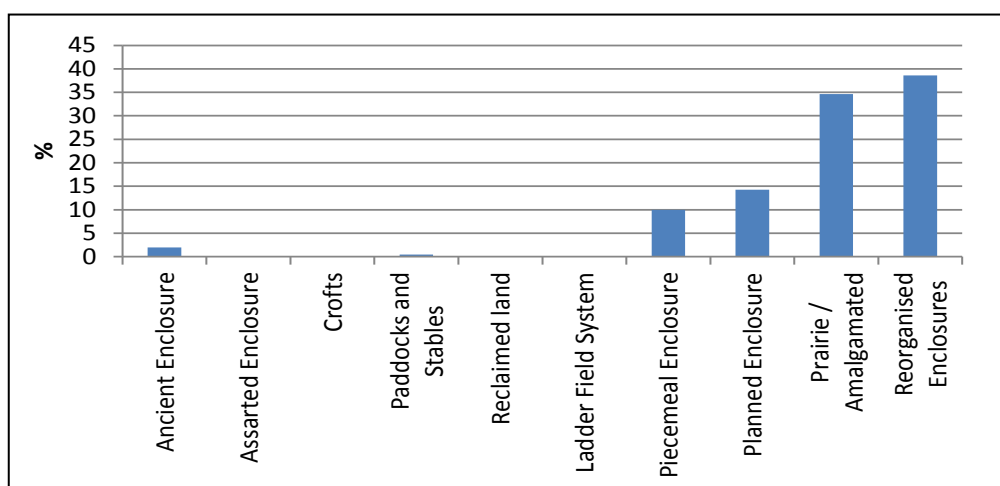


5.4.11 Results: Portable Antiquities Scheme (PAS) Finds

PAS Finds by Broad Type

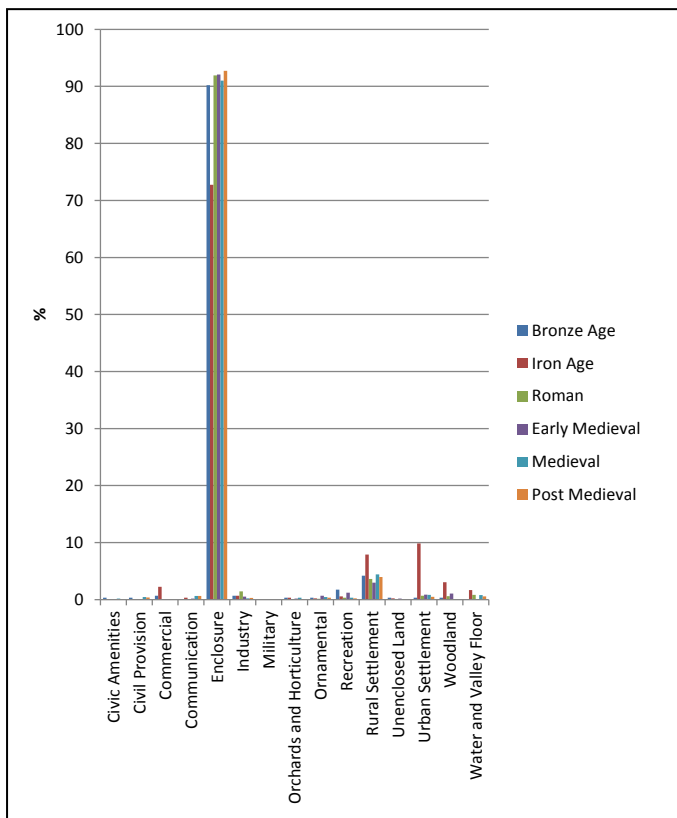
BroadType	Count	%
Civic Amenities	9	0.05
Civil Provision	40	0.24
Commercial	27	0.16
Communication	57	0.34
Enclosure	15178	90.74
Industry	140	0.84
Military	2	0.01
Orchards and Horticulture	30	0.18
Ornamental	48	0.29
Recreation	70	0.42
Rural Settlement	697	4.17
Unenclosed Land	10	0.06
Urban Settlement	196	1.17
Water and Valley Floor	81	0.48
Woodland	142	0.85

Finds recorded by the PAS show a strong bias towards land characterised as Enclosure – 91% of finds are found within fields, despite fields covering only 74% of the county. Woodland is the second most common landscape type in Oxfordshire, but only 0.9% of PAS finds have been found within woods, reflecting their unsuitability for the detection or observation of artefacts. The same can be said within Settlements, where the percentage of finds is also low. Unsuitability for metal detecting or field walking is not the only reason for low numbers of finds; accessibility to certain landscape types also has an effect. For example, Ornamental Landscapes, often privately owned, cover 2.7% of Oxfordshire but only 0.3% of PAS finds have been recorded on land characterised as such. It seems, therefore, that the distribution of finds relates directly to the type and accessibility of different landscape types.



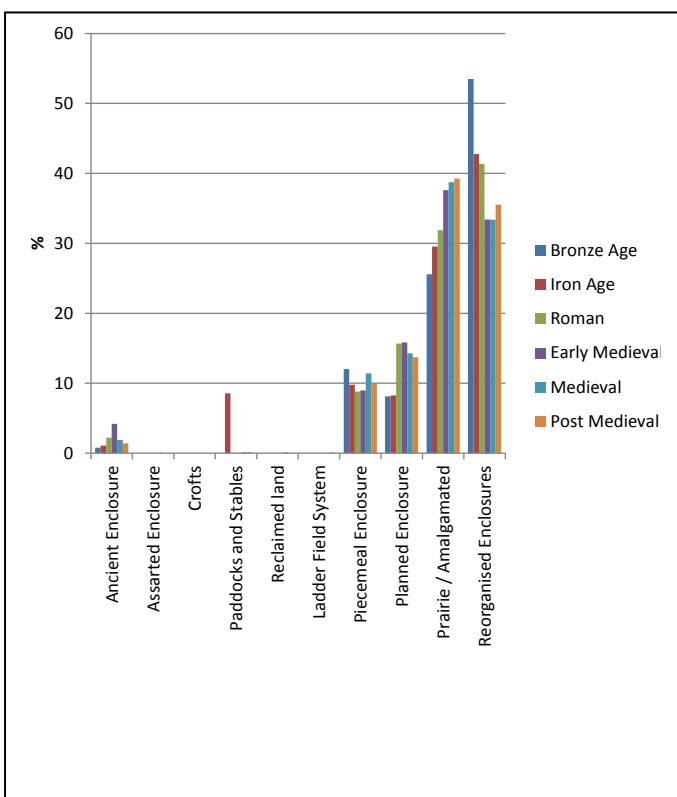
PAS Finds from Enclosures

Analysis shows that the percentage of finds recorded on the PAS from fields often resembles the percentage of the county covered by each Enclosure Type. Piecemeal Enclosures, for example, cover 9.5% of Oxfordshire and account for 10% of PAS finds from within fields. The percentage of finds from Reorganised and Prairie Fields is slightly higher than the coverage of the county by these landscape types, which is likely to reflect the intensity of farming, particularly arable farming, in fields of these types. Such agricultural regimes are likely to bring artefacts to, or close to, the surface, making them easier to see during field walking and easier to detect when metal detecting.



PAS Finds by Period

Finds from all periods tend to have been recorded within Enclosures: with the exception of the Iron Age, a minimum of 90% of finds came from this Broad Type in each period. Iron Age finds appear to have a different profile of recovery, with only 73% found within Enclosures and many more found within Urban Settlements, Rural Settlements, Woodland, Valley Floor, and on Commercial sites than finds from other periods. In all other periods, finds have similar distributions, suggesting that we are seeing patterns of recovery and not patterns of land use.



Enclosures

In general, finds from all periods follow the same pattern of recovery within fields, most being found within Prairie and Reorganised Fields. There is a particularly high concentration of Bronze Age finds identified from with Reorganised Fields and a corresponding dip in the number found within Prairie Fields. 6.2% of Iron Age finds have been recorded within Paddocks, despite only 0.4% of total PAS finds having been recorded on land characterised as such. Paddocks are often found near settlements, where Iron Age finds were also more common than finds from other periods and this may explain this concentration.



5.5 Case Study 5: Comparing the County and the City

5.5.1 Introduction

This case study investigates how the distribution and frequency of certain HLC Types varies between the county of Oxfordshire and the city of Oxford.

It analyses the occurrence of manufacturing sites, certain recreational sites, and unenclosed land.



5.5.2 Manufacturing in Oxfordshire

5.5.2.1 Research questions

- Is there a pattern to the location of manufacturing in the county?
- Where and on what type of land do these sites develop?
- Are different patterns observable between the development of factories in the county and the city?
- What are the difficulties associated with this analysis?

5.5.2.2 Methodology

To analyse the distribution of manufacturing and processing in Oxfordshire, records characterised by the HLC Type “Industry – Manufacturing” or “Industry – Processing Industry” were identified and mapped using the MapInfo HLC.tab layer and the SQL Query: HLCType = “Industry – Manufacturing” Or HLCType = “Industry – Processing Industry”.

Definitions used by the Oxon HLC:

- “Industry – Manufacturing” characterises an area of land or building complex used for the creation of goods.
- “Industry – Processing Industry” characterises industries applying various processes to primary materials to prepare them for use either directly or in manufacturing industry.

The identified records were then individually investigated: where appropriate, they were grouped to form complete industrial units; their date and position relative to settlement was recorded; and their previous types noted.

5.5.2.3 Results

In total, 33 records were identified. Once the records were grouped into distinct industrial sites, 12 sites remained: including iconic factories, such as the Mini plant in Cowley; historic sites, such as the Jam Factory in central Oxford; and modern businesses such as JSP Limited, which developed on the site of a post medieval mill on the River Windrush (see below). Seven of the identified sites lie outside the City of Oxford, suggesting that manufacturing is not solely focused on this economic centre, but spreads throughout the county.

Unique ID (s)	Group / Name	Date	Position	Previous Type
HOX12987		20 th century	South-West of Broughton Poggs	Post Medieval piecemeal enclosure
HOX12288		20 th century	East of Eynsham, beside a stream	Eynsham Post Medieval wharf
HOX3708		20 th century	South of Bicester	Former rough ground probably enclosed by planned fields in the early 19 th century and then reorganised in the 19 th and 20 th century
HOX4854		20 th century	South-Eastern edge of Thame	Former open fields probably enclosed by planned fields in the early 19 th century



HOX12699	Wychwood Brewery	19 th and 20 th century	Within Witney, formerly on the South-Western edge of the town	Formerly the early 19 th century Eagle Brewery which developed behind Post Medieval residential buildings
HOX12926	JSP Ltd.	20 th century	Countryside location, beside the River Windrush	Formerly the site of a Post Medieval mill used in the 19 th century as a mop and blanket factory
HOX13593		20 th century	South of Charlbury, beside the railway station and near the River Evenlode	A late 19 th century gas works was built on former partially enclosed river meadow
HOX14487, 15536-7	Oxford University Press	17 th – 19 th century with 20 th century expansion	Central Oxford, previously the Eastern edge of the city	The 20 th century extensions redeveloped 19 th century housing which had been built in Post Medieval piecemeal enclosures
HOX14244-8, 14319, 14447, 14964-5, 14971, 16957	BMW Mini Factory	19 th – 20 th century	South-Eastern edge of Oxford	Later 20 th century redevelopment on land formerly occupied by a railway line and works. The early factory and the railway were constructed primarily on planned 19 th century enclosures and some earlier piecemeal fields.
HOX14449, 14962-3	County Trading Estate	20 th century	South-Eastern edge of Oxford	Mixture of planned 19 th century enclosure and probably earlier piecemeal enclosure
HOX14577-9, 15338-40, 15438	Boat yard	19 th – 20 th century	Central Oxford, on the River Thames	The original yard expanded on to land used by canal infrastructure and 19 th century housing
HOX15793, 16521	The Jam Factory	19 th century	Central Oxford, near the railway station	Built on the site of earlier residential housing

Manufacturing and Processing sites characterised by the HLC in Oxfordshire

The table shows that both brownfield and greenfield sites have been used for the development of these industrial sites. The 19th century sites – Wychwood Brewery, the Boat yard, and the Jam Factory – were built on land which was already occupied by buildings and a degree of demolitions or conversion may have been necessary. The use of brownfield sites, however, is not solely a preserve of the 19th century as illustrated by JSP Limited and the processing plant east of Eynsham which redeveloped the site of the post medieval wharf. Similarly, greenfield sites are not only used by modern factories and two of the oldest and biggest (and most iconic) are also built within fields – Oxford University Press and the BMW Mini factory. Examples of modern factories built within fields include those near Broughton Poggs and Thame.

Unsurprisingly, the 20th century factories tend to be located on the edge of settlements, where there is space, access to communication routes, and fewer earlier buildings to clear. The 19th century Mini factory was also built on the edge of a settlement, probably for the same reasons as the later sites. A railway line and works, removed in the 20th century, may have also provided an incentive to use this



location. Town/city centre locations tend to be used by the 19th century or older sites, although at the time of their development this may not have been the case. For example, Oxford University Press lies at the heart of the Jericho community with Oxford, but prior to the 19th century would have lain on the eastern edge of the city, between the settlement and the canal and River Thames. The Boat yard, now surrounded by properties lining Abingdon Road, would also have been peripheral to the post medieval city.

	Hectares	% of Total Area
County	29.96	0.012
City	116.41	2.54

Amount of land characterised as Manufacturing or Processing

In terms of the types of sites used and their locations, little distinction can be made between those factories in the city and those in the county and factories are found across Oxfordshire. Considering frequency, there is evidence to suggest that these types of site are more common in the city as they take up 2.54% of the land, compared to just 0.012% in the county. In addition, it appears that oldest and longest lived factories tend to be found in Oxford itself. It is perhaps no surprise that these are the most famous 'brands' for which Oxford is known – Mini, Oxford University Press, and the Jam Factory (formerly Cooper's Jam and Marmalade). The advantages provided by the city – access to markets, large workforces, and extensive rail networks – all working together to ensure the success and survival of these businesses.

The significance of the observations made in this analysis must be set against the limitations of the dataset. In particular, this analysis is restricted by the methodology used to characterise Oxfordshire, specifically the minimum digitisation size. As such, the observations made here are confined to only those sites which in the county cover a minimum of 1 hectare. Numerous smaller sites, such as Hook Norton brewery, therefore, are not included in this analysis. Of course, this limitation does not negate the value of this analysis, but it must be emphasised that not all manufacturing and processing sites have been considered. The grain of analysis does not seem to bias the identification of factories in the city, however, as all the sites identified here would have been large enough to have been identified if they lay in the wider county. As previously stated, the bias is towards larger sites in the county, with small factories omitted which would increase the number of hectares occupied by these sites in the county.



5.5.3 Sports, Golf, Public and Country Parks, and Other Leisure Facilities in Oxfordshire

5.5.3.1 Research questions

- Are these recreational facilities more common in the city or the county?

5.5.3.2 Methodology

To analyse the distribution of sports sites, golf courses, public and country parks, and other leisure facilities in Oxfordshire, records characterised by the HLC Types “Recreation – Sports Facilities”, “Recreation – Golf Course”, “Recreation – Public Park”, “Recreation – Country park” and “Recreation – Other Leisure Facilities” were identified and mapped using the MapInfo HLC.tab layer and the SQL Query: HLCType = "Recreation -Sports Facilities" Or HLCType = "Recreation - Golf Course" Or HLCType = "Recreation – Public Park" Or HLCType = "Recreation – Country Park" Or HLCType = "Recreation - Other Leisure facilities".

Definitions used by the Oxon HLC:

- “Recreation – Sports Facilities” characterises areas whose dominant character is provision for sporting activity, whether or not commercially provided, and whether or not in areas of purpose-built structures. This includes recreation grounds, playing fields, and swimming pools.
- “Recreation – Golf Course” characterises a landscaped area of ground, encompassing different types of terrain and features, such as ponds, sand-filled bunkers etc., on which the game of golf is played. This also includes associated buildings, such as club houses.
- “Recreation – Public Park” characterises land, often in urban areas, dedicated to outdoor public recreation. Usually with ornamental planting of trees and shrubs, with some formal gardens, ornamental ponds, public conveniences & playgrounds.
- “Recreation – Country Park” characterises areas of managed countryside designated for visitors to enjoy recreations, such as walking specified parks and trails, in a rural environment. Often provides public facilities such as car parking, toilets, cafes and visitor information. Sometimes found on the rural-urban fringe.
- “Recreation – Other Leisure Facilities” characterises places used for other types of sporting and recreational activities.

The identified records were too numerous for individual analysis and were, therefore, analysed at a more general scale.

5.5.3.3 Results

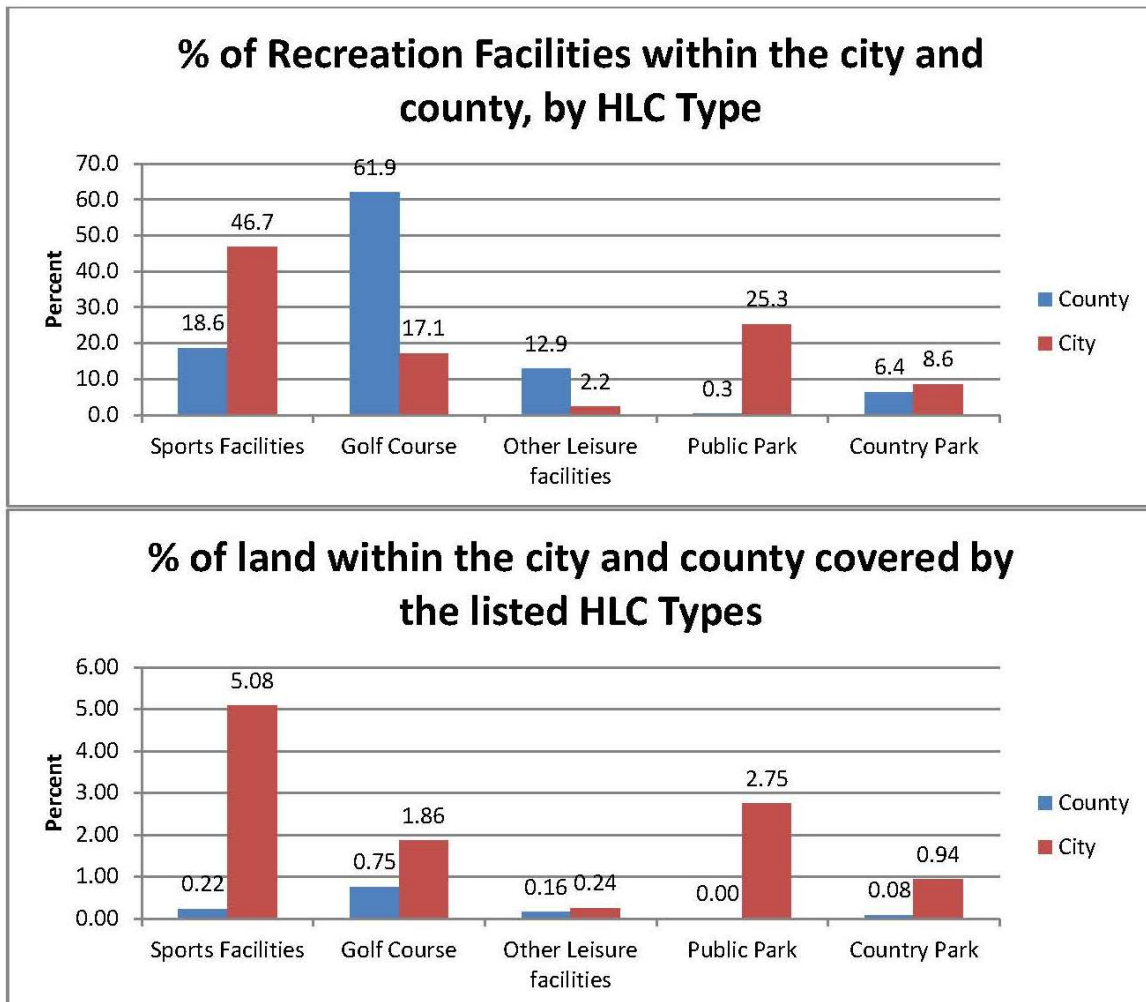
	Area covered by Sports, Golf, and Other Leisure Facilities	% of Total area covered by Sports, Golf, and Other Leisure Facilities
City	497.29 hectares	10.86%
County	3094.17 hectares	1.22%

The area of land characterised as Sports, Golf, Public or Country Park, or Other Leisure Facilities by the City and County HLCs

In total, 423 records were identified, including the polo ground at Kirtlington Park, the Rugby Club at Thame, the ski training slope near Brize Norton, various village playing fields like that at Churchill, and cricket and football grounds like those in Ascott under Wychwood and Middle Barton. In the city



these include the Kassam Football Stadium, Southfields Golf Course, and the Oxford University Boathouses. These 423 records cover a combined 3591.46 hectares and make up 10.86% of the city and 1.22% of the county. As with other Types, these 423 records do not represent discrete sites – Southfields Golf Course for example comprises 3 polygons – and percentage of total area covered is likely to be a better indicator of how common these HLC Types are in the city and the county than frequency.



Various Recreation HLC Types in Oxford and the wider county

The percentages shown in the table suggest that these HLC Types are more common in the city than in the county, almost ten times as common. One reason for this high percentage in the city might be the sports grounds and facilities associated with Oxford University and Oxford Brookes University, which includes the playing fields for the various colleges, such as Merton College Sports Ground. In total, these university related sporting facilities cover 97.6 hectares, almost half of all the land recorded as the HLC Type “Sport Facilities” in the city. These, however, cannot account for this high percentage alone.

In Oxford, there are a number of large Public Parks, such as South Park, Florence Park, and Headington Hill Park. These cover large areas of land and contain playgrounds, open lawns, and trees. Over ¼ of the land covered by the Recreation Types considered here in the city are characterised as parks such as these, representing 2.75% of the city as a whole. If Country Parks are



also included in this figure, then the area of the city covered rises to 3.71%. In contrast, in the County Public and Country Parks cover only 0.08% of the land. Instead, the county is covered by large areas of ornamental parks and gardens relating to stately homes – Blenheim Park, for example.

The data is certainly biased towards the city due to its finer digitisation grain and it is anticipated that a number of buildings which host sporting facilities within the towns – Banbury, Abingdon, Didcot etc. – will have been neglected. This does not, however, affect the parks and the golf courses and a distinction still remains between the percentage of land occupied by these types of recreation in the city and the county.



University Parks, a public park in the centre of Oxford.



5.5.4 Unenclosed Land in Oxfordshire

5.5.4.1 Research questions

- Is unenclosed land more common in the city or the county?
- Why might there be high survival of unenclosed land in the city?
- Is there a difference between where unenclosed land occurs in the city and in the county?

5.5.4.2 Methodology

To analyse the distribution of unenclosed land in Oxfordshire, records characterised by the Broad Type “Unenclosed Land” were identified and mapped using the MapInfo HLC.tab layer and the SQL Query: BroadType = “Unenclosed Land”. This returned all land characterised as either “Unenclosed – Rough Ground” or “Unenclosed – Green”.

Definitions used by the Oxon HLC:

- “Unenclosed Land – Rough Ground” characterises land which show no visible evidence of recent agricultural improvements, including downlands and unimproved common ground.
- “Unenclosed Land – Green” characterises areas of often grassy ground, usually common, normally situated at the centre of a village or hamlet, sometimes within or near a town. Usually maintained by grazing.

The identified records were then individually investigated and their landscapes analysed.

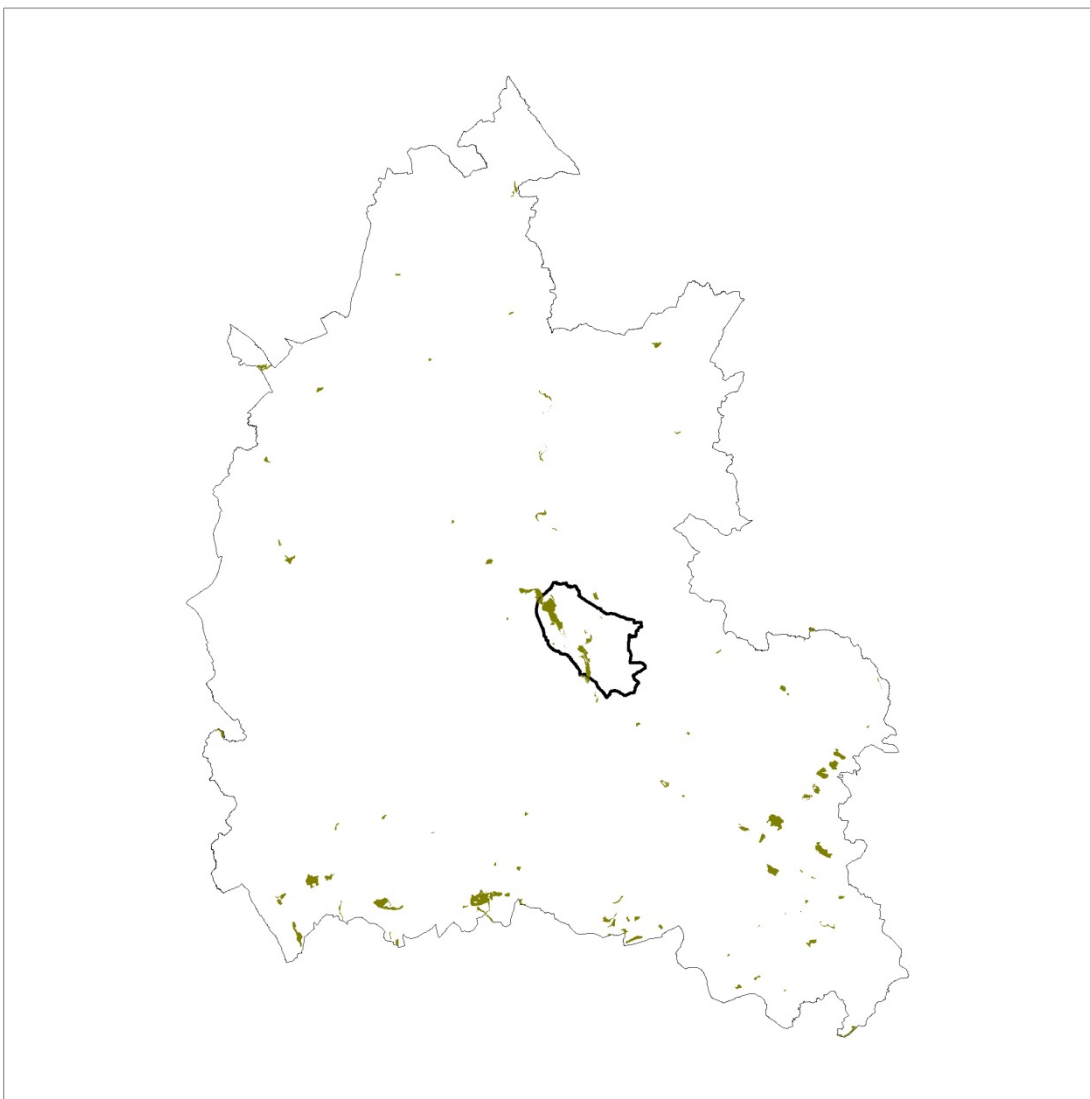
5.5.4.3 Results

In total, 160 records were identified – 94 in the county and 66 in the city – including Swalcliffe Common, Highmoor Common, Chilton Down, and Binsey Common. These do not represent 160 distinct areas of unenclosed ground as some areas have been recorded as multiple records to capture information on their different characteristics or different previous types. For example, Swyncombe Down is recorded as HOX6403 and HOX6404, with the polygons divided by a now wooded earthwork. In the city, Port Meadow is recorded as HOX14796-7 and HOX16805-11 with the slip-off slopes of the River Thames recorded separately to the wider meadow. With this in mind, the total area covered by unenclosed land in the county and city may be a more useful indicator of the frequency of this character type.

	% of Total area covered by Unenclosed – Rough Ground	% of Total area covered by Unenclosed – Green
City	7.57%	<0.01%
County	0.59%	0.032%

The area of land characterised as Unenclosed Land recorded by the City and County HLCs

The table indicates three things: first, rough ground is more common than greens, a fact which is unsurprising given the smaller size of greens and their location within settlements which leaves them more vulnerable to development. Second, no greens are recorded by the Oxford HLC. This is not a product of the conversion and integration of the city’s data into the Oxfordshire HLC, in fact “Green” was not a character type used by the Oxford HLC. This may indicate that either no greens were identified, that no green large enough for digitisation was identified, or that greens were included within the character type “Commons”. The Oxford HLC Methodology document suggests



The distribution of unenclosed land in Oxford and Oxfordshire

that the latter was the case and this can be seen at Goose and Wolvercote Green which are characterised as rough ground. Third, the table suggests that unenclosed rough ground occurs more frequently within Oxford than within Oxfordshire.

The high frequency of unenclosed land recorded in Oxford is, in part, a consequence of the inclusion of the Oxford HLC Type “Riverine Landscape” within the Oxfordshire HLC Type “Rough Ground”. Areas affected by this type focus primarily around the university boat houses strung along the River Thames. This type was included with Rough Ground as, outside of the AONBs, rough ground in the county also tends to occur beside the major rivers. Furthermore, even if this land is not included within analysis of Rough Ground, the frequency of this type in the city still remains high. It includes the meadows – Christ Church Meadow, Angel and Greyhound Meadow, Magdalen Water Walks and Long Meadow, and Music Meadow – all of which are owned and, significantly, preserved by colleges of Oxford University (Christ Church, Magdalen, and Merton). The age and wealth of these landowners is likely to have been instrumental in the survival of these meadows. In terms of area covered, however, all of these, even when combined, pale in comparison to Port Meadow, the large swathe of common which stretches along the north-western edge of Oxford, lying between the city and the River Thames.



Covering in excess of 160 hectares, Port Meadow accounts for almost 50% of the rough ground characterised by Oxford HLC. Unlike the meadows owned by the Oxford Colleges this land is a true common and the Freeman of Oxford and Wolvercote still hold rights to graze animals on the land – as they did in the Domesday Book. The meadow is now an SSSI and a Scheduled Monument and is protected from development. Unlike the college meadows, the survival of this area may be due to its seasonal flooding and the persistence of common rights held dear by the local population.

As with Port Meadow, elsewhere in the county rough ground does survive beside rivers – such as the c.20 hectares between Shipton-on-Cherwell and the River Cherwell. However, this landscape is not the most commonly used by rough ground; this is one of the biggest differences between the occurrence of rough ground in the city and in the county. In the city riverside meadows dominate (all of those named above lie beside a river), whereas, in the county, chalk downlands are the most common landscapes where rough ground survives.

The distribution map shows that there are concentrations of Unenclosed Land in the south and south-east of the county, in areas which correspond with the North Wessex Downs and Chilterns AONBs. In the North Wessex Downs examples include Ardington Down, East Ginge Down, and Long Valley Down which, when combined into a single contiguous area, covers an area of c.173 hectares south of the Lockinges and on the Ridgeway. In the Chilterns, Swyncombe Down covers c.100 hectares and further east five areas of downland lie on the Chilterns scarp slope between Watlington Hill and Beacon Hill. Unlike in the city and in other parts of the county, survival here seems to rely on the steep gradient of the land, the rural nature of the landscape, and the chalk geology.

Despite occurring in different landscapes and their reasons for survival likely stemming from quite different sources, the lack of human intervention in these areas means that archaeological preservation is a feature of unenclosed land in both the city and the county. Having never been ploughed, earthworks of a number of Bronze Age barrows, an Iron Age settlement, and 17th century Parliamentary Civil War fortifications remain on Port Meadow. Similarly, a section of Grim's Ditch and tumulus are shown on Ardington Down; the downland around Uffington Castle preserves various tumuli, the White Horse, and the hill fort itself; and an earthwork described as a 'Danish Embankment' on the 1st Edition OS cuts across Swyncombe Down.