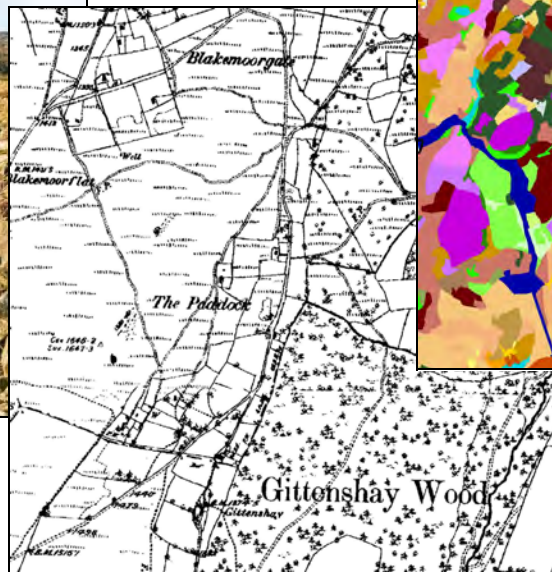




ENGLISH HERITAGE

The Shropshire Historic Landscape Character Assessment.

Final Report



Andy Wigley



Shropshire
County Council

The Shropshire Historic Landscape Character Assessment.

Final Report

**Andy Wigley
June 2007**

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Executive Summary

This report provides technical details of the methodology and results of a three year study of the historic landscape character of Shropshire (including the Borough of Telford and Wrekin). This work formed part of English Heritage's national programme of Historic Landscape Characterisation (HLC) and was carried out in partnership between Shropshire County Council and English Heritage.

The aim of the Shropshire Historic Landscape Characterisation Project, as set out in the original project design (see Appendix 1), was to "...to improve understanding of the historic and archaeological character of the whole landscape of Shropshire, with particular regard to the visibility of time-depth in the landscape and to the historic processes that have created the landscape". This was achieved by developing a desk-based, attribute led methodology, whereby the landscape was characterised in relation to nine broad Attribute Groups. When analysed, the data thus collected enabled the definition of fifty eight Current Historic Landscape Character (HLC) Types and forty six Previous HLC Types. Definitions of each of the Types are provided in Section 3.

From the outset the intention was to use the HLC to review and revise the pre-existing Landscape Character Assessment for the county. The Shropshire HLC methodology was therefore designed to be compatible with that of the LCA. Section 4 describes how the results of HLC were subsequently integrated with the LCA, thus enabling the definition of a series of Landscape Types.

The final section of the report reviews the work on the applications of HLC that Shropshire County Council has conducted since the initiation of the HLC project. Further details are also provided in the Appendices at the end of the report.

1. Introduction.

Background.

- 1.1 In October 2001 Shropshire County Council, in partnership with English Heritage, began a programme of Historic Landscape Characterisation (hereafter HLC). The project ran for three years to December 2004 and the results represent a major addition to the databases Shropshire County Council holds on the historic environment. It also complements the authorities Landscape Character Assessment (hereafter LCA), and forms part of English Heritage's national programme of historic landscape characterisation.
- 1.2 The initial Shropshire HLC project design sought an approach based upon the Lancashire model (Ede and Darlington 2002), which was felt to provide a range of historic landscape character types that might be broadly applicable in Shropshire (see Appendix 1). The Lancashire approach represents one of a number of 'second generation' historic LCA projects that have refined the methodology which was developed in Cornwall in the early 1990s. Subsequently, in developing the Shropshire project methodology the Devonshire model has also proved to be influential (Turner 2002).
- 1.3 The main aim of the project was to produce a GIS-based digital map of Shropshire's historic landscape character, supported by a database containing details of the attributes of each HLC 'unit'. This would: -
 - provide a broad assessment of the historic and archaeological dimensions of the county's landscape *as it exists today*.
 - set the archaeological 'sites' recorded in the Shropshire Environmental Record within a wider landscape context .
 - add a higher degree of detail to, and form an integral component of, the existing LCA (Shropshire County Council 2006), which is based on the methodology developed by Steven Warnock and the Living Landscapes Project (Warnock 2002) and complies with The Countryside Agency/ Scottish Natural Heritage's guidance (The Countryside Agency and Scottish Natural Heritage 2002).
 - enable a range of applications for HLC to be developed that actively contribute to the sustainable management of Shropshire's landscape.
 - identify key characteristics of the county's landscape requiring protection and enhancement through supplementary planning guidance and related development control procedures.
 - support Shropshire Council's other core functions relating to the delivery of services on archaeology, landscape, biodiversity, land reclamation and records management.

- 1.4 An initial methodology statement was issued in 2001 (Shropshire County Council 2001), and subsequently tested and refined through three pilot studies (Shropshire County Council 2002a, 2002 b, 2002c). This resulted in the definition of a number of provisional Historic Landscape Character Types (hereafter HLC Types). One of the pilot studies also tested the applicability of the Shropshire HLC methodology to an area beyond the county boundary in Staffordshire. The methodology was subsequently adopted with minor modifications by the Staffordshire HLC Project (Robinson 2006).
- 1.5 The Shropshire HLC and LCA together constitute the Shropshire Character Framework. It is intended that landscape scale information about biodiversity will be added to the Framework in due course.
- 1.6 This document is the final report on the project and therefore replaces the three pilot study reports that were issued in 2002. It includes a methodology statement and definitions for all of the HLC Types that were defined during the project. It will also explain how the results of the HLC were used to review the LCA and to produce an integrated Landscape Typology for the county. Further analysis of Shropshire's historic landscape character is provided by the report on this work (Shropshire County Council 2006). Additional statements about the Shropshire HLC statements have also been published elsewhere (most notably Fairclough and Wigley 2005).

Principles.

- 1.7 Fairclough has defined HLC as: -

“...the ways in which, in the present landscape, we can see and interpret physical remains as indicators of how the landscape's character has been created over thousands of years by the interaction of people and their environment.”
(1999: 3)
- 1.8 Clark *et al* (2004: 6) summarise the main principles behind HLC as follows: -
 - Past not present - HLC takes the present-day landscape as the main object of study, providing a broad analysis of the physical remains of past human activity as they survive within today's landscape.
 - Landscapes not sites – HLC deals with areas not sites or 'points', therefore providing a broader context for the site based data contained within county Historic Environment Records/Sites and Monuments Records (hereafter HERs/SMRs)
 - All aspects of the landscape – all parts of the landscape, from the oldest to the most recent, are viewed as part of landscape character.
 - Human landscape – HLC treats all aspects of the landscape character, including the living, semi-natural components (i.e. hedgerows, woodland, land covers), as the product of human

agency. For the purposes of HLC, biodiversity is seen as a cultural phenomena.

- Landscape as perception – HLC treats landscape as a matter of perception, rather than purely a material object.
- Landscape is the product of change – the landscape is, and always has been, dynamic. Management of change, rather than preservation, is therefore the aim.

1.9 The Shropshire HLC methodology (see Section 2) was designed to ensure that the outputs of the project have a wide range of applications in planning and land management.

Approach

1.10 Over the past decade there has been a significant increase landscape scale archaeological surveys in Shropshire (e.g. Dinn and Edwards 1999, Gaffney *et al* 2001, Leah *et al* 1998, Stamper 1993). These have been undertaken by different organisations, at different scales, times and in relation to differing priorities. These provide a rich source of information on some aspects of the character of the county's landscape. However, they do not provide complete spatial coverage for the whole of the county.

1.11 The approach that was followed in the Shropshire HLC Project acts as an additional component, at the scale of a Level 3 LCA or 1:10,000, of the recently completed LCA (Shropshire County Council 2006).

1.12 The HLC Project was seen as an opportunity to test and review the results of the LCA. The Hampshire HLC project demonstrated that there was a close co-relation between the results of both levels of survey in that county (Lambrick and Bramhill 1999). A similarly close correspondence was expected in Shropshire.

1.13 In order to maintain the integrity of both datasets the HLC was conducted independently of the LCA. This reflects the methodological differences between the two forms of assessment. HLC is essentially a desk-based, 'vertical' (i.e. principally map based) form of landscape analysis. LCA also offers a 'horizontal' view of the landscape(i.e. as it appears when standing on the ground), whereby the desk based assessment is supplemented by a field survey.

1.14 The advantage of HLC, over other forms of landscape assessment, is the analysis and greater detail it provides about patterns of landscape development and change (i.e. time-depth). Ideally, however, both forms of landscape assessment should be used together (e.g. Countryside Agency and Scottish Natural Heritage 2002, Scottish Natural Heritage *et al* 2003). In Shropshire, the completion of the HLC assessment provided an opportunity to test and compare the results of the LCA. This was done by using the information about time depth provided by HLC to review the boundaries of the Landscape

Description Units (which form the basis of the LCA), and subsequently to inform the identification of Landscape Types. A more detailed description of how this was done is provided in Section 4 below.

2. Methodology.

Introduction.

2.1 This section will outline the methodology of the Shropshire HLC, which was designed take account of four key concerns: -

- Shropshire’s county boundary encompasses a huge variety of different landscapes. At a broad scale, this is reflected by the six Countryside Character Areas that partially or wholly cover the county (Countryside Agency 1999): -
 - Oswestry Uplands – formed from Carboniferous rocks, this upland region lies on the north-western fringes of the county, to the west of Oswestry. It is has a distinctly Welsh character, which is reflected in its vernacular architecture and place names.
 - Shropshire, Cheshire and Staffordshire Plain – an undulating lowland region formed on glacial drift deposits over Triassic sandstones and marls, interrupted by upstanding ridges of harder sandstone. In Shropshire, it includes significant areas of wetlands, in the form of meres (e.g. Cole Mere), mosses (e.g. Whixhall Moss) and the remnants of once extensive valley mire systems (e.g. Baggy Moor). It is punctuated by low sandstone hills, which run across the region on a loosely southwest – northeast axis. Its southern boundary coincides with the valley of the River Severn, which meanders across the lowlands of central Shropshire, from the Welsh border to the Severn Gorge.
 - Mid-Severn Sandstone Plateau – A rolling plateau of Permo-Triassic sandstone, which give way in the west to Upper Carboniferous marl, sandstone and conglomerate, and in the north and south to Carboniferous Coal Measures. The Permo-Triassic sandstones are overlain by brown sandy soils, brown earths and podsols, which historically supported extensive tracts of heathland. Within Shropshire, the plateau is also dissected by the river valleys of the Severn and the Worfe.
 - Shropshire Hills – this region of hill country is formed of a complex sequence of Palaeozoic rocks and covers most of the western, southern parts of the county. It comprises a series of ridges with a south-west/ north-east axis. The higher ground on the Stiperstones, The Long Mynd and the Clee Hills remains unenclosed and supports extensive tracts of moorland, whilst the intervening valleys are characterised by ancient agricultural landscapes. Extensive evidence for extractive industries also exists around the Stiperstones (lead and barytes mining) and the Clees (coal and ironstone mining and dolerite quarrying).

- Clun and North West Herefordshire Hills - The Clun Forest, in south-western corner of the county, represents a plateau of Silurian mudstones and siltstones which is cut by the deeply incised valleys of the rivers Unk, Clun and Teme. As a result, the hills in this area have rounded profiles and the valleys are separated by larger expanses of higher ground. As in the Shropshire Hills, this valley floors and lower valley side are characterised by ancient field patterns, whilst the upper slopes were occupied by large areas of rough grazing land until their enclosure in the 18th and 19th centuries.
 - Because the project was designed to run for 18 mths, and the study area (Shropshire, England's largest inland county, plus TWUA) is not a small area (3488 sq km), the methodology was calibrated to allow a fairly rapid and high level characterisation.
 - It was intended that the results of the HLC project would be integrated with the existing Shropshire LCA from the outset. As a result the HLC adopted of a broadly similar data structure.
- 2.2 HLC was conceived as a relatively rapid form of desk based assessment, which relies on a limited but consistent range of sources (Fairclough 1999, Aldred and Fairclough 2003). Consequently, the county wide data sets available in a GIS format formed the principle data sources for Shropshire HLC project (e.g. maps, sets of aerial photographs, digital data sets generated by agencies such as the Forestry Commission). These were supplemented, to some extent, by more detailed sources such as the Victoria County History volumes and the Foxall Tithe Award transcription maps when they became available. A list of the main sources used in the project can be found in Appendix 2.
- 2.3 The Shropshire HLC project adopted an *attribute-based* approach, whereby historic landscape character types were defined through analysis of the combinations in which certain HLC attributes occur. For example, areas of predominantly small fields (Attribute 1), that have predominantly sinuous boundaries (Attribute 2), some or all of which have 's-curve' morphology (Attribute 3), can be defined as 'piecemeal enclosure' (HLC character type).
- 2.4 Each HLC unit or 'polygon' was defined in a GIS systems in relation to nine broad attribute groups (Unenclosed land, Fieldscapes, Woodland, Water and Valley Floor, Industrial and Extractive, Military, Onamental, Parkland and Recreational, Settlement and Orchards). Further information about the attributes of each polygon was captured in a bespoke project database. As such, the inherent subjectivity of the process of interpreting map based sources was framed and controlled by a transparent, attribute-based approach.
- 2.5 HLC Types are then defined through analysis of this data, rather than being pre-determined at the outset. The historic landscape character types are generic in nature: they may occur in different parts of the

landscape but in each case they are defined by the same combinations of HLC attributes.

- 2.6 The LCA methodology maintains a distinction between a relatively objective initial phase of characterisation and the subsequent use of judgement to inform decision-making processes (The Countryside Agency and Scottish Natural Heritage 2002).
- 2.7 The attribute-based approach was intended to make the characterisation processes itself as ‘objective’ as possible. To use the terminology adopted by Aldred and Fairclough (2003), the Shropshire project used a multi-mode type 2 methodology. In other words, the inherent subjectivity of the process of interpreting map based sources was framed and controlled by a transparent, attribute-based approach and GIS. The intention, when basing the definition of HLC Types on the analysis of a solid set of criteria, was to make the resulting HLC Types defensible to planners and other ‘end users’

HLC GIS Polygons.

Introduction.

- 2.8 The Shropshire HLC project utilised Shropshire County Council’s corporate GIS package (ESRI’s ArcView v3.3)¹. Digitisation took place directly onto Ordnance Survey 1:10,000 digital raster maps.
- 2.9 The GIS component was supported by a Microsoft Access database, within which information about each HLC polygon was captured (see below).
- 2.10 The basic unit of analysis is the HLC ‘polygon’. Each polygon covers a discrete geographical area that contains a particular combination of HLC attributes and, therefore, can be assigned a single historic landscape character type. In this sense, these units can be seen as loosely equivalent to LCA LDUs, although much smaller in size.
- 2.11 In this section the factors that determine what is included within each polygon will be outlined.

Defining HLC polygons.

- 2.12 Each polygon was defined on the basis that: -
 - All areas included within it posed characteristics that could be assigned to the same *attribute group* (e.g. unimproved land, fieldscapes etc.)
 - All areas included within it shared a common set of *attributes* (e.g. all of the woodland included within the polygon is broadleaved and has one or more wavy external boundaries etc.).

¹ Shropshire County Council upgraded to ArcGIS 9.1 in Jan 2006 and all HLC GIS files have now been migrated to the new system.

- All areas within it could be interpreted as having the same previous landscape character (i.e. all of the fields within the polygon contain evidence of medieval strip fields).
- 2.13 Because each polygon possessed these qualities it was possible to assign the same current and previous² historic landscape character type to all of the areas within it.

Polygon areas.

- 2.14 Shropshire HLC polygons define areas of no smaller than 1ha in size. The pilot studies conducted for the Devonshire HLC project demonstrated that areas below this size are too small to determine *landscape* character (Turner 2001). Consequently, such units were incorporated into adjacent polygons.
- 2.15 The only exception to this was made for the settlement attribute group, in instances where small areas of ‘growth’ and redevelopment were identified within or around the fringes of a settlement.

HLC data structure.

Introduction.

- 2.16 Each polygon has four different levels of data attached to it. These were recorded within the project database, which is analysed in order to create the final HLC Types. This section describes the data structure in detail.

Data Level 1 – polygon identification code and location.

- 2.17 Data Level 1 captured four basic categories of data that provide each polygon with a unique identification code and a definition of its geographical location.
- 2.18 These categories are defined as: -
- *Polygon I.D. No.* – Each polygon has its own unique identification code. The first part of the code consists of a ‘character code’, which corresponds to the attribute group to which the polygon has been assigned (see table below).

² See paragraph 2.18 for a definition of ‘previous landscape character’.

Table 1 – HLC Attribute Groups

Character Code	Attribute Group
UI	Unimproved land
F	Fieldsapes
W	Woodlands
Wvf	Water and Valley Floor
Ind	Industrial
Mil	Military
Opr	Ornamental, parkland and recreational
Set	Settlements
O	Orchards

The second part of the polygon identification code is a unique number (e.g. F4681, Opr23, Set245 etc.)

- *Central grid ref.* – The approximate central grid reference (to eight figures) of each polygon was recorded.
- *LCA landscape description unit (LDU) identification code* – This was intended to aid cross reference with LCA.
- *Modern parish name* – The modern parishes that each polygon lies within was recorded. In cases where a polygon extended across a parish boundary, the name of the parish within which the greatest part of polygon lay was recorded.

Data Level 2 – attribute descriptions.

- 2.19 Each polygon was assigned to one of the nine broad *attribute groups* that have been defined at the outset, in order to allow finer-grained analysis to proceed (see Table 1 above).
- 2.20 Each attribute group has a series of different *attributes* attached to it. Once a polygon has been assigned to a particular attribute group it's attributes are then be defined. A number of different sources of information are used to help determine what these attributes are (see Appendix 2). The following table summarises the different attributes: -

Table 2 – HLC Attributes

Attribute Group	Attribute
1. Unimproved Land	Enclosed (Yes/ No)
	Elevation (higher ground [$\geq 244\text{m}$], lower ground [$< 244\text{m}$]) ³
	Type of ground (heathland, moorland, hill pasture)
	Interpretation of previous character – see level three.
	Additional notes
2. Fieldscapes	Predominant field size (small, small-medium, medium-large, large-very large) ⁴
	Predominant field shape (irregular, rectilinear)
	Predominant boundary morphology (straight, sinuous, curvilinear)
	Secondary boundary morphology (straight, sinuous, curvilinear, none)
	Other internal boundary morphology (non, dog leg, s-curve, following watercourse, co-axial)
	Other external boundary morphology (sinuous, settlement edge, line of communication [e.g. a road, canal or railway], woodland, none).
	No. of fields lost since 1st ed 6" OS map
	Interpretation of previous character – see Level 3
	Additional notes
3. Woodland	Nature of boundaries (straight, sinuous, curvilinear)
	Is it present on the 1st Ed 6" OS map? (Yes/ No)
	Is it designated as being ancient semi-natural? (Yes/ No)
	Forestry Commission Indicative forestry designation (Broadleaved, Coniferous, Felled, Mixed, Shrub, Young Trees, None)
	Interp. of previous character – see level three.
	Additional notes.
4. Water and Valley Floor Fields	Type (open water, raised bog/ 'moss', floodplain)
	If open water is it natural (Yes/ No)
	If man made is it a lake/pond, marl pit or reservoir?
	Additional notes
5. Industrial and extractive	Type (stone quarry, gravel quarry, disused mine with associated spoil tips, industrial complex or factory)
	If a quarry is it active? (Yes/ No)
	If a disused mine with associated spoil tips, is it a former colliery or metal ore mine?
	Additional notes
6. Military	Type of installation (airfield, barracks, ordnance depot).
	Current use (abandoned, active but used for other purposes, still used by the military)
	Additional notes
7. Ornamental, parkland and recreational	Type (garden or 'designed' landscapes, golf course, race course, sports field, other parkland)
	Additional notes
8. Settlement	Type (historic core [pre 1800], pre-1880s, redeveloped pre-1880s, post-1880s).
	Additional notes.
9. Orchards	Present on 1 st ed. 6" OS map? (Yes/ No)
	Additional notes

³ For the purposes of their Uplands Initiative the Royal Commission on the Ancient and Historical Monuments of Wales (2002) has defined 'upland' as being all land above the 244m (800ft) contour.

⁴ For purposes of the HLC these terms can be defined as follows, based upon the national definitions used for the Landscape Character Assessment.

Small fields = < 2ha

Medium-Large fields = 4.1-8ha

Small-Medium fields = 2.1-4ha

Large-very large fields = > 8.1ha

Data Level 3 – interpretation of previous historic landscape character (where relevant).

2.21 For some polygons evidence existed, either in the form of extant archaeological remains or documentary sources, which indicated that it had a different historic landscape character in the past to the one it has in the present. For instance, on the Clee Hills of south-eastern Shropshire extensive areas of post-medieval coal and ironstone workings lie in areas that have now reverted back to rough pasture. In other cases the previous landscape character of a polygon can be inferred. For example, strip fields within an open field system would once have existed in areas where piecemeal enclosure can be identified. Interpretation this evidence allowed a previous historic landscape character to be assigned to many polygons, thus adding further ‘time-depth’ to the HLC.

2.22 The interpretation of the previous landscape character of a polygon were structured as follows -

- *Previous HLC attribute group* – This indicates the attribute group to which the polygon has been assigned.
- *Previous HLC character description* – This field was initially populated with standardised key phrases (e.g. strip fields, unenclosed common, open heath etc.) that relate to the previous landscape character of the polygon. In the final analysis these were used to determine a set of Previous HLC Types (see Data Level 4 below), the names of which were used to overwrite the key phrases.
- *Period* – This describes the period to which a polygon’s previous landscape character can be assigned. For the purposes of the HLC project the following period definitions will be used: -

Table 3 – HLC Period Classifications (based on standard period definitions used by the Shropshire SMR).

Period Name	Dates
Prehistoric	500,000 BC – AD 42
Roman	AD 43 – AD 409
Saxon	AD 410 – AD 1065
Medieval	AD 1066 – AD 1499
Post-Medieval	AD 1500 – AD 1799
Industrial	AD 1800 – AD 1913
Post-1914	AD 1914 – AD 1945
Post-War	AD 1945 – present

- *Degree of confidence* – This field provides a measure of the degree of certainty about the interpretation of a polygon’s previous landscape character. Following Turner (2001), Table 4 provides definitions for the levels of confidence assigned to each HLC polygon.

Table 4 – Definitions of degrees of certainty used in HLC.

Degree of certainty	Definition
Certain	Indicates that there is no doubt about the interpretation.
Probable	Suggests that an interpretation is highly probable (approximately over 80% chance).
Possible	Suggests that an interpretation is possible but by no means certain (approximately over 50% chance).

- *Source/reference* – An acknowledgement of the source(s) upon which the interpretation is based.

Data Level 4 – current historic landscape character.

2.23 The current historic landscape character of each polygon was determined through analysis of Level 2 and Level 3 data once data capture was completed (see Appendix 2 and below for details of the methodology). The current ‘character type’ description has the following structure: -

- *Historic character* – This field was populated once data capture and analysis was completed (see below). It contains the names of the Current HLC Type assigned to each polygon.
- *Period* – This field defines the period in which the current landscape character came into being, using the same definitions set out in data level 3 (see above). However, in the case of polygons that have been assigned to the settlement attribute group, the ‘industrial’ period will be sub-divided into an early (c 1800-1880s) and a late (c 1880s – 1950s) phase.
- *Map Source* (settlement attribute group only) - this field defines the map source upon which the interpretation of the historic landscape character of the polygon is based. The four categories are as follows
 - CMHTS/ SUAD⁵ historic core definition

⁵ The Central Marches Historic Towns Survey and the Shrewsbury Urban Archaeological Database.

- 1880s 1st Edition 6” OS map
- 1950s/60s 1:10,560 SMR OS maps
- Modern 1:10,000 digital map
- *Confidence* – In the case of current landscape character the confidence measure relates solely to the period designation. The confidence levels are the same as those recorded in Data Level 3 (see Table 4 above).

Definition of historic landscape character types.

- 2.24 Following the completion of the digitisation phase of the pilot studies the data within the database was analysed in order to determine a series of Current and Previous HLC types (see Appendix 2 for full details of the methodology).
- 2.25 Each Current and Previous HLC Type was assigned a numeric code which were be used to define a legend within the GIS.
- 2.26 Data relating to the current and previous Attribute Group, the Current and Previous HLC Type code and name, the period and field loss⁶ was imported into the GIS data set via a Structured Query Language (SQL) connection. This was then joined to the HLC Shapefile.

⁶ Only applies to HLC polygons assigned to the ‘Fieldsapes’ attribute group.

3. Historic Landscape Character Types .

Introduction.

- 3.1 In this section each Current and Previous HLC Type will be defined and described.

Definitions of current historic landscape character types.

- 3.2 Each polygon has been assigned a Current HLC Type. Figure 1 provides a map of Current HLC Types and they are defined in Table 5.

Definitions of ‘previous historic landscape character types’.

- 3.3 Figure 2 provides a map of Current HLC Types and they are defined in Table 6.

Figure 1 – Current HLC Types maps for Shropshire.

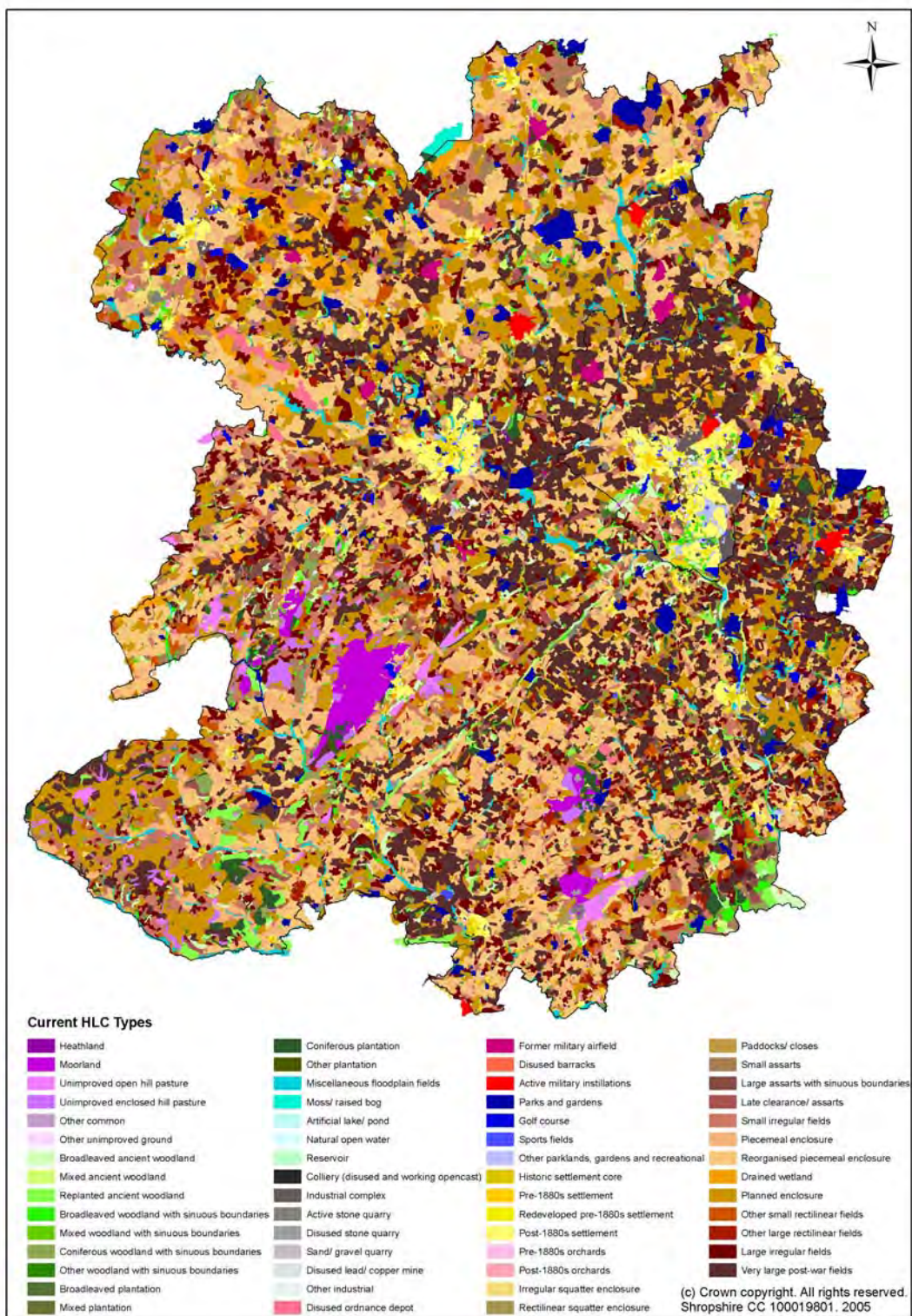


Figure 2 – Previous HLC Types maps for Shropshire.

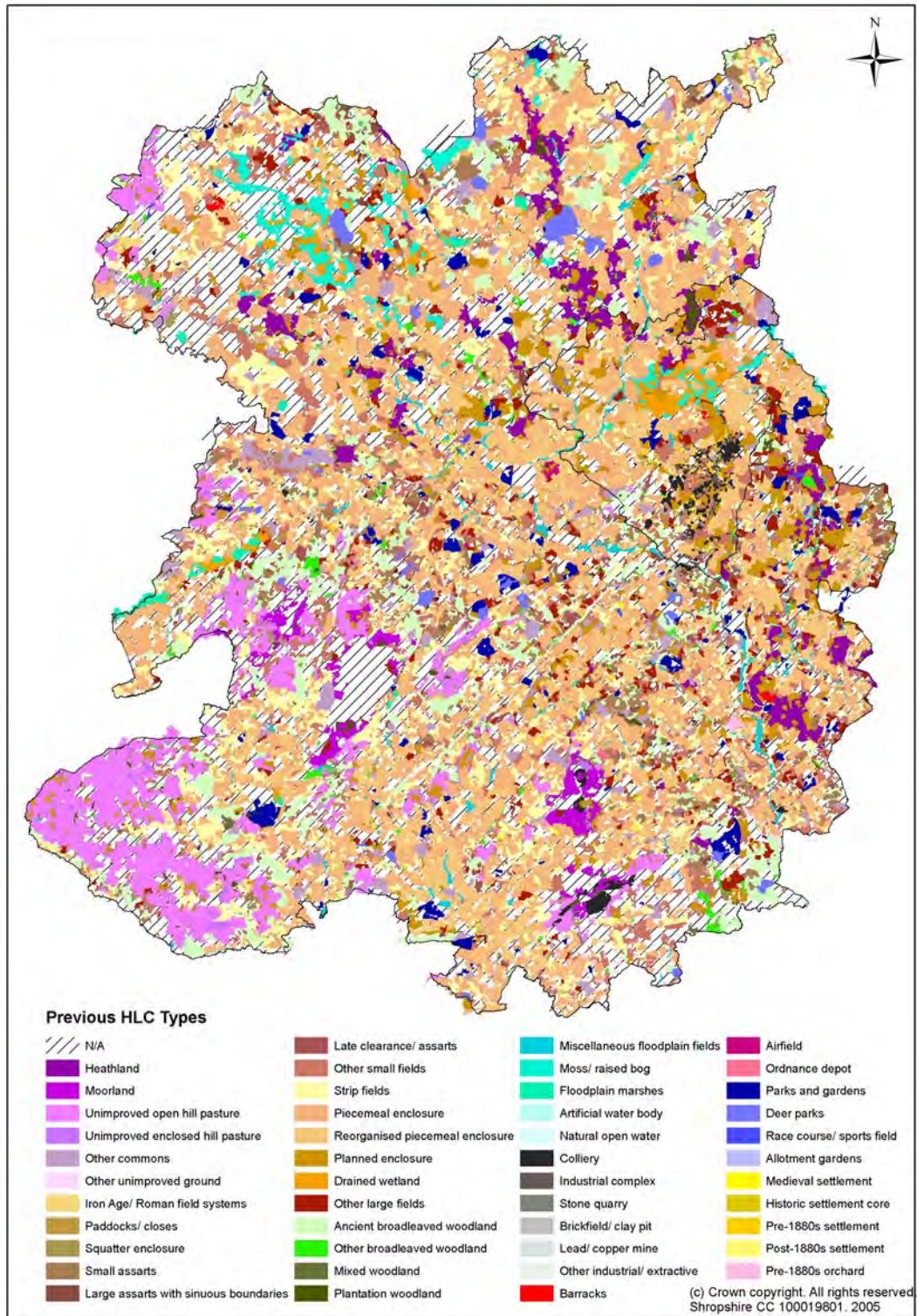

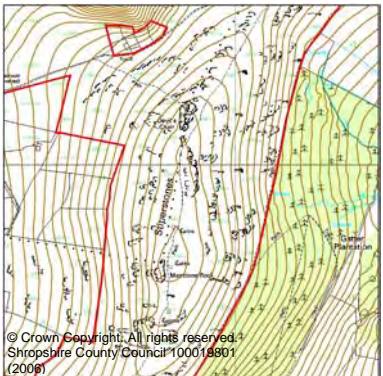

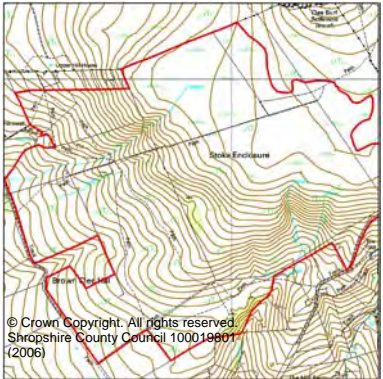
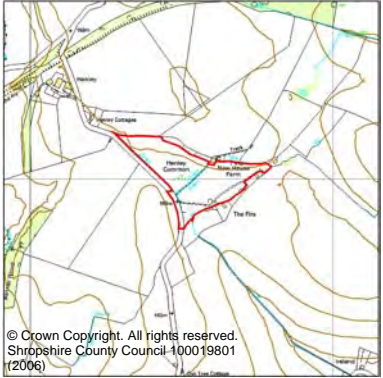
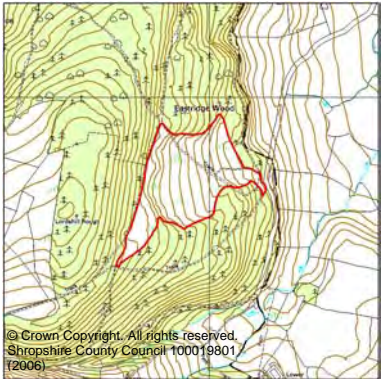


Table 5 – Definitions of Historic Landscape Character Types.



1. Unimproved land.


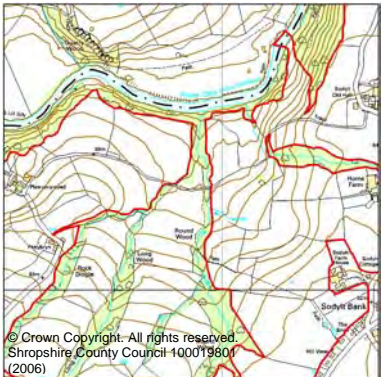
Historic Landscape Character Type	Number Code	Description and interpretation	Map example
Heathland	54	Unimproved land below 244m that supports heathland vegetation (e.g. heather, Bilberry etc.). Most of the areas where this type is found have had the same historic character since at least the late medieval period.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Moorland	1	Unenclosed land above 244m that supports heathland and rough pasture vegetation (e.g. heather, Bilberry etc.). Most of the areas where this type is found have had the same historic character since at least the late medieval period. They may also contain well preserved monuments and other earthworks dating to the prehistoric, Roman, medieval, and post-medieval periods.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>



Unimproved open hill pasture	2	Unenclosed, unimproved grassland above 244m that often relate to areas of medieval common and waste. They may also contain well preserved archaeological monuments dating to the prehistoric, Roman, medieval, and post-medieval periods.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Unimproved enclosed hill pasture	33	Enclosed, unimproved grassland above 244m. Such areas were usually enclosed from former commons and waste in the post-medieval or industrial periods (or during the post-War period in association with post and wire fences), and exhibit a field pattern characterised by rectilinear or regular fields with straight boundaries. This character type also includes areas of land, enclosed during these periods, which are now reverting back to scrub and/ or moorland.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

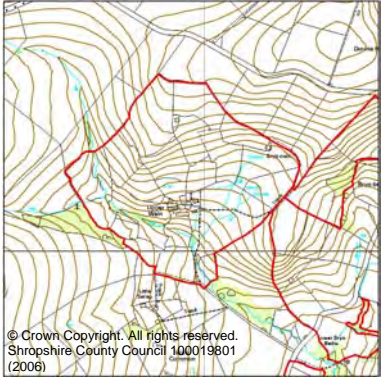

Other common	51	<p>This category includes areas of unimproved land that do not fall into any of the above categories, and which are also marked on the 1st edition 6" Ordnance Survey maps. For instance, it covers areas of lower lying ground that were used for communal grazing but which, on the basis of place name evidence, do not appear to have been heathlands.</p>	
Other ground unimproved	52	<p>Unimproved land, generally created through a recent (e.g. 20th century) change in land use, that does not fall into any of the above categories.</p>	


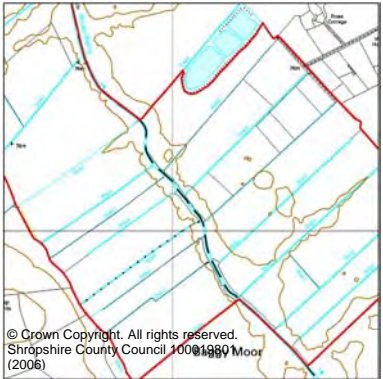
2. Fieldscapes.

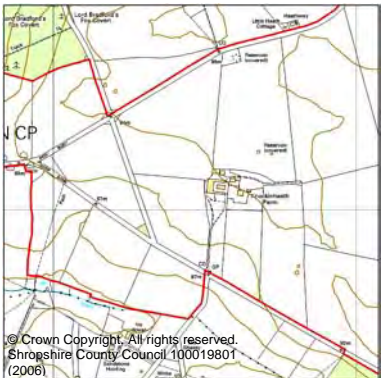
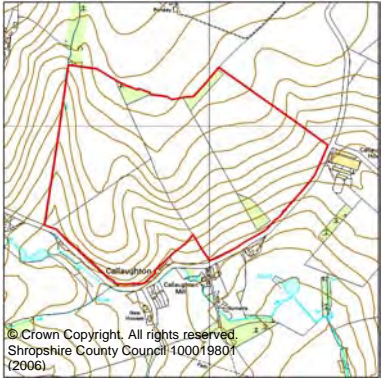
Historic Landscape Character Type	Number Code	Description and interpretation	Map examples
Irregular squatter enclosure	34	<p>Field systems principally comprising small irregular fields with sinuous or curvilinear boundaries. The overall field pattern has an unordered, often amorphous appearance. These areas are often associated with networks of lanes and trackways, and a dense dispersal of small cottages. They sometimes occur as 'islands' within tracts of unimproved land. In addition, they are sometimes associated with mining, quarrying or other industrial activity. They usually represent encroachments onto commons, established between the 16th and beginning of the 19th century (Edwards 1989).</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Rectilinear squatter enclosure	35	<p>Field systems principally comprising small rectilinear fields with predominantly straight boundaries and a more regular appearance than the 'irregular squatter enclosure' type. These areas are often associated with networks of lanes and rights of way and a dense dispersal of small wayside cottages. They are sometimes associated with mining, quarrying or other industrial activity. They usually represent encroachments onto commons, established between the 16th and beginning of the 19th century (Edwards 1989).</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>


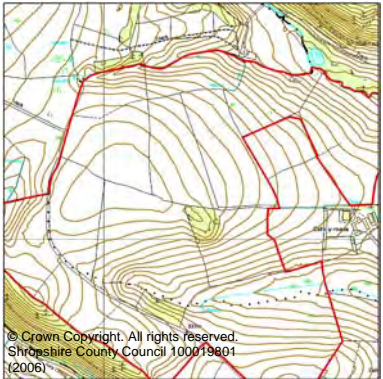
Paddocks/closes	36	<p>Small irregular fields distinguished from 'other small fields' character type by their location on the edge of settlements. In many cases these probably represent small meadows and paddocks of varying dates.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Small assarts	37	<p>Field patterns consisting of small-medium, irregular or sub-rectangular fields associated with a dispersed settlement pattern of older farmsteads and a winding road network. In addition, they often – but not always – lie adjacent to small areas of broadleaved woodland that have an irregular outline. They also occur around the edges of larger blocks of semi-natural ancient woodland. Historically these fields were created through the clearance and enclosure of woodland and waste between the medieval and earlier post-medieval periods (Stamper 1989).</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

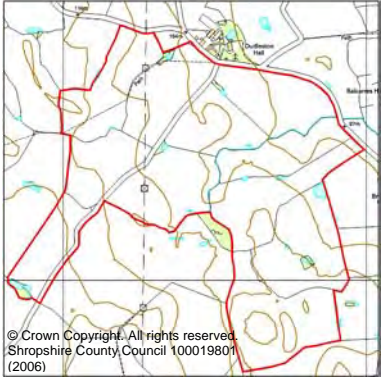
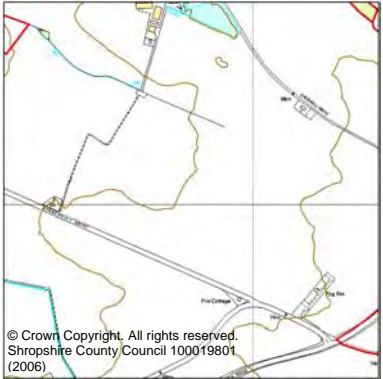
<p>Large assarts with sinuous boundaries</p>	<p>38</p>	<p>Field patterns consisting of medium-large, irregular or sub-rectangular fields, associated with a dispersed settlement pattern of older farmsteads and a winding road network. In addition, they often – but not always – lie adjacent to small areas of broadleaved woodland with an irregular outline. They also occur around the edges of larger blocks of semi-natural ancient woodland. Historically these fields were created through the clearance and enclosure of woodland and waste between the medieval and earlier post-medieval periods (Stamper 1989), although the type also includes fields created through the recent (e.g. post-1880s) amalgamation of small assarts.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
<p>Late assarts</p>	<p>39</p>	<p>Field patterns comprising of small-large rectilinear or sub-rectangular fields with predominantly straight boundaries, which appear to have been created through woodland clearance. They occur immediately adjacent, or in close proximity, to areas of ancient woodland. This type is likely to be later in date than the ‘small assarts’ and ‘large assarts with sinuous boundaries’ types (e.g. date to the 16th century or later).</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

Small irregular fields	40	<p>Small-medium irregular fields with predominantly sinuous boundaries that cannot be assigned to one of the other Historic Landscape Character Types. This type includes small meadows and closes that do not occur next to settlement boundaries, as well as 'intakes' from former commons and waste. Such field patterns are likely to vary considerably in date, although the oldest examples probably date to at least the medieval period.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Piecemeal enclosure	41	<p>'Piecemeal enclosure' can be defined as those fields patterns created by the gradual enclosure of medieval open fields, through sales and informal private agreements between farmers seeking to consolidate their holdings (Johnson 1996). Within Shropshire this process was under way by the late medieval period, and a number of 16th century commentators regarded the county as largely enclosed (Kettle 1989: 84). These areas have field patterns comprised of small irregular or rectilinear fields, where at least two boundaries will have 's-curve' or 'dog-leg' morphology, suggesting that that they follow the boundaries of former medieval field strips.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

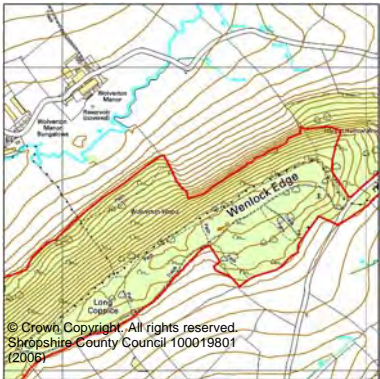
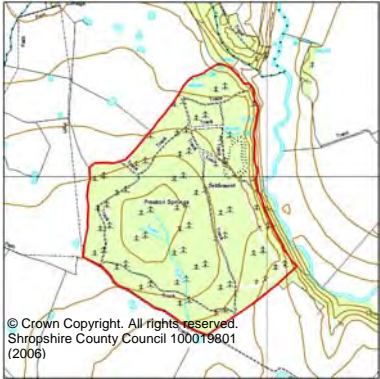
<p>Re-organised piecemeal enclosure</p>	<p>42</p>	<p>Small -large irregular or rectilinear fields where at least two field boundaries exhibit 's-curve' or 'dog-leg' morphology (suggesting the former presence of medieval open fields), but which also demonstrate evidence for significant change since their initial enclosure. These changes may take the form of the rationalisation and straightening of some boundaries and/or field amalgamations and enlargements (usually since the publication of the 1st ed. 6" OS maps). Historical processes that have produced such field systems include the improvement of estatelands in the 18th and 19th centuries and, in many cases, agricultural intensification in the later 20th century.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
<p>Drained wetlands</p>	<p>43</p>	<p>Field systems where the majority of field boundaries are drains or ditches. There is, however, significant variation across the type in terms of field size and form. The drainage of wetlands was underway in Shropshire by the 16th century, after which some of the more extensive areas (e.g. the Weald Moors) began to specialise in livestock fattening (Rowley 1989). Some drained wetlands (e.g. Baggy Moor) were brought into cultivation during the later 18th century. In most cases, drainage operations and improvements continued into the 19th and 20th century (Leah <i>et al</i> 1998).</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

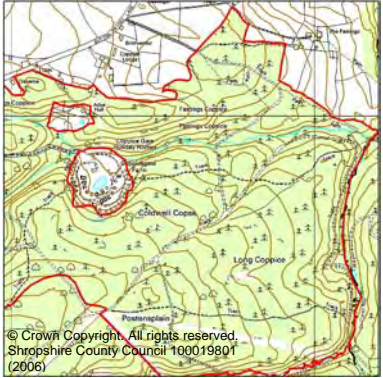
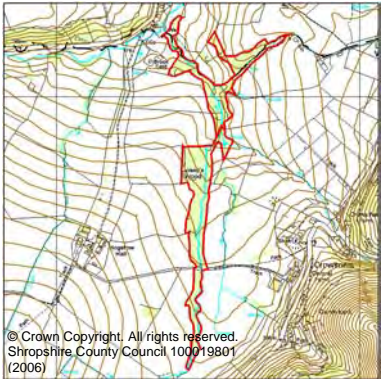
Planned enclosure	44	<p>Small - large fields with very straight boundaries and a rectilinear form, which lends them a geometric, planned appearance. They are often associated with a pattern of very straight roads and dispersed farmsteads. In most cases these field patterns result from a process of general enclosure by formal agreement during the late 17th and 19th centuries. This entailed one or more proprietors acting together, with lawyers and surveyors establishing each parties rights and/ or the extent of their property. The land in question was then re-allotted, either as consolidated holdings or in proportion to the rights exercised over them, and then enclosed. This HLC type, therefore, includes commons that were enclosed by Act of Parliament. Although Parliamentary Enclosure was relatively insignificant in Shropshire, when compared with other counties, it still resulted in the enclosure of approximately 25,800 ha (or 7.5% of the county) of predominantly common land (Baugh and Hill 1989: 171).</p> <p>A variant of this type is associated with areas (often estatelands) that have been improved by being replanned at some point in their history. The characteristic planned field system is associated with a more irregular, sinuous road network, which reflects their evolution from older enclosure patterns.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p> <p>Planned enclosure of former heathland.</p>  <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p> <p>Planned enclosure pattern created through reorganisation of an earlier field pattern.</p>
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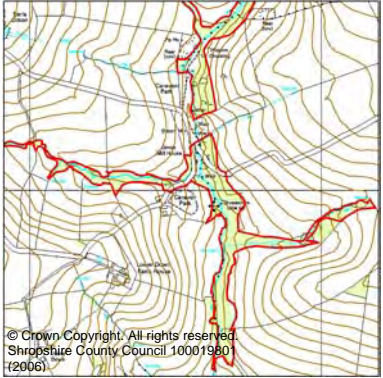
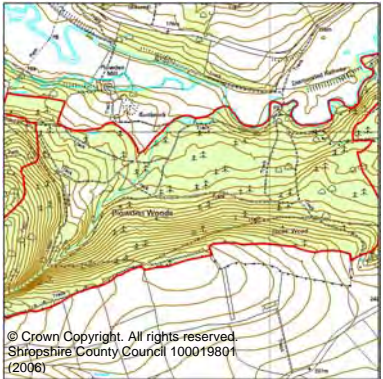
<p>Other small rectilinear fields</p>	<p>45</p>	<p>Areas of small rectilinear fields that cannot be assigned to one of the other Historic Landscape Character Types. The type includes small meadows and closes that do not occur next to settlement boundaries.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
<p>Other large rectilinear fields</p>	<p>46</p>	<p>Areas of large rectilinear fields that have a significant number of sinuous boundaries, and which can not be assigned to one of the other Historic Landscape Character Types. Includes some field patterns that have been created through the amalgamation of fields in the period since the publication of the 1st ed. 6" OS map.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

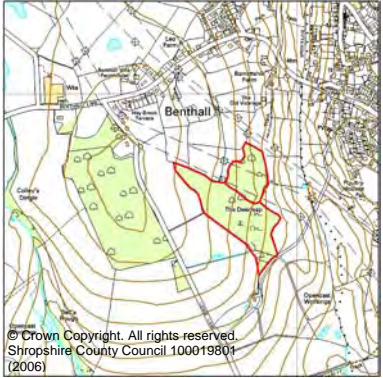
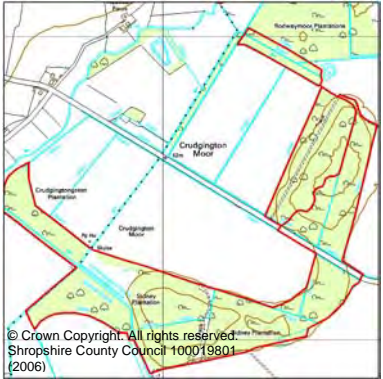
<p>Large irregular fields</p>	<p>47</p>	<p>Areas of large irregular fields that have a significant number of sinuous boundaries, and which cannot be assigned to one of the other Historic Landscape Character Types. Includes some field patterns that have been created through the amalgamation of fields in the period since the publication of the 1st ed. 6" OS map.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
<p>Very large Post-War fields</p>	<p>48</p>	<p>Very large fields (e.g. > 10ha) created through the amalgamation of fields since the publication of the 1st ed. 6" OS map. They are the result of later 20th century agricultural improvements, designed to meet the requirements of intensive arable cultivation.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>


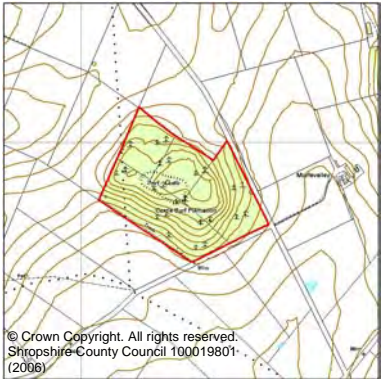
3. Woodland.

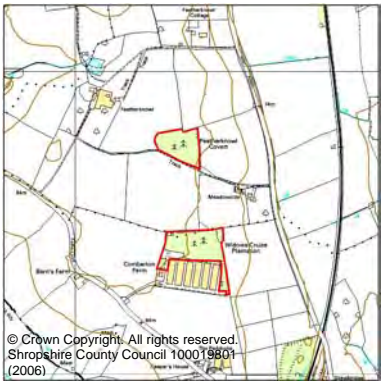
Historic Landscape Character Type	Number Code	Description and interpretation	
Broadleaved ancient woodlands	3	Woods that are listed on the Inventory of Ancient Woodland (Provisional) for England, which have also been identified by the Forestry Commission as having a broadleaved composition. This category will therefore include the oldest woods in the county, many of which will have medieval, if not earlier, origins. Some may contain well preserved archaeological monuments and relict landscapes dating to the Roman and prehistoric periods.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Mixed ancient woodlands	4	Woods that are listed on the Inventory of Ancient Woodland (Provisional) for England, which have also been identified by the Forestry Commission as having a mixed broadleaved and coniferous composition. This category will therefore include the oldest woods in the county, many of which will have medieval, if not earlier, origins. Some may contain well preserved archaeological monuments and relict landscapes dating to the Roman and prehistoric periods.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

<p>Replanted ancient woodlands</p>	<p>5</p>	<p>Woods that are listed on the Inventory of Ancient Woodland (Provisional) for England, which have also been identified by the Forestry Commission as comprising conifers or 'young trees'. This category will therefore include the oldest woods in the county, many of which will have medieval, if not earlier, origins. Some may contain well preserved archaeological monuments and relict landscapes dating to the Roman and prehistoric periods.</p>	
<p>Broadleaved woods with sinuous boundaries</p>	<p>6</p>	<p>Woods with sinuous boundaries that have been identified as broadleaved by the Forestry Commission. This category includes woods that may be 'ancient' but fall below the >2ha threshold for the Inventory of Ancient Woodland (Provisional) for England.</p>	

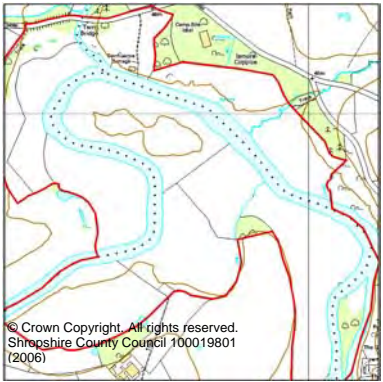
<p>Mixed woods with sinuous boundaries</p>	<p>7</p>	<p>Woods with sinuous boundaries that have been identified as mixed by the Forestry Commission. This category includes woods that may be 'ancient' but fall below the >2ha threshold for the Inventory of Ancient Woodland (Provisional) for England.</p>	
<p>Coniferous Woodland with sinuous boundaries</p>	<p>8</p>	<p>Woods with sinuous boundaries that have been identified as coniferous by the Forestry Commission. Most represent 19th or 20th century plantations, although some may occupy the site of ancient woodlands.</p>	


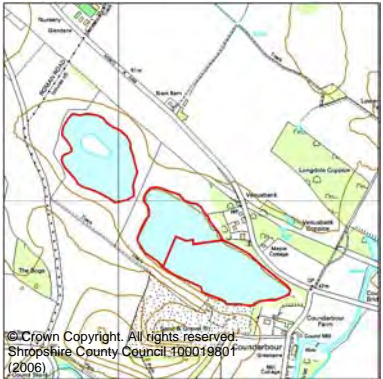
<p>Other woods with sinuous boundaries</p>	<p>9</p>	<p>Woods with sinuous boundaries that were either not included in the Forestry Commission survey because of their size (e.g. because they are < 2ha in size) OR have been identified as either having been felled or as consisting of young trees.</p>	
<p>Broadleaved plantation</p>	<p>10</p>	<p>Woods that the Forestry Commission has identified as having a broadleaved composition, where the wood's name and/or straight boundaries indicate that it was planted in the 19th or 20th century (the latter can be identified by their absence from the 1st ed. 6" map).</p>	

Mixed plantation	11	Woods that the Forestry Commission has identified as having a mixed broadleaved and coniferous composition, where the wood's name and/or straight boundaries indicate that it was planted in the 19 th or 20 th century (the latter can be identified by their absence from the 1 st ed. 6" map).	
Coniferous plantation	12	Woods that the Forestry Commission has identified as having a coniferous composition, where the wood's name and/or straight boundaries indicate that it was planted in the 19 th or 20 th century (the latter can be identified by their absence from the 1 st ed. 6" map).	

Other plantation	13	<p>Woods that were either not included in the Forestry Commission survey because of their size (e.g. because they are < 2ha), OR have identified as either having been felled or as consisting of young trees, where the wood's name and/or straight boundaries indicate that it was planted in the 19th or 20th century (the latter can also be identified by their absence from the 1st ed. 6" map).</p>	
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4. Water and valley floor.

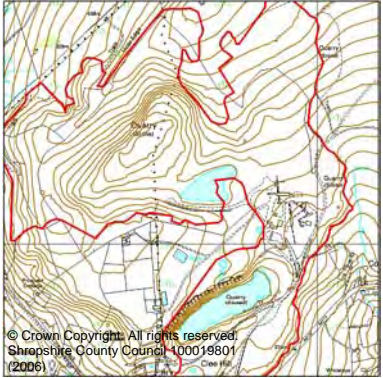

Historic Landscape Character Type	Number Code	Description and interpretation	
Miscellaneous floodplain fields	14	<p>Fields situated on river floodplains that do not fall into any of the more diagnostic 'Fieldscapes' categories. During the early medieval period many of these areas were probably used as common rough pasture and grazing marsh. The amount of enclosed meadowland remained small until the 14th century. However, towards the end of the medieval period documentary sources indicate that there was a significant increase in enclosed meadowland, enabling specialised livestock farming that was not possible in the common open fields (Kettle 1989). In addition, some of these areas retain the earthwork remains of water meadows, which were established in Shropshire from the late 16th century onwards. By the mid 17th century the lush pastures in these areas were being used to fatten cattle (Edwards 1989). Many retain a predominantly pastoral character today, although agricultural intensification in the later 20th century has resulted in the spread of intensive cultivation of some parts of the floodplain.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>


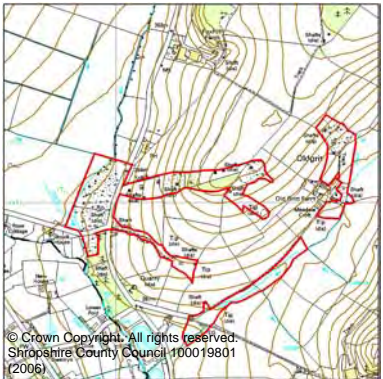
Moss/ raised bog	15	<p>Areas of unimproved peatland. The acidic conditions favour the preservation of organic remains and, as a result, these areas often preserve high-quality palaeoenvironmental and archaeological evidence (Leah <i>et al</i> 1998). Truncation of the uppermost layers may have often occurred due to peat cutting in the historic period. They also sustain ecologically rich wetland habitats.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Artificial lake/pond	16	<p>Lakes or ponds that can be recognised as being artificial by the presence of retaining earthworks and/or dams, or which occupy former minerals or aggregates workings. This category includes ornamental lakes, recreational facilities (e.g. modern fish ponds), flooded quarries and ponds associated with former industrial activity.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>


<p>Natural open water</p>	<p>53</p>	<p>Natural ponds, lakes and meres. In Shropshire most examples occupy 'kettle holes' in the surrounding drift deposits.</p>	
<p>Reservoir</p>	<p>49</p>	<p>Artificial bodies of water created specifically for the purposes of water supply, which are marked as such on current maps. In Shropshire these will generally date to the latter half of the 20th century.</p>	

5. Industrial.


Historic Landscape Character Type	Number Code	Description and interpretation	
Colliery (disused and active open cast)	57	Former or active coal workings, recorded on in the County's Councils Industrial Archaeology Survey and/or on Ordnance Survey maps, which can still be distinguished as such (i.e. they have not been fully reclaimed or recolonised by semi-natural vegetation).	 <p>© Crown Copyright. All rights reserved. Shropshire County Council: 100019801 (2006)</p>
Industrial complex	17	Modern industrial complexes marked on current editions of Ordnance Survey maps. Includes industrial estates, large factories and sewage farms. Most date to the latter half of the 20 th century.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council: 100019801 (2006)</p>

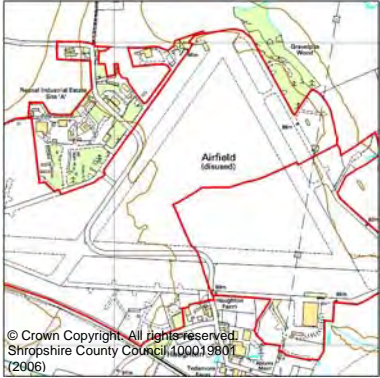
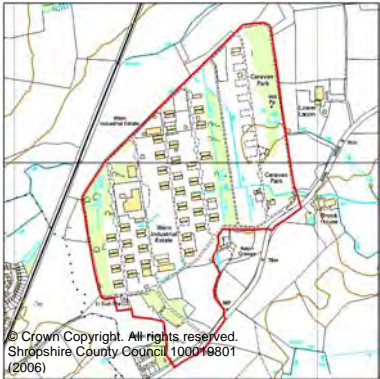
Active stone quarries	18	Stone quarries that are in active use. Will usually comprise of very large modern quarries run by aggregates/ construction companies.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Abandoned stone quarries	19	Disused stone quarries. This category will usually consist of larger quarries created during the 19 th and early 20 th centuries.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>


Sand/ gravel quarries	56	Aggregates workings which can still be distinguished as such. Most represent larger later 20 th century workings that remain active, and which are marked as such on current editions of Ordnance Survey maps.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Disused lead/ copper mine	55	Former lead and copper mine workings. Most will be identified as such in the County's Councils Industrial Archaeology Survey and/or on Ordnance Survey maps.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

Other industrial complex	58	Miscellaneous industrial sites which do not fall into any of the above categories. Most will have late 20 th century origins.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
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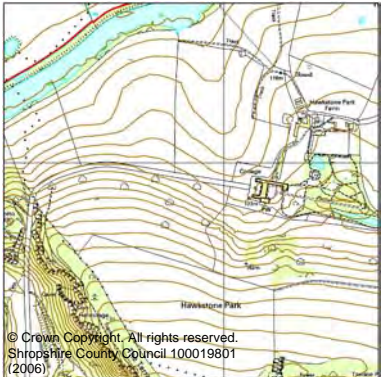
6. Military.



Historic Landscape Character Type	Number Code	Description and interpretation	
Disused ordnance depot	20	Areas given over to the storage of munitions during the World War II but which are now used for other purposes (e.g. storage, industrial units etc.), although the military architecture continues to form the dominant element of their Historic Landscape Character.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

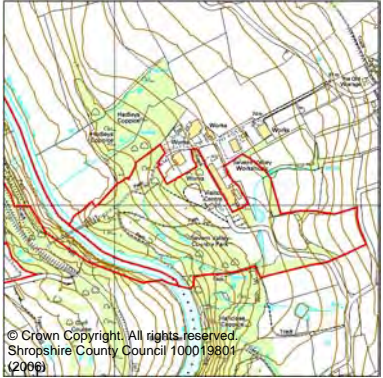
Former military airfields	21	World War II airfields whose origins as such can still be distinguished (i.e. where the runways and associated building complexes remain).	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Former barracks	22	Former army barracks, which most cases were constructed during World War II.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

Active military sites	59	Military bases which remain in active use and which are marked as such on current editions of Ordnance Survey maps.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
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7. Ornamental, parkland and recreational.

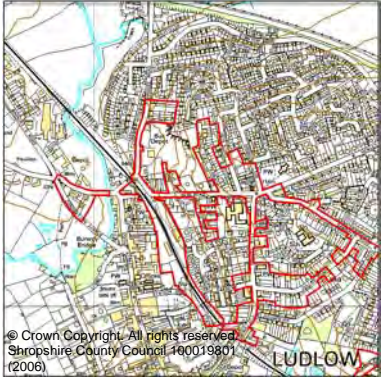

Historic Landscape Character Type	Number Code	Description and interpretation	
Parks and gardens	23	This category includes all parks and gardens identified on the County Council's Survey of Shropshire Historic Parks and Gardens (Stamper 1993) which can still be distinguished as such on current Ordnance Survey maps. Most were emparked between the 16 th and 19 th century, although a significant number also incorporate elements of medieval parks.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>


Golf course	24	Modern golf courses, which are marked as such on current editions of Ordnance Survey maps.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Sports fields	25	Modern sports fields, which are marked as such on current editions of Ordnance Survey maps.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

Other parkland	27	Others types of parkland, recreational or ornamental landscapes that do not fall into any of the above categories. This category includes playing fields, caravan parks and cemeteries.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
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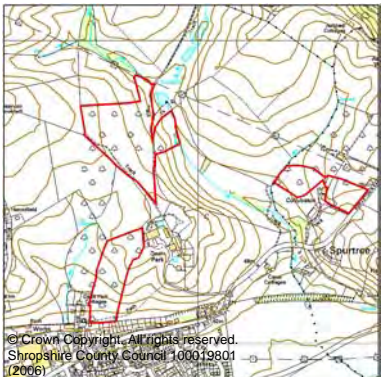
8. Settlement.

Historic Landscape Character Type	Number Code	Description and interpretation	
Historic settlement core	28	Historic settlement cores identified by the CMHTS/ SUAD (where these surveys have been conducted). In most cases these represent the extent of the settlement either by the end of the medieval period OR, in most cases, by the beginning of the 19 th century.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

Pre-1880s settlement	29	<p>This category defines the extent of a settlement as marked on the 1st ed. 6" OS map. In most cases this will effectively define the historic settlement core. However, for those settlements covered by the CMHTS/ SUAD, this category will provide a measure of settlement growth since the period defined by the historic core (e.g either over the course of the post-medieval and 19th century OR over the course of the 19th century, depending on the dates assigned by the CMHTS to their settlement core).</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Redeveloped pre-1880s settlement	50	<p>This relates to those parts of a settlement that are visible on the 1st ed. 6" OS map that have been changed significantly over the past 120 years, either through substantial infilling or wholesale redevelopment.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

Post-1880s settlement	30	This category defines the limit of a settlement shown on the current 1:10,000 Ordnance Survey maps. Where other settlement categories exist, it provides a measure of settlement growth over the past 120 years (i.e. since the 1 st ed. 6" map).	
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9. Orchard.

Historic Landscape Character Type	Number Code	Description and interpretation	
Pre-1880s orchards	31	This category defines orchards that are marked on both the 1 st ed. 6" map and the current Ordnance Survey maps. Consequently, the orchards will date to either the post-medieval OR early-mid 19 th century.	

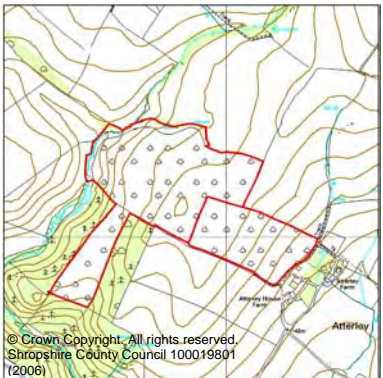

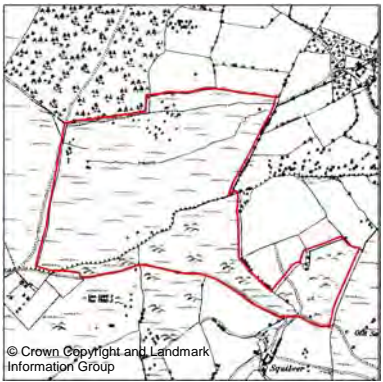

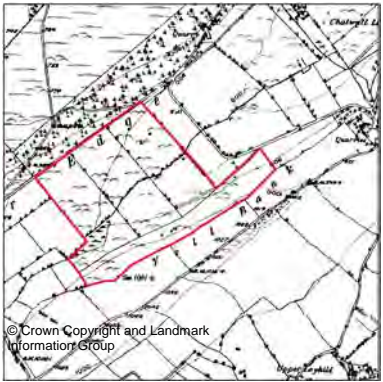
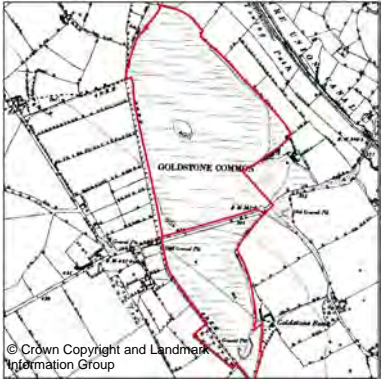

Post-1880s	32	<p>This category defines orchards that are marked on the current Ordnance Survey maps but not on the 1st ed. 6" OS map. These orchards have been planted over the past 120 years.</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2008)</p> <p>The image is a topographic map from the Ordnance Survey. It features contour lines indicating elevation, a network of roads, and a watercourse. A specific area is highlighted with a red outline, containing several small symbols that represent orchards. The map includes a copyright notice at the bottom left: '© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2008)'. The name 'Antarley' is visible in the bottom right corner of the map area.</p>
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Table 6 – Definitions of previous historic landscape character types

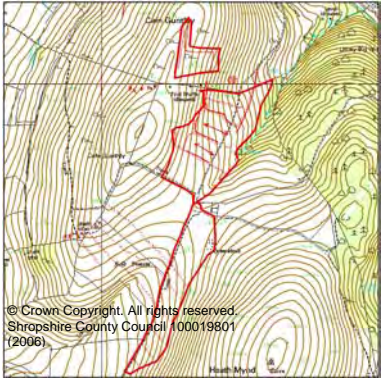
1. Unimproved land historic landscape character types.


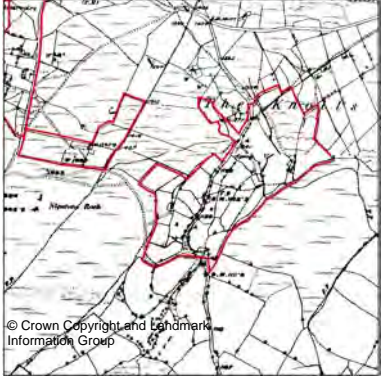

Previous Historic Landscape Character Type	Number Code	Description and interpretation	Map example
Heathland	3	Generally situated below the 244m contour line, this category distinguishes areas of former heathland. In most cases this land was subject to common rights during the medieval and early post-medieval periods.	 <p>A topographic map showing a landscape with a red boundary line. The text 'WHITCHURCH HEATH' is visible in the center. The map includes contour lines and various land parcels. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>
Moorland	2	Former areas of unenclosed land above 244m that probably supported moorland vegetation (e.g. heather, bilberry etc). This land was usually subject to common rights during the medieval and early post-medieval periods.	 <p>A topographic map showing a landscape with a red boundary line. The map includes contour lines and various land parcels. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>



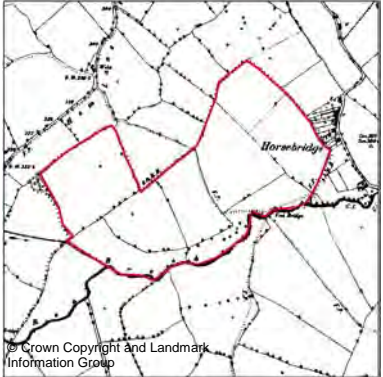
Unimproved open hill pasture	1	Areas of former unimproved grassland above 244m which, in most cases, was subject to common rights during the medieval and early post-medieval periods.	 <p>© Crown Copyright and Landmark Information Group</p>
Unimproved enclosed hill pasture	35	Areas of former unimproved enclosed grassland above 244m. Such areas were usually enclosed from commons and waste in the post-medieval or industrial periods (or during the post-War period in association with post and wire fences), and exhibited a field pattern characterised by rectilinear or regular fields with straight boundaries.	 <p>© Crown Copyright and Landmark Information Group</p>
Other commons	5	This category includes areas of former common land that do not fall into any of the above categories. For instance, it covers areas of lower lying ground that were used for communal grazing but which, on place name evidence, do not appear to have been heathlands.	 <p>© Crown Copyright and Landmark Information Group</p>



Other ground	unimproved	4	Other former areas of unimproved land that do not fall into any of the above categories.	 <p>© Crown Copyright and Landmark Information Group</p>
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2. Fieldscapes historic landscape character types.


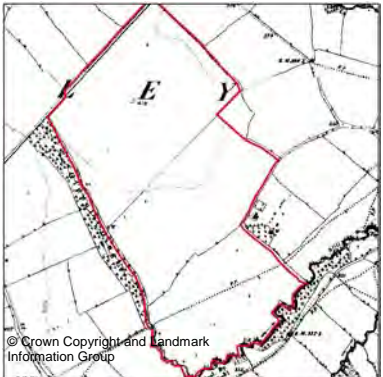
Historic Landscape Character Type	Number Code	Description and interpretation	Map examples
Iron Age/ Roman field system	47	Potentially later prehistoric or Roman field systems, including examples of 'Celtic' field systems recorded by the MUMP.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>

Paddocks/closes	9	Former small, irregular fields distinguished from 'other small fields' previous HLC types by their location on the edge of settlements. In many cases these probably represent small meadows and paddocks of varying dates.	 <p>© Crown Copyright and Landmark Information Group</p>
Squatter enclosure	14	Former field systems that comprised small irregular fields with sinuous or curvilinear boundaries. The overall field pattern has an unordered, often amorphous appearance. These areas are often associated with networks of lanes and trackways, and a dense dispersal of small cottages. They sometimes occur as 'islands' within tracts of unimproved land. In addition, they are sometimes associated with mining, quarrying or other industrial activity. They usually represent encroachments onto commons, established between the 16 th and beginning of the 19 th century (Edwards 1989).	 <p>© Crown Copyright and Landmark Information Group</p>
Small assarts	7	Former small-medium, irregular or sub-rectangular fields associated with a dispersed settlement pattern of older farmsteads and a winding road network. In addition, they often – but not always – lie adjacent to small areas of broadleaved woodland that have an irregular outline. They also occur around the edges of larger blocks of semi-natural ancient woodland. Historically these fields were created through the clearance and enclosure of woodland and waste between the medieval and earlier post-medieval periods (Stamper 1989).	 <p>© Crown Copyright and Landmark Information Group</p>

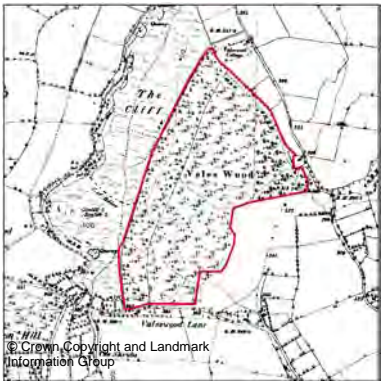

<p>Large assarts with sinuous boundaries</p>	<p>8</p>	<p>Field patterns that previously consisted of medium-large, irregular or sub-rectangular fields, associated with a dispersed settlement pattern of older farmsteads and a winding road network. In addition, they often – but not always – lie adjacent to small areas of broadleaved woodland with an irregular outline. They also occur around the edges of larger blocks of semi-natural ancient woodland. Historically these fields were created through the clearance and enclosure of woodland and waste between the medieval and earlier post-medieval periods (Stamper 1989), although the type also includes fields created through the recent (e.g. post-1880s) amalgamation of small assarts.</p>	
<p>Late clearance/ assarts</p>	<p>46</p>	<p>Field patterns previously comprising small-large rectilinear or sub-rectangular fields with predominantly straight boundaries, which appear to have been created through woodland clearance. They occur immediately adjacent, or in close proximity, to areas of ancient woodland. This type is likely to be later in date than the 'small assarts' and 'large assarts with sinuous boundaries' types (e.g. date to the 16th century or later).</p>	
<p>Other small fields</p>	<p>10</p>	<p>Former areas of small fields that cannot be assigned to one of the other previous historic landscape character types. Includes small meadows and closes that do not occur next to settlement boundaries.</p>	

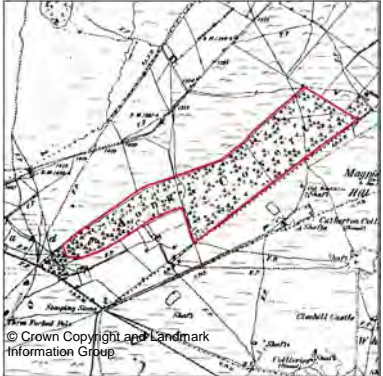

Strip fields	6	This category identifies those areas that are likely to have formed part of medieval open fields, the presence of which can be deduced by the existence of piecemeal enclosure.	 <p>A historical map showing a landscape with various field patterns. A specific area is highlighted with a red outline, indicating piecemeal enclosure. The map includes labels such as 'Green Street to St', 'Bridgwater Mill', and 'Bridgwater'. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>
Piecemeal enclosure	11	Former areas of piecemeal enclosure that created by the gradual enclosure of medieval open fields, through sales and informal private agreements between farmers seeking to consolidate their holdings (Johnson 1996). Within Shropshire this process was under way by the late medieval period, and a number of 16 th century commentators regarded the county as largely enclosed (Kettle 1989: 84). These areas have field patterns comprised of small irregular or rectilinear fields, where at least two boundaries will have 's-curve' or 'dog-leg' morphology, suggesting that that they follow the boundaries of former medieval field strips.	 <p>A historical map showing a landscape with various field patterns. A specific area is highlighted with a red outline, indicating piecemeal enclosure. The map includes labels such as 'Stanton Long'. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>

Re-organised piecemeal enclosure	12	<p>Former small -large irregular or rectilinear fields that have with at least two field boundaries that exhibit 's-curve' or 'dog-leg' morphology, suggesting the former presence of medieval open fields, but which demonstrate evidence for further significant change since the since their initial enclosure. These changes may take the form of the rationalisation and straightening of some boundaries and/or field amalgamations and enlargements (usually since the publication of the 1st ed. 6" OS maps). Historical processes that have produced such field systems include the improvement of estatelands in the 18th and 19th centuries.</p>	 <p>This is a black and white Ordnance Survey map of the Brackton area. Several field boundaries are highlighted in red, showing irregular, 's-curve' or 'dog-leg' shapes. The map includes labels for 'Brackton', 'Old Church', and 'St. Mary's'. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>
Planned enclosure	13	<p>Former small - large fields with very straight boundaries and a rectilinear form, which lent them a geometric, planned appearance. They were often associated with a pattern of very straight roads and dispersed farmsteads. In most cases these field patterns result from a process of enclosure by formal agreement during the late 17th and 19th centuries. This entailed one or more proprietors acting together, with lawyers and surveyors establishing each parties rights and/ or the extent of their property. The land in question was then re-allotted, either as consolidated holdings or in proportion to the rights exercised over them, and then enclosed. This HLC type, therefore, includes commons that were enclosed by Act of Parliament. Although Parliamentary Enclosure was relatively insignificant in Shropshire, when compared with other counties, it still resulted in the enclosure of approximately 25,800 ha (or 7.5% of the county) of predominantly common land (Baugh and Hill 1989: 171).</p>	 <p>This is a black and white Ordnance Survey map of the Bolas Heaph area. The field boundaries are highlighted in red and are notably straight and rectilinear. The map includes labels for 'Bolas Heaph' and 'G A'. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>



Drained wetland	16	<p>The former fields systems where the majority of field boundaries represented drains or ditches. There is, however, significant variation across the type in terms of field size and form. The drainage of wetlands was underway in Shropshire by the 16th century, after which some of the more extensive areas (e.g. the Weald Moors) began to specialise in livestock fattening (Rowley 1989). Some drained wetlands (e.g. Baggy Moor) were brought into cultivation during the later 18th century. In most cases, drainage operations and improvements continued into the 19th and 20th century (Leah <i>et al</i> 1998).</p>	 <p>A historical map of the Weald Moors area, showing a dense network of drains and ditches. The text 'WEALD MOORS' is printed across the map. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>
Other large fields	15	<p>Former areas of large fields that do not fall into any of the other above categories.</p>	 <p>A historical map showing a large field area outlined in red. The letters 'E Y' are visible within the field. A copyright notice at the bottom reads '© Crown Copyright and Landmark Information Group'.</p>




3. Woodland historic landscape character types.

Historic Landscape Character Type	Number Code	Description and interpretation	
Ancient broadleaved woodland	17	<p>Woods that are listed on the Inventory of Ancient Woodland (Provisional) for England but are designated by the Forestry Commission as <i>not</i> having a broadleaved composition. Consequently, it is assumed for the purposes of the HLCA that these were formerly areas of ancient broadleaved woodland. In addition, polygons may have been assigned this previous character type if ancient woodland is assumed to have been present in the past (i.e. in areas of assartment etc.).</p>	 <p>A map showing a woodland area outlined in red. The area is labeled 'The Cliff' and 'The Wood'. The map includes a scale bar and a north arrow. The text '© Crown Copyright and Landmark Information Group' is visible at the bottom of the map.</p>
Other broadleaved woodland	18	<p>Areas of woodland marked as being broadleaved on the 1st ed. 6" maps, which are not listed as Ancient Woodland by English Nature and whose broad species composition has since changed. Also includes those areas of this kind of woodland that have been cleared over the past 120 years.</p>	 <p>A map showing several woodland areas outlined in red. The areas are labeled 'The Wood' and 'The Cliff'. The map includes a scale bar and a north arrow. The text '© Crown Copyright and Landmark Information Group' is visible at the bottom of the map.</p>



Mixed woodland	19	Areas marked as mixed woodland on the 1 st ed. 6" map but whose composition has since changed or which have been cleared over the past 120 years.	
Plantation woodland	20	Woods whose morphology and/or name, as marked on the 1 st ed. 6" OS map, suggest that they represent plantations but whose character as such has since changed. Also includes plantations over 1ha that have been cleared over the past 120 years.	


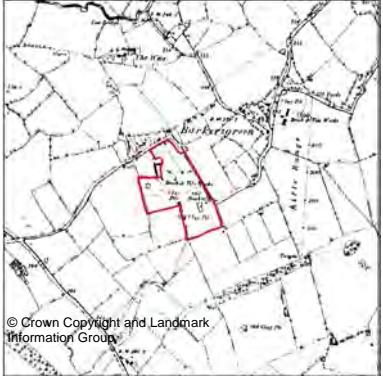
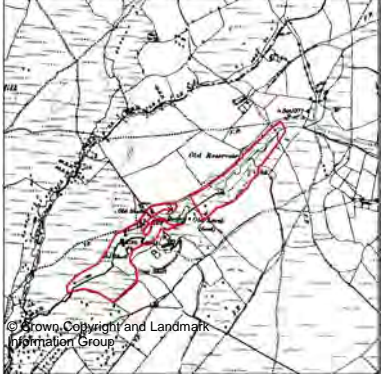
4. Water and valley floor historic landscape character types.


Historic Landscape Character Type	Number Code	Description and interpretation	
Miscellaneous floodplain fields	21	<p>Former areas of fields on river floodplains, as marked on the 1st ed. 6" OS map, which do not fall into any of the more diagnostic 'Fieldscapes' previous HLC type categories, and whose character has subsequently changed. During the early medieval period many of these areas were probably used as common rough pasture and grazing marsh. The amount of enclosed meadowland remained small until the 14th century. However, towards the end of the medieval period documentary sources indicate that there was a significant increase in enclosed meadowland, enabling specialised livestock farming that was not possible in the common open fields. In addition, some of these areas retain the earthwork remains of water meadows, which were established in Shropshire from the late 16th century onwards. By the mid 17th century the lush pastures in these areas were being used to fatten cattle (Edwards 1989).</p>	 <p>© Crown Copyright and Landmark Information Group</p>
Moss/ raised bog	15	<p>Areas of former unimproved peats. In most cases peat formation will have begun in the prehistoric period. The acidic conditions in these environments favour the preservation of organic remains and, as a result, these areas often preserve high-quality palaeoenvironmental and archaeological evidence (Leah <i>et al</i> 1998). Truncation of the uppermost layers may have occurred due to peat cutting in the historic period. These would also have sustained ecologically rich wetland habitats.</p>	 <p>© Crown Copyright and Landmark Information Group</p>

Floodplain marshes	23	Former areas of poorly drained, marshy ground in floodplain locations. They will either be marked as such on the 1 st ed. 6" map (in which case they have only been drained over the last 120 years) OR whose existence can be inferred from areas of intensive floodplain drainage.	 <p>OS map showing floodplain marshes. The marshes are outlined in red. The map includes labels for 'English Hall' and 'Tropus Quarry'. A copyright notice at the bottom reads: © Crown Copyright and Landmark Information Group.</p>
Artificial water body	36	Former lakes or ponds that can be recognised as being artificial by the presence of retaining earthworks and/or dams, or which occupy former minerals or aggregates workings. This category includes ornamental lakes, recreational facilities (e.g. modern fish ponds), flooded quarries and ponds associated with former industrial activity.	 <p>OS map showing artificial water bodies. The water bodies are outlined in red. The map includes labels for 'The Lake' and 'The Pond'. A copyright notice at the bottom reads: © Crown Copyright and Landmark Information Group.</p>
Natural open water	22	Former water bodies whose morphology and/or names, as marked on the 1 st ed. 6" OS map, suggest that they were natural ponds, lakes and meres. In Shropshire most examples occupy 'kettle holes' in the surrounding drift deposits.	 <p>OS map showing natural open water. The water body is outlined in red. The map includes labels for 'THE MERES' and 'THE POND'. A copyright notice at the bottom reads: © Crown Copyright and Landmark Information Group.</p>



5. Industrial historic landscape character types.

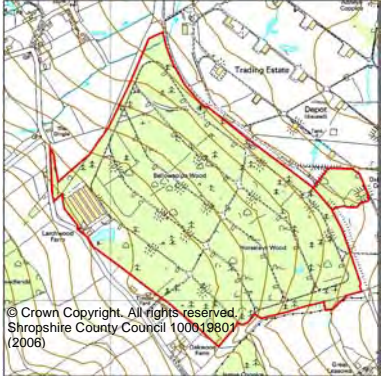
Historic Landscape Character Type	Number Code	Description and interpretation	
Colliery	25	Former coal workings, recorded on the Shropshire County's Councils SMR Industrial Archaeology Survey and/or on Ordnance Survey maps, which can still be distinguished as such (i.e. they have not been fully reclaimed or recolonised by semi-natural vegetation).	 <p>© Crown Copyright and Landmark Information Group</p>
Industrial complex	38	Former industrial complexes marked on the 1 st ed. 6" OS maps and/ or recorded on the Shropshire County Council's SM Industrial Survey. Includes former works, factories and foundries that were established in the later 18 th and 19 th centuries.	 <p>© Crown Copyright and Landmark Information Group</p>

Stone quarry	27	Former stone quarries. This category will usually consist of larger quarries created during the 19 th and early 20 th centuries.	 <p>© Crown Copyright and Landmark Information Group</p>
Brickfield/ clay pit	37	Former brick works or clay pits marked on the 1 st ed. 6" OS maps and/ or recorded on Shropshire County Council's SMR Industrial Survey.	 <p>© Crown Copyright and Landmark Information Group</p>
Lead/ copper mine	26	Former lead or copper mines as marked on the 1 st ed. 6" OS maps and or Shropshire County Council's SMR Industrial Survey maps. The majority of the activity associated with this period will date to the post medieval or industrial periods.	 <p>© Crown Copyright and Landmark Information Group</p>


Other industrial/ extractive	39	Miscellaneous former industrial sites 1 st ed. 6" OS maps which do not fall into any of the above categories.	
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6. Military historic landscape character types.

Historic Landscape Character Type	Number Code	Description and interpretation	
Barracks	28	Former military bases. In most cases these will have been built during the 20 th century.	 <p>© Crown Copyright and Landmark Information Group</p>
Airfield	40	World War II airfields whose character as since changed.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>



Ordnance depot	41	Areas formerly given over to the storage of ammunition during the Second World War and whose character has since changed.	
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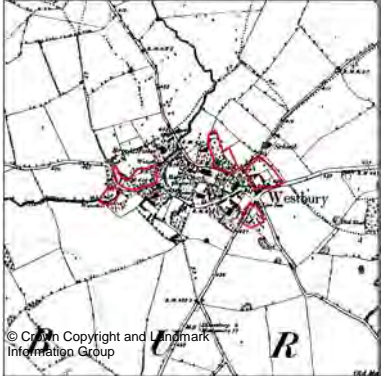

7. Ornamental, parkland and recreational historic landscape character types.

Historic Landscape Character Type	Number Code	Description and interpretation	
Parks and gardens	29	This category includes all former parks and gardens, identified by the Shropshire County Council's Survey of Historic Parks and Gardens in Shropshire (Stamper 1993) and/or on 1 st ed. 6" OS maps, whose character has since changed (e.g. now used principally as farmland).	


Deer parks	30	Medieval deer parks, identified in the Shropshire County Council's Survey of Shropshire Historic Parks and Gardens in Shropshire (Stamper 1993), whose boundaries can still be distinguished on the modern or 1 st ed. 6" OS map.	 <p>© Crown Copyright and Landmark Information Group</p>
Race course/ sports field	43	Former racecourses and sports fields marked as such on the 1 st ed. 6" OS maps but whose character has since changed.	 <p>© Crown Copyright and Landmark Information Group</p>
Allotment gardens	42	Former urban allotment gardens marked on the 1 st ed. 6" OS maps.	 <p>© Crown Copyright and Landmark Information Group</p>

8. Settlement historic landscape character types.

Historic Landscape Character Type	Number Code	Description and interpretation	
Medieval settlement	31	Denotes areas of deserted medieval settlement, as identified on the Shropshire County Council's SMR or by the CMHTS.	 <p>© Crown Copyright. All rights reserved. Shropshire County Council 100019801 (2006)</p>
Historic settlement core	44	Historic settlement cores identified by the CMHTS/ SUAD (where these surveys have been conducted). In most cases these represent the extent of the settlement either by the end of the medieval period OR by the beginning of the 19 th century.	 <p>© Crown Copyright and Landmark Information Group</p>

Pre-1880s settlement	32	<p>This category defines the extent of a settlement as marked on the 1st ed. 6" OS map. In most cases this will effectively define the historic settlement core. However, for those settlements covered by the CMHTS/ SUAD, this category will provide a measure of settlement growth since the period defined by the historic core (e.g either over the course of the post-medieval and 19th century OR over the course of the 19th century, depending on the dates assigned by the CMHTS to their settlement core).</p>	 <p>© Crown Copyright and Landmark Information Group</p>
Post-1880s settlement	45	<p>This category defines the limit of a settlement as marked on the current 1:10,000 Ordnance Survey maps. Where other settlement categories exist, it provides a measure of settlement growth over the past 120 years (i.e. since the 1st ed. 6" map).</p>	 <p>© Crown Copyright. All rights reserved. Shropshire County Council, 100019801 (2006)</p>

9. Orchard historic landscape character types.

Historic Landscape Character Type	Number Code	Description and interpretation	
Pre-1880s orchard	31	This category identifies orchards that are marked on the 1 st ed. 6" OS maps but which have since been grubbed up. Such orchards would have dated to either the post-medieval OR early-mid 19 th century	

4. HLC/LCA Integration

Introduction.

- 4.1 Paragraph 4.20 of The Countryside Agency and Scottish Natural Heritage's Guidance on LCA states that: -

“A study which combines Landscape Character Assessment with a historic [landscape] assessment...is likely to be the most satisfactory” (The countryside Agency and Scottish Natural Heritage 2002:26).

- 4.2 The importance of integrating HLC and LCA is further emphasised in LCA Topic Paper 5: Understanding Historic Landscape Character (Scottish Natural Heritage *et al* 2003).

- 4.3 The main advantages of the integrating both forms of landscape assessment are stated in paragraph 30 of Topic Paper 5: -

“The inclusion of HLC/HLA within the Landscape Character Assessment process improves understanding of how changes in the past have affected the modern environment and of the complex interaction between human actions and natural forces (i.e. its time depth). It enables Landscape Character Assessment to take better account of the varied ways in which the landscape has been influenced by past activity and the length of time over which this has occurred. This allows current issues to be seen within a longer-term perspective and contemporary management decisions to be taken with a fuller understanding of past management practices.” (Scottish Natural Heritage 2003: 9).

- 4.4 As noted in Section 2 above, the Shropshire HLC project methodology was designed to be compatible with the existing LCA from the outset. The completion of data capture and analysis in December 2004, and the creation of Landscape Officer post within Shropshire County Council, provided an opportunity to review the LCA and integrate it with the HLC.
- 4.5 This section describes the methodology that was developed to integrate HLC with LCA with assistance Steven Warnock of The Living Landscapes Project.

Methodology

Processing the HLC data

- 4.6 Because HLC operates at a different resolution to LCA it was firstly necessary to process the HLC data in a way that would it to be related to the LCA.
- 4.7 This was done by developing two GIS layers, which could be used to produce a composite map displaying the current extent of certain aggregated or 'higher level' HLC Types against 'deep time depth' (in practice a 'late medieval' map projection). This provided an illustration of how different parts of the landscape have evolved over several centuries, thus illustrating key differences which should be reflected within the LDU framework (e.g. between areas of piecemeal enclosure

from open fields as apposed to those that have developed from former tracts of common rough pasture - see Fig. 3).

- 4.8 *Developing 'higher level' HLC Types* - This was achieved firstly inserting an additional field, labelled 'Level_2', into a copy of the HLC GIS shapefile. Certain HLC Types were then selected using a definition query and a code inserted into the new field (see Table 7). These codes were then used to define a legend.

Table 7 – Higher Level HLC Types used in HLC/LCA integration

Higher Level HLC Type	Code	Definition	Constituent HLC Types
Ancient woodland (including post-1945 clearance)	1	Ancient woodlands, including areas of ancient woodland that were cleared in the later 20 th century.	Broadleaved ancient woodland, Large irregular fields*, Mixed ancient woodland, Other large rectilinear fields, Other small rectilinear fields, Paddocks/closes, Planned enclosure, Replanted ancient woodland, Small irregular fields, Very large post-war fields
Other woodlands with irregular boundaries	2	Other woodlands that <i>may</i> have ancient origins	Broadleaved woodland with sinuous boundaries, Coniferous woodland with sinuous boundaries, Mixed woodland with sinuous boundaries, Other woodland with sinuous boundaries.
Parks and gardens (including areas lost post-1945)	3	Parks and gardens, including areas converted to farmland etc. in the later 20 th century.	Large irregular fields**, Other large rectilinear fields*, Paddocks/closes*, Parks and gardens, Planned enclosure*, Small irregular fields*, Very large post-war fields*

· When period = 'Post-War' & Previous HLC Type = 'Ancient broadleaved woodland' OR 'Other broadleaved woodland'.

* When previous HLC Type = 'Parks and gardens'

Unimproved land (including post-1945 improvement).	4	Areas of unimproved land, including areas former unimproved land that was improved in the later 20 th century.	Heathland, Moorland, Other commons, Large irregular fields*, Other unimproved ground, Unimproved enclosed hill pasture, Unimproved open hill pasture, Very large post-war fields
Wetlands (including post-1945 drainage).	5	Wetlands, including areas drained/ improved in the later 20 th century.	Large irregular fields**, Miscellaneous floodplain fields, Moss/raised bog, Natural open water, Other large rectilinear fields*, Paddocks/closes*, Planned enclosure*, Small irregular fields*, Very large post-war fields*

4.9 *Developing a late medieval map projection to show ‘deep time depth’* – This projection was produced in much the same way as the Level 2 HLC map. An additional field, labelled ‘L_Med_HLC’ was again inserted into the duplicate HLC shapefile. A specific set of Current and Previous HLC Types were then selected using a definition query and a code number inserted into the new field. These codes were then used to develop a legend.

· When period = ‘Post-War’ & Previous attribute group = ‘Unimproved land’

* When period = ‘Post-War’ & Previous attribute group = ‘Wetland and valley floor’

Table 8 – Late Medieval HLC Types

Late Medieval HLC Type	Code	Definition	Constituent Current and Previous HLC Types
Ancient woodland	1	Areas of woodland that probably to have existed in the later medieval period.	<p><i>Current HLC Types</i> – Broadleaved ancient woodland, Broadleaved woods with sinuous boundaries, Coniferous woodland with sinuous boundaries, Late clearance/assarts, Mixed ancient woodland, Mixed woods with sinuous boundaries, Other woods with sinuous boundaries, Replanted ancient woodland</p> <p><i>Previous HLC Types</i> – Ancient broadleaved woodland, Late clearance/assarts</p>
Assarts	2	Areas that are likely to have been cleared and enclosed from woodland in the medieval period	<p><i>Current HLC Types</i> – Small assarts, Large assarts with sinuous boundaries</p> <p><i>Previous HLC Types</i> – Small assarts, Large assarts with sinuous boundaries</p>
Closes	2	Enclosed pasture fields beyond the open fields and adjacent to settlements	<p><i>Current HLC Types</i> – Paddocks/closes, Other small rectilinear fields, Small irregular fields</p> <p><i>Previous HLC Types</i> – Iron Age/Roman field systems, Other large fields, Other small fields, Paddocks/closes</p>

Deer parks	4	Medieval parklands recorded by Stamper (1993).	<i>Previous HLC Types –</i> Deer parks
Meadowland and wetlands	5	Areas of wet and meadowland wetlands	<i>Current HLC Types –</i> Drained wetlands, Miscellaneous floodplain fields, Moss/raised bog, Natural open water <i>Previous HLC Types –</i> Drained wetlands, Floodplain marshes, Miscellaneous floodplain fields, Moss/raised bog, Natural open water
Rough grazing	6	Areas of lowland heathland, moorland, and rough pasture, much of which was subject to common grazing	<i>Current HLC Types –</i> Heathland, Moorland, Other commons, Other unimproved ground, Unimproved enclosed hill pasture, Unimproved open hill pasture <i>Previous HLC Types –</i> Heathland, Moorland, Other commons, Other unimproved ground, Unimproved enclosed hill pasture, Unimproved open hill pasture
Settlements	7	Pre-1880s settlements, the origins of many of which will lie in the medieval period	<i>Current HLC Types –</i> Historic settlement core, Pre-1880s settlement, Redeveloped pre-1880s settlement <i>Previous HLC Types –</i> Historic settlement core, Medieval settlement, pre-1880s settlement

Strip fields	8	Areas that lay within open fields. Enclosure of some open fields may already have begun by the 14 th century.	<p><i>Current HLC Types –</i> Piecemeal enclosure, Reorganised piecemeal enclosure</p> <p><i>Previous HLC Types –</i> Piecemeal enclosure, Reorganised piecemeal enclosure, Strip fields.</p>
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4.10 *Projecting the composite map* – This was generated by overlaying the Level 2 HLC layer over the Late Medieval HLC layer (see Figure 3).

Reviewing the LCA Landscape Description Unit framework

4.11 *Comparing the LDU boundaries to the composite HLC map* – Firstly, LDU shapefile was displayed with a hollow legend with a black outline at 0.5pt thickness. This was then overlaid over the composite HLC map (see Fig.).

4.12 *Checking and revising the LDU boundaries* – A visual check of the relationship between the LDU boundaries was undertaken. It was found that there was a significant degree of correlation between the LDU boundaries and the information about the historic character and time depth displayed by the composite map. However, in a number of instances anomalies were seen to exist where, for example, LDU boundaries did not adequately differentiate between areas with significantly different histories. In these circumstances the LDU boundaries were adjusted to better reflect these differences in the historic character of the landscape (See Figure 3)

4.13 *Review the LDU coding* – The composite map was also used to review the Settlement codes held within the LDU attribute table. For example, it helped to distinguish patterns of ancient dispersed settlement in areas with a history of assarting from areas of post-medieval encroachment on areas of former waste.

Identify and describing Landscape Types

4.14 The revised LDU data provided the basis for identify a set of Landscape Types for the county, based on an analysis of landform, ecological character, cultural pattern (based on settlement pattern and farm type) and tree cover (see Figure 4).

4.15 The composite HLC map also proved useful in the production of the written descriptions for each Landscape Type, and facilitated the integration of information relating their historical development.

Figure 3 – Composite HLC maps and revised LDU boundaries.

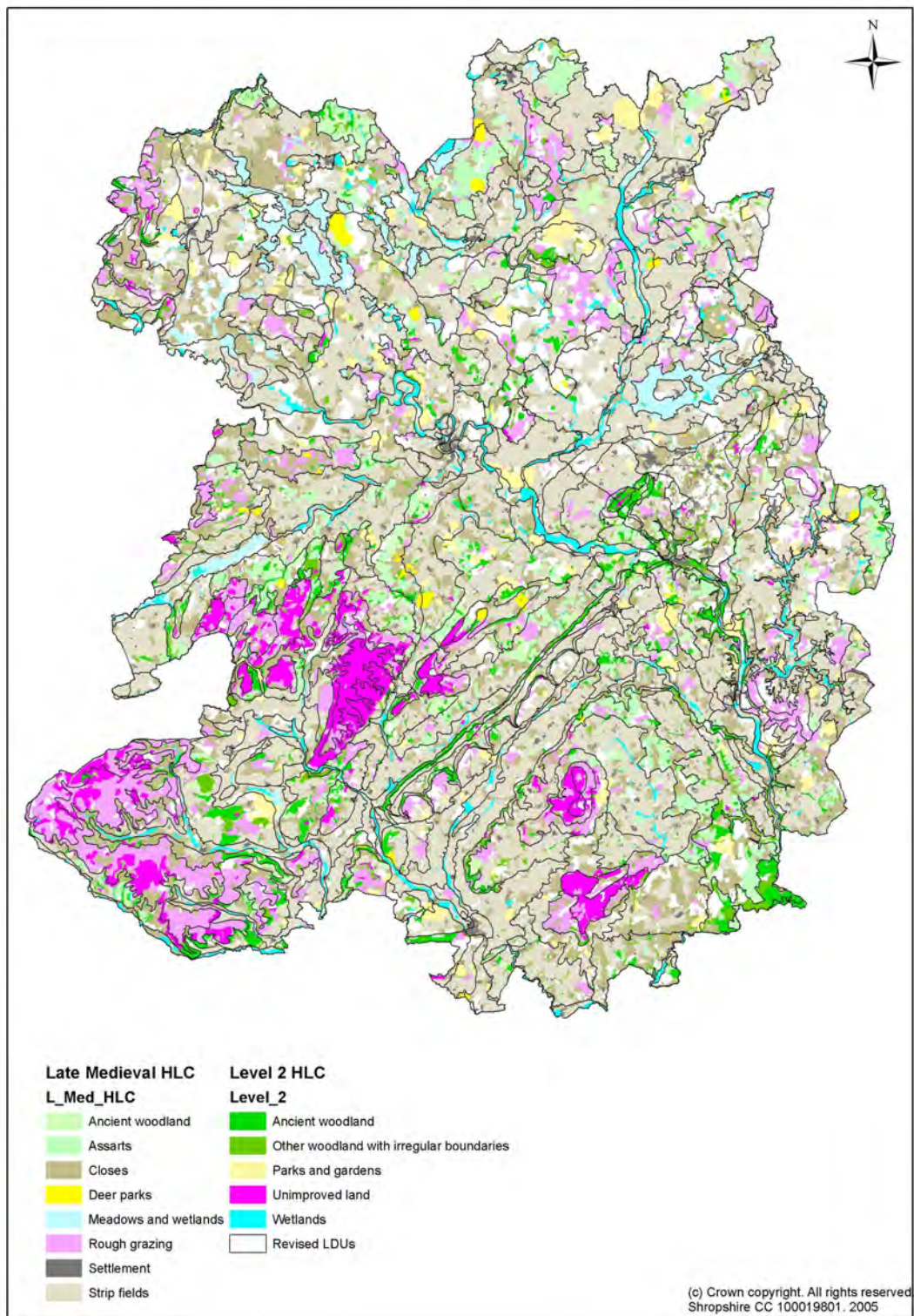
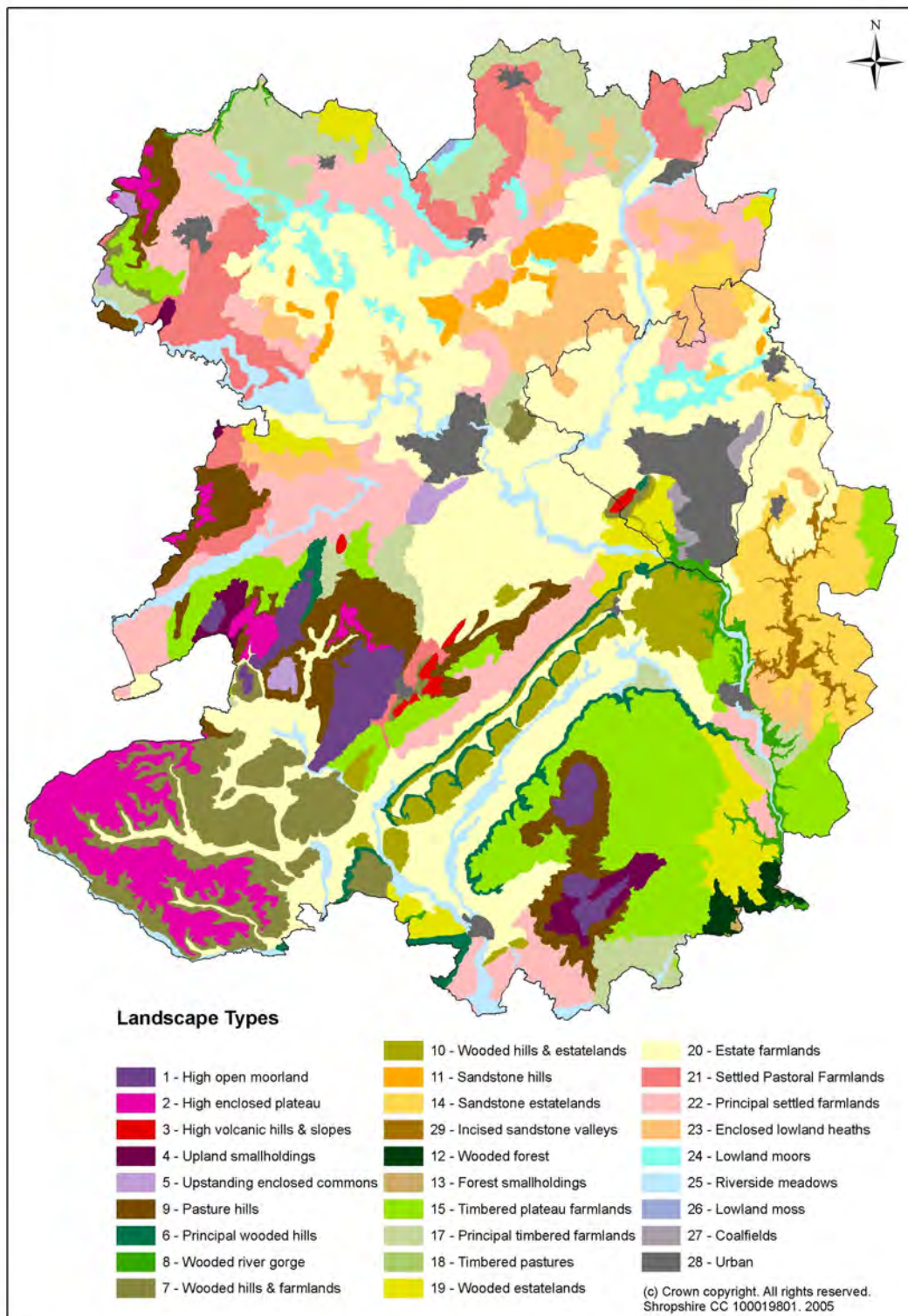


Figure 4 – Landscape Types map for Shropshire.



5. Conclusion: Applications and future development.

Introduction

- 5.1 The methodology that was developed in Shropshire resulted in the definition of over 30,000 HLC polygons and 58 Current HLC Types covering the whole of the ceremonial county area (e.g. Shropshire County Council and the Borough of Telford and Wrekin Council areas) .
- 5.2 The methodology used as the basis of the Staffordshire HLC project (Robinson 2006, Wigley 2002) and with modifications in Warwickshire (Wallace). Worcestershire and Leicestershire HLC projects are also using a similar methodology and a simplified version of the Shropshire approach was also used after training by SCC in three counties of the Irish midlands as part of a Culture 2000 project.
- 5.3 Work is now progressing on the applications of the Shropshire HLC, both in its own right and through its integration with the LCA. The next section of this chapter will briefly describe the work that has been done to date in this area.
- 5.4 The final part of this chapter will outline possible areas for future development of the Shropshire HLC.

Applications

Introduction

- 5.5 Work on the applications of HLC formed an integral component of the Shropshire HLC Project from the outset. A number of opportunities have arisen, both during the life of the project and since the completion of data capture in 2004, to develop and explore the applications of HLC in a number of areas. These are briefly outlined below and are supported by the various reports included as separate appendices below.

Land Management Initiatives

- 5.6 One of the initial HLC pilot study areas was chosen to coincide with the Severn-Vyrnwy Land Management Initiative (hereafter SVLMI) project area. It formed one of the nine LMIs initiated by the Countryside Agency between 2001 and 2004, which aimed to force for change within farming industry in different types of landscape. The SVLMI explored the future of farming on the floodplain and placed particular emphasis on exploring the agri-environment schemes could be used to develop farm businesses.
- 5.7 The results of the pilot study provided an opportunity to explore the potential of HLC for targeting agri-environment funding. A suite of GIS layers were produced which highlighted the location of certain HLC types within the SVLMI project, together with a series of

recommendations as to what land management practices would help to maintain the historic character (see Appendix 4).

Wet Washlands

- 5.8 The Environment Agency (EA) are working on a number of initiatives aimed at mitigating flooding in the upper Severn valley. They have convened the Upper Severn Wet Washlands Group (USWWG), comprising representatives EA, RSPB, Natural England, Defra, Shropshire Wildlife Trust and Shropshire County Council, to consider the feasibility of establishing wet washlands in the area. These would put in a place a control structure that would enable the water level to be raised on the floodplain at times of peak flow, enabling 'storage' of flood waters and protection of properties at risk in Shrewsbury and other downstream towns and villages.
- 5.9 In 2003 EA drew up a long list of potential washlands and asked the USWWG members for their views on what the likely environmental impact would be. As an example of the sort of information that Shropshire County Council could provide, HLC was used alongside other SMR to provide a response on the potential impact on the historic environment in one of the proposed washlands (see Appendix 5). This was included with similar statements on the possible impacts on biodiversity and landscape character.

West Midlands Woodland Opportunity Map

- 5.10 The West Midlands Woodland Opportunities Map represents a key output of the Regional Forestry Framework: an action plan which is intended to enhance the regions tree, woodland and forestry assets in order to achieve social, environment and economic benefits. The Woodland Opportunities Map is a strategic document which aims to: -
- Assist landowners in making decisions about how their proposals fit into the wider regional aspirations of the Regional Forestry Framework.
 - Help focus activity on areas of maximum public benefit in creating and managing woodlands in the region.
 - Assist the Forestry Commission (FC) and other funding bodies regionally in making decisions about proposals to create and manage woodlands (via regional scoring).

The initial version of the map was launched in March 2005, for which Shropshire County Council produced a contribution to the '*Woodland Opportunities Map: Landscape Classification based on information supplied and agreed by local authorities.*' Map. In autumn 2005 FC invited Local Authorities to review their existing maps, and to contribute additional maps in cases where they were unable to do for the first version of the map, for publication in early 2006.

- 5.11 Shropshire County Council produced an for the historic environment theme map, based HLC data, for Shropshire and Telford and Wrekin for the second version of the Woodland Opportunities Map. By adapting a methodology that was developed in Staffordshire, the sensitivity of each HLC Type to new planting was assessed. This information was then used to ‘score’ each LDU as to the likely sensitivity of the historic landscape character to new woodland planting in order produce the theme map (see Appendix 6 for a full description of the methodology and the resulting map).

Community Landscapes

- 5.12 The Down to Earth Community Landscapes initiatives form a component of The Blue Remembered Hills (BRH) Project: a five year project Heritage Lottery Fund funded which is managed by the Shropshire Hills AONB Partnership. It focuses on nine aspects/features of the landscape, ranging from orchards and veteran trees to grazing regimes and riparian woodland management, and provides advice and grant aid to people within the AONB and the surrounding area to care for and celebrate their landscapes. Each Down to Earth project aims to enable communities to care for and improve the management of their local landscape.
- 5.13 The first Community Landscape initiative was established in 2003 in four parishes in the Upper Onny valley, in south western Shropshire. The HLC Officer was invited to sit on the project Steering Group, which provided an opportunity to make information about the historic landscape character of the parishes directly available to the local communities involved in the project. Data capture for the Shropshire HLC project was still ongoing at this time, so an advanced pilot study was undertaken to ensure that a HLC was available for the parishes. This provided the basis for a presentation on HLC to members of the communities involved at an initial public meeting and the production of a poster for display at the community events that were organised as part of the initiative (see Appendix 7 for the interpretation of the landscape history of the area).
- 5.14 HLC information was also provided for another Community Landscapes initiative in Newcastle, Bettws-y-crwyn and Mainstone parishes, in the south western Shropshire. This involved sitting on the project Steering Group, and providing a brief talk on the landscape character for a local history event and providing a ‘tour guide’ for a mini-bus tour of the landscape of the three parishes (see Appendix 8).

Future Developments

Introduction

- 5.15 Shropshire County Council would like to develop its work on Historic Landscape Characterisation in the following areas.

Spatial planning

- 5.16 The County Council is currently proposing a Supplementary Planning Document (SPD) on landscape, which would be based upon the Shropshire Character Framework. The landscape SPD will form one of a suite of interrelated SPD which the County Council wishes to produced as part of its Local Development Framework on Sustainable Resource Management.

Sensitivity and capacity assessments

- 5.17 In relation to the wider spatial planning agenda, the County Council is currently using HLC data to input into the development of a Major Developments Framework, similar to Hampshire Strategic Landscape Sensitivity assessment (Hampshire County Council 2005). This will provide a strategic overview of the inherent sensitivity of the landscape of the county based upon assessments of historic landscape, biodiversity, visibility and tranquillity. It will also assess the capacity of the county's landscape to accommodate major developments such as renewable energy developments (principally wind turbines), waste infrastructure, industrial development etc.
- 5.18 In further development of this work would be to produce a HLC based historic environment assessment, along the lines of those which were undertaken in relation to the housing growth areas in the South East (Croft 2003, English Heritage & ALGAO 2003, Buckinghamshire County Council 2004), for the housing growth points which have been identified in the county (Shrewsbury and/or Telford). This would be a regional first outside the conurbations in the West Midlands and would provide an opportunity to develop the County Councils capacity on historic environment sensitivity and capacity work.

Parish planning

- 5.19 Over the course of 2006 Shropshire County Council worked with the Kinnerley Landscape Group to produce a parish scale landscape assessment in connection with their Parish Plan. The County Council developed a methodology which enables character areas to be identified on the basis of HLC and LCA information. Following initial training, the Group used the methodology to undertake a field survey of their Parish. The Group published their report in January 2007 and the County Council would like to build on this success by producing a guidance note on the methodology so that other parishes could conduct similar assessments.

Environmental Stewardship

- 5.20 The County Council currently provides interpretive statements on the historic landscape character of farm holdings as part of its standard response to Farm Environment Plan consultations. At present, however, these are not linked to the provision of management advice or recommendations concerning the various options available under the stewardship scheme. The County Council would like to develop a Historic Environment Countryside Advisor Service (HECAS) post to develop is service provision in relation to support the environmental stewardship scheme. This would also provide an opportunity to develop a set of generic recommendations linked to each HLC Type.

Farmstead Characterisation

- 5.21 Linked to the improvement of the its HLC advice for environmental stewardship, the County Council would also like to undertake a Historic Farmstead Characterisation assessment similar to that undertaken recently in Hampshire. This would provide important contextual information about traditional farm buildings for any future HECAS Officer, and enable the relationship between historic farmsteads and landscape character to be analysed.

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Appendix 1

HISTORIC LANDSCAPE CHARACTER ASSESSMENT IN SHROPSHIRE

Project Design. May 2001

Summary

This provisional project design describes a historic landscape characterisation (HLC) project in the former County of Shropshire, to be carried out with English Heritage (EH) support by the County Council's Natural and Historic Environment Team (NHET). The project will fit into EH's national programme of county-based HLC; locally it will also be an extension of Shropshire County Council's current Countryside Agency-inspired Landscape Character Assessment programme, and is designed to develop the historic element previously only touched upon.

HLC will involve the analysis and interpretation of the present-day landscape as shown by current maps and air photos, supported where appropriate by study of published and unpublished information on present land use, land cover and landscape archaeology. It will aim to define the main aspects of the county's landscape character that derive from historic processes. It will also identify specific landscape components, elements or attributes, which, when occurring in specific combinations, create distinct Landscape Character types. The distribution of these types will be mapped at an initial scale of 1:25,000 and stored on the corporate GIS, supported by written descriptions of each type and of the principal processes creating them.

As part of the County Environmental Record (which incorporates the former County Sites and Monuments Record), the results will form part of a permanent and renewable database, available for a wide range of planning, land management, interpretative and educational purposes.

1. Introduction

1.1 The National Context

Historic Landscape Characterisation became an issue in 1990, when the White Paper "This Common Inheritance" suggested that EH consider the desirability of a national register of landscapes of historic importance. Such a concept has been realised in Wales, but has been refined in England into a more comprehensive approach (Fairclough 1991; Fairclough *et al* 2000) with direct links to the Countryside Agency's mainstream Landscape Assessment work.

This refinement led to the first EH / local authority Historic Landscape Characterisation project, undertaken by the Cornwall Archaeological Unit. Since 1995 eleven broadly similar projects have been completed, with a further five in progress. As the programme has expanded, theory and methodology have developed, with GIS becoming the fundamental platform for structuring, displaying and disseminating the results of the characterisation process.

As well as providing the first ever countywide assessments of today's historic landscape, the programme creates a powerful and fundamental foundation platform for Sites and Monuments Records, useable for a wide variety of planning and land management work. It is this potential which makes the exercise so important in

Shropshire, where the former Sites and Monuments Record is now part of an integrated Environmental Record.

1.2 The local background to the project

In recent years, Shropshire County Council (SCC) has moved towards a more holistic treatment of environmental issues, through the amalgamation of the former Countryside and Historic Environment Teams into the current Natural and Historic Environment Team and through the integration of the County Sites and Monuments Record and Environmental Record.

The NHET delivers services on archaeology, historic buildings, landscape and nature conservation, land reclamation and records management to SCC itself, Districts and Boroughs, Telford and Wrekin Unitary Authority, organisations such as the Farming and Rural Conservation Agency (FRCA), Farming and Wildlife Advisory Group (FWAG) and Shropshire Wildlife Trust (SWT), and to community groups, researchers, utility companies and the general public.

The demand for an "in the round" provision of information, expertise and advice is growing, particularly in relation to landscape conservation work, and Landscape Character Assessment is seen as providing a unifying framework for information and analysis on the broad range of landscape issues.

Some work has been undertaken on an area by area basis - the Ironbridge Gorge, the Shropshire Hills Area of Outstanding Natural Beauty and the Vale of Montgomery - but with very different objectives and methodologies. In order to standardise, update and disseminate the LCA approach, the NHET is undertaking a County-wide exercise, based on the Countryside Commission / Agency (COAG) methodology and particularly on the advanced Midland Region approach.

To date, the work has been progressed by NHET staff working in partnership with COAG and specialist consultants. Funding has come from Europe, COAG and directly from the County Council.

Characterisation has focused on the physiographic aspects of the landscape, together with some initial work on land use post-1880. The key output has been to divide the County into Provisional Landscape Description Units (PLDUs), which are now being assessed in the field. This will lead to the production of written descriptions of all of Shropshire's various landscape types and will identify key characteristics requiring protection and enhancement through planning guidance, management projects and so on.

Spatial data is being stored in SCC's ArcView GIS, supported by a database recording principal features, their contribution to landscape character and the overall condition of the landscape. This information will become an integral part of the County Environmental Record and will be maintained, enhanced and disseminated in the usual way. It will also be used for the preparation of Supplementary Planning Guidance, Guidance for Woodland Creation and similar material.

The above approach involves a robust and proven methodology for undertaking the fundamental assessment exercise, but also creates a framework for collating and disseminating more detailed information. We are contemplating extending the exercise in various ways, but development of a fuller historic perspective is our highest priority, for several reasons:

- we provide planning-related advice on archaeology (and other matters) to all Shropshire Districts, the new Telford and Wrekin Unitary Authority and others. There are opportunities to strengthen the protection of Shropshire's landscape and its archaeological components through the development of new policies and strategies, but these will require a better understanding of the subject than we have at present:
- similarly, new landscape management programmes and mechanisms are being developed, such as English Nature's Meres and Mosses Strategy and 'Back to Purple' projects, and further developments are likely through the Rural Development Plan, Lottery funding for AONBs, etc. Like the existing Clun and Shropshire Hills ESA Programmes, these are likely to require an holistic view of 'landscape', and the archaeological dimension needs to be properly understood if it is to be protected;
- our development programme for the County Environmental Record (currently focusing on the Sites and Monuments Record element) is running in parallel with the Landscape Characterisation programme, which will help to place individual archaeological sites, features and areas into their broader landscape context. Detailed historic characterisation will strengthen this contextualisation and help to integrate the various elements of the Environmental Record;
- The Record development programme will include the processing of data generated by several English Heritage funded surveys - the Marches Uplands Survey, the Central Marches Historic Towns Survey, the Shrewsbury Urban Archaeological Project, the North-West Wetlands Survey and the Wroxeter Hinterland Survey. Much of this information is directly relevant to the Characterisation programme and a single exercise will be most efficient and productive.

There is an obvious danger that Provisional Landscape Description Units (PLDUs), being based largely on physiographic study, will not accurately or adequately reflect the "surface" variations and modifications produced by human management and development over many centuries. PLDUs inevitably operate at a relatively superficial and generalising level, which is too coarse to allow for any significant identification of smaller areas where particular interventions or processes have created distinctive cells or units.

Without further and more detailed study of the results of human activity, PLDU descriptive text will lack historical depth and colour, and possibly even defensibility, limiting their effectiveness as a tool for the formulation and implementation of policy and strategy. Equally importantly, the value of Landscape Assessment generally will be diminished unless it can be applied at a more local level, reflecting the mosaic of settlement and field patterns, heathland and hill commons, ornamental and military developments, etc., that create true local distinctiveness. It is at this level that many planning applications, land management decisions, enhancement projects, etc. need information and guidance. While it is reasonable to expect that this fine-grained mosaic will have a close relationship to the underlying "natural" or physiographic pattern, it is vital that the two levels of Assessment are cross-referenced and integrated. Thus the proposed phase of Historic Landscape Characterisation will add detail, colour and clarity to the current programme of work and will provide a more powerful tool for landscape management at the local level.

2. Outline of the Historic Landscape Characterisation Project.

2.1 Area of proposed characterisation

The area to be covered is 3488 sq km. This comprises the whole of the historic County of Shropshire, Le. including the newly-created Telford and Wrekin Unitary Authority (291 sq km) and therefore the Ironbridge Gorge World Heritage Site.

2.2 Management arrangements

The project will be undertaken by the NHET, overseen by a Steering Group (SCC Project Manager, SCC Project Officer, Graham Fairclough [EH MPP] and Paul Stamper [EH WM Region]), in close liaison with Michael Watson of the County Council's Archaeology Service. A wider advisory working-party of local and regional experts and future users of the HLC will also be convened to support the project.

2.3 Aims and objectives

Summary of aims: to improve understanding of the historic and archaeological character of the whole landscape of Shropshire, with particular regard to the visibility of time-depth in the landscape and to the historic processes that have created the landscape. The project will contribute to methodological developments in the HLC technique and to future regional and national overviews, as the EH programme develops.

Objectives

- ◆ to analyse and describe the historic characteristics of the contemporary landscape through map-based research
- ◆ to interpret the historic processes producing these characteristics, through archaeological analysis and where possible associated documentary research
- ◆ to compile a GIS-centred database for land management and other purposes
- ◆ to contribute to the methodological and analytical development of HLC
- ◆ to produce a framework within which site-specific data can be contextualised and inter-related
- ◆ to identify areas where there is scope / need for more detailed characterisation
- ◆ to identify historic features, areas or patterns requiring / capable of conservation, reinforcement or re-creation
- ◆ to challenge, modify and add detail to existing PLDUs
- ◆ to add historical depth and colour to the resulting LDUs by expanding textual descriptions.

3. Presentation of Results

The results of the HLC phase will form part of SCC's overall Characterisation project, but will also be distinctly available in three different ways:

- a) as part of SCC's GIS
- b) through a project report in
- c) a project archive

a) GIS

The principal product of the HLC project will be a fully interactive GIS with associated database. It will sit within the SCC's corporate GIS, and be widely available online in read-only format to SCC staff, District / Unitary and other users, as indicated in 1.2, above. A master copy will be kept centrally in NHET, to be updated and revised as necessary, along with archive copies. Copyright will be jointly held by SCC and EH. The GIS will also be made available more widely (if necessary non-interactively) on the Web or on CD, for example in public libraries and school networks, as part of SCC's developing Internet use.

b) Project report

The report on the HLC project will be produced as a bound monograph compatible with reportage on the earlier Assessment phase. Its provisional content is:

- ◆ Background and introduction to the project
- ◆ Aims and objectives
- ◆ Methodology - development and sources
- ◆ Historic Landscape Character Types (HLCTs)
 - written descriptions with some map illustration
 - discussion of occurrence, significance, interaction
- ◆ Comparisons
 - brief discussion of correlation between HLCTs, singly or grouped, with LDUs, identifying areas requiring modification or further study
 - brief study of interrelationship between HLCTs and historic, civil and political administrative areas
 - brief discussion of the possible relationships between HLCTs and SMR data
- ◆ Applications
 - need / potential for further research
 - analysis of degree, pace and trends of landscape change
 - implications for future policy and strategy formulation, development control, project initiation, etc.
 - identification of management issues at strategic and local levels
 - dissemination for education / interpretation / awareness raising

- ◆ Illustrations
 - will consist of maps generated from the GIS to show the nature, distribution and interrelationships of HLCTs, together with limited APs and diagrammatic representation. Consideration will be given to the inclusion of map data on CD ROM
- ◆ Critique
 - of achievement of aims and objectives, methodology, etc.

c) Archive

The archive, to be held within the Environmental Record and structured according to English Heritage guidelines, will include:

- ◆ copies of correspondence
- ◆ textual, map-based and photographic material obtained during the project
- ◆ copies of the project report and any subsequent productions
- ◆ film copies of the definitive Landscape Character Type maps as overlays to the OS 1:25000 series.

4. Dissemination of results

The results of the exercise will be incorporated into the County Environmental Record as a fundamental and unifying platform providing context and cohesion for other elements. Consequently, it will be accessible at Shirehall, via the Environmental Records Officer.

Through the current arrangements with the County Library Service, the ER is already available at several libraries and information points, and we hope to extend this access to Museums, Interpretation Centres and other venues through an "outreach" project currently under discussion with the Heritage Lottery Fund and due to begin in October 2001.

In order to ensure that the results are used as extensively as possible for study, protection and enhancement of the Shropshire landscape, full copies will be made available to relevant colleagues in Districts and Boroughs, the Unitary Authority, the Forestry Authority, MAFF / AD AS / FRCA, the Council for the Protection of Rural England and other bodies active in landscape management.

5. Programme and costings

It is anticipated that the project will commence during the financial year 2001/2, preferably in August/September.

A full-time Project Officer, suitably qualified in landscape archaeology and with extensive experience of G.I.S-based data management, will be appointed on an 18-month contract.

Phase I: Start-up and pilot (Sept. - Dec. 2001)

This phase will include familiarisation of the Project Officer with Shropshire's landscape (if needed), review of current HLC methodologies, assessment of available data-sets, pilot study to produce the project's HLC classification, and preparation of a definitive programme for the project.

A provisional list of Character Types has been drawn up based on the Lancashire model (Appendix 1). This model is felt to provide an adequate range of Types, broadly relevant to Shropshire, but capable of revision, and more importantly subdivision, to create an agreed, enduring and routinely applicable framework. This will be tested on a pilot area or areas in Phase 1 of the project, and modified accordingly, with input from the Herefordshire Archaeology Service. Some modification might also be required to reflect differences in the particular range of documentation, survey results, assessment exercises, etc. available in Shropshire, and any differences in aims and objectives.

The interaction between the by-then-completed phase of characterisation following COAG methodology and the more detailed phase of historical characterisation will need particular thought. The first phase has used OS maps dating back to the 1870s editions, and these editions might be seen as the starting point for the second phase of work. Preliminary study has shown that Shropshire has a very substantial record of earlier maps and there are also several surveys that may deserve study (see above, 1.2).

Having established the degree of consistency and comprehensiveness of map and supporting data at a County-wide level, it will be possible to devise a sampling strategy, testing the provisional classification on a number of km squares providing a representative sample of the County's variety. This will refine definitions of character types and subdivisions, streamline methods of data capture and manipulation, encourage participation of specialists and users, and enable the production of a robust and viable final project design.

Phase 11: Landscape interpretation, mapping and digitisation (Jan - October 2002)

This, the core stage, will attempt to allocate all land in the County to one of a series of Character Types. A provisional list of Character Types has been drawn up (Appendix I) but will be thoroughly refined and expanded in the first phase of the project. Current 1:25000 OS maps will be used for an archaeological analysis of the contemporary landscape, focusing on "shape" - e.g. form (S-shaped field boundaries, relict woodland-edges), pattern (e.g. assarting, geometrical enclosure), and predominance (e.g. airfields, parks). A combination of 1870s and later OS maps and aerial photographs will be available, with scrutiny of enclosure awards, tithe maps and estate maps being used where necessary to define or clarify the historic processes which have produced the characteristics of the land in question.

The results of this exercise will be mapped initially at a 1:25,000 scale and transferred to (or may be input direct to) the County's GIS at 1:50,000 scale, not necessarily by the Project Officer him/herself.

This will allow the results to be compared with the Landscape Description Units delineated in the previous, more generalised assessment exercise and will lead to a reconciliation of boundaries, thus integrating the two exercises and providing coherent results suitable for strategic land use planning and for more localised application.

The main body of the project report will be produced at this stage (see 3.b, above, for format and contents), but will be added to in the next.

Phase III: review of results, identification of potential for extension, development of practical applications. (Nov - Dec 2002, Jan 2003)

It is anticipated that the results of the exercise will form part of a clearly-layered assessment of the Shropshire landscape within a broader context. This will need confirmation and explanation through the study of Countryside Agency and English Nature-defined Areas, examination of the interaction of LDUs and HL Ts, and of potential links with other data-sets in the Environmental Record.

Areas may well be identified in the County where specific pressures or opportunities create a case for further, more detailed assessment or interpretation. One such area might be the Ironbridge Gorge World Heritage Site, where the preparation of a management plan is already demonstrating the need for a very full characterisation of the site, in its wider context.

As indicated in the Project aims and objectives (2.3, above), use of the results for management and enhancement of the Shropshire landscape is the main reason for undertaking the exercise. Identifying, developing and explaining these uses will require inputs from the Natural and Historic Environment Team and beyond, and will need a 'sales drive' going well beyond the life of this particular project.

Phase IV: archive preparation and publication of final report (Feb 2003)

The form of the Project Archive is predicted in 3, above, but its relationship with that of the earlier Landscape Assessment exercise will need to be considered carefully, as well as its position within the Environment Record generally. Similarly, the format and content of the Project Report have been outlined, but some modification may be needed in the light of comments and suggestions gained from the feedback process.

Programme

The work programme lays out the sequence and direction of the proposed project. It is difficult to predict exactly how long the exercise will take, but comparisons in terms of size with broadly similar counties, particularly Herefordshire (2,173 sq. km), have suggested the need for an eighteen-month programme. Allowance has been made for annual leave, induction and familiarisation, etc.

Provisional Project Work Programme

(assuming Sept start date for Project Officer)

MONTH (1	Sept	STEERING GROUP. PO familiarisation. Assessment of data sets. Review of methodologies, with Herefordshire.
	(2 Oct	Identification of pilot area(s) and trialling of approaches, with Herefordshire.
	(
Ph I	(3 Nov	Trialling and interim report.
	(4 Dec	STEERING GROUP. Refine and agree definitive approach. Revise pilot results.
	(5 Jan	Full interpretation, mapping and digitisation phase.
	(Interim report
Ph II	(9 May	STEERING GROUP. Confirm approach, plan User Group, exit strategy.
	(
	14 Oct	Field checking and production of draft report.
	(16 Dec (STEERING GROUP. Review of results, correlation with other data, revision of LDV text.
	(17 Jan (
Ph III		USER GROUP. Prepare exit strategy. Integrate results into Environmental Record. Archive preparation.
PhIV	(18 Feb (Publication of final report. Dissemination. Implementation of exit strategy.

Costings

PROJECT OFFICER	<u>COST £</u>	<u>SOURCE</u>
Appointment costs (national advertising and interview expenses}	2000	EH
Salary, NI, superannuation :Scale 5 for 18 months	29000	EH
Training (one course @ £300 including travel and subsistence)	300	EH
Travel for meetings, fieldwork, data capture, etc, (estimated at 400m @ 36p p.m. - say	150	EH
Miscellaneous - say	50	EH
TOTAL	31500	EH
EQUIPMENT FACILITIES AND SUPPORT		
PC and Access, ArcView licences	1300	SCC
Purchase of map and AP cover	5000	SCC
Digitisation (estimated at 10 days @ 100 p.d.)	1000	SCC
Accommodation (estimate)	500	SCC
Telephone, postage, stationery, etc (estimate)	500	SCC
Project administration - personnel, finance, etc, (notional - normally 15%)	1000	SCC
NHET support (notional - data, advice, supervision, etc)	1000	SCC
Consultancy (eg Herefordshire Archaeology)	1000	SCC
Miscellaneous - say	700	SCC
	12000	SCC

Appendix 1

DRAFT HISTORIC LANDSCAPE CHARACTER TYPES

Considerable research, analysis and discussion will be needed to produce a definitive typology of historic character types, but it is anticipated that this will be developed from the Lancashire model in the first phase of the project. The Herefordshire approach will be used in the development of more closely defined categories or subdivisions, particularly of the "Enclosed Farmland" Character Type.

We will be seeking to identify events and processes which have stamped dominant and enduring characteristics on the landscape. Dominant themes rather than exhaustive subdivisions will reflect the essential continuity of the Shropshire landscape, and will not preclude further detailed assessment when triggered by village design statements, environmental impact assessments or other requirements.

We will undertake a pilot study [Phase 1] in order to test the provisional categorisation and refine approaches. Particular attention will need to be given to pre-Norman periods, as preliminary discussions within Shropshire County Council have concluded that there are very few landscapes, as distinct from individual sites, surviving from these earlier periods.

For the purposes of this outline project design, the following broad categories have been identified, but it is anticipated that further categories may be added and existing ones altered. The broad categories will provide a frame for sub-divided types, whether fixed or capable of being created by analysis of the GIS database. Sub-divisions will need to be created in terms of period, identifiable processes or interventions, etc.

Rough or Unenclosed Ground

This type includes the South Shropshire hills - Wrekin, Clee, Long Mynd, Stiperstones, etc, but also the larger northern "Meres and Mosses" - Fenn's, Whixall and Bettisfield.

Areas such as Black Knoll and Stapeley Hill contain extensive prehistoric and later complexes of earthworks, which are probably the only examples surviving in the County.

The northern "Mosses" may contain historic features or buried land surfaces, under their current peat or wetland blankets, which demonstrate post-medieval peat extraction.

Parts of the Stiperstones and Clee Hills are largely industrial in character, with mines and quarries, waste tips, processing plants, squatter settlements, etc.

Fragments of heath and common exist throughout Shropshire, but some may be too small to be mapped in the proposed exercise and might best be viewed as associated with adjacent or surrounding enclosure activities.

Woodland

Shropshire's current woodland cover is much below the national average, while Forestry Commission-led coniferisation has affected character, quality and Historic interest dramatically.

Ancient semi-natural woodland (Le. pre-1600 in origin) has recently been mapped by the Forestry Authority. Where identified, internal earthwork subdivisions and other features such as ridge and furrow may indicate processes of formation, but most deciduous woodland is on steep, poorly drained or otherwise unattractive land. The "shape" of woodland / field boundaries may indicate processes of woodland clearance, particularly in conjunction with documentary evidence.

Enclosed Farmland

The historic characterisation of enclosed land (of field pattern and size, likely date and origins, previous land-use) is the most challenging aspect of HLC projects. Apart from characterising on broad date (as e.g. in Cornwall), two broad models exist: characterising using a pre-defined set of morphological, historical and land-use criteria (e.g. Lancashire, Somerset, Eastern England, and using patterning and stratigraphic approaches without predefined types (e.g. Herefordshire). Phase 1 of the project will need to decide on the appropriate method for Shropshire.

It can be argued that in agricultural terms Shropshire can be divided into the northern plain, with a predominance of large, uniform, intensively arable fields, and the western and southern hills, which, because of the preponderance of livestock and the more varied terrain, is more fine-grained.

Such generalisations have many weaknesses. Settlements in northern Shropshire often retain some paddocks, closes, meadows, etc., while late enclosures in the Clun Forest area, for example, produced large, uniform fields, with drainage and cultivation destroying earlier characteristics.

In some areas, agricultural recessions in the 1870s and 1930s led to the abandonment of field boundaries in favour of more extensive livestock husbandry. In all areas, intensification from the 1940s onwards led to the neglect, abandonment or removal of earlier boundaries in favour of denser stocking patterns and larger machinery. As a result, the contemporary character and presentation identified in the earlier Assessment work bears limited resemblance to the high point of landscape quality and detail at - say - 1900, but the proposed study will identify and catalogue the process of attrition and to a lesser extent (because of inadequacies in "mapping" coverage) the earlier process of enclosure. This provisional category is the most widely applicable and has the most potential for subdivision (vineyards, orchards, horticulture, allotments, etc).

Industry

Although Shropshire is usually seen as a rural area dominated by agriculture, extraction and processing have been important, particularly in the nineteenth and twentieth centuries and perhaps most notably in the Ironbridge / Coalbrookdale area.

The "Industrial Survey" undertaken by the Natural and Historic Environment Team in the late 1990s identified a large number of "industrial" sites, but many are individual mills, kilns, etc., which do not impose themselves upon the landscape.

However, there are substantial areas where the marks of past activity are dominant, including coal- and lead-mining, quarrying for hard rock or sand and gravel, and even peat-cutting.

Some areas have been disguised by landfill and reclamation operations, while the New Town of Telford exists largely because of the availability of reclaimable land, which is now often covered with mid-to-late twentieth century development.

Sewage works, scrap yards, industrial estates, highways depots, etc. will often be components of suburban development, but, when in open country, may be sufficiently distinct and dominant, to justify a specific category. The redevelopment of World War II military bases as areas of industrial activity will pose interesting questions here.

Military

As a border county, Shropshire has an impressive accretion of military sites and features, ranging in date from hill forts to Cold War tracking stations. Some, such as Offa's Dyke or Bury Ditches, are large, prominent and impressive, but it is difficult to argue that they form landscapes in themselves.

Twentieth century installations are much more clearly definable in area and distinctiveness and have dramatically altered pre-existing character. The Ditton Priors ordnance depot, the Nesscliffe and Park Hall barracks and the Cosford and Ternhill airfields all stamped a new and very distinctive character on previously agricultural land.

In Shropshire at least, any attempted distinction between active and inactive military sites would seem artificial, as few sites have been abandoned - most have found new uses compatible with the military design and layout.

"Designed", "Ornamental" or "Cultural" Landscapes

The English Heritage Register of Historic Parks and Gardens and the Natural and Historic Environment Team's Parks and Gardens Survey 1992-94 identify some four hundred examples in the County, of varying extent, quality and survival.

If it can be accepted that such modifications of existing landscapes were made primarily for leisure and recreation purposes, then it might be appropriate to include urban parks (eg The Quarry, Shrewsbury, and included in the Register as a Gr. " entry) and even golf courses, in this category. The internationally renowned Hawkstone Park courses have been introduced into a Registered C18 parkland, where the equally famous Follies are still available for public enjoyment.

Lilleshall Hall, a Gr. I1 Register entry, now houses the National Sports Centre and its array of pitches, courses, courts, etc. Such a large complex may deserve discrete identification, but most sports and recreation areas will be too small for such treatment or will be part of urban areas outside the scope of the proposed exercise.

Similarly, most graveyards and cemeteries will be elements of a wider urban landscape, but some - such as Bridgnorth and Shifnal - may be large, segregated and distinct enough to deserve categorisation in their own right.

The case of Alberbury Deerpark - part of a wider Register entry - is interesting, since, while recognisably an eighteenth century (?) enclosure of an earlier park, it contains a very strong imprint of World War 11 military use.

Towns and Villages

The largest towns in the proposed area of study are Shrewsbury and Telford, but there are several other significant market towns and a large number of sizeable villages. Smaller villages and hamlets tend to be less densely developed and with fewer modern estates, as a result of planning policies, lack of employment in rural areas, etc., etc.

It is proposed to exclude the major towns and villages from the study, for various reasons. The resources likely to be available are probably inadequate to study urban areas in meaningful detail. The Central Marches Historic Towns Survey and the Shrewsbury Urban Archaeological Project ("extensive" and "intensive" studies, respectively) have delineated the extent of urban development in the settlements studied. Increasing numbers of Conservation Areas Assessments are being produced by the District and Borough Councils and the Telford and Wrekin Unitary Authority, and are describing historic character in some detail, if with differing perspectives, methodologies and language. The growing emphasis on the regeneration of market towns through enhancement, reestablishment of local character and distinctiveness, etc., will require detailed studies of each townscape in the near future.

There are cases where inclusion in the Central Marches Survey' does not justify exclusion from the current proposal. In the case of settlements like Caus and Redhill, the "urban intention" was never realised and their current status and character resembles that of many hamlets. Generally, however, the boundaries defined by the Survey will be used to create, in effect, an Urban category.

Discussion

As suggested above, some "landscapes" can be entered into more than one category. Some installations, such as motorways, are linear features rather than landscapes, although creating dominant "corridors". A lot of thought and discussion will be required to develop this provisional list of Historic Landscape Character Types into a working list and finally into the definitive characterisation. Two enduring principles will guide this work.

Landscapes are not static, but subject to processes of varying speed and intensity. Over-elaborate categorisation will often be arbitrary and occasionally spurious and will emphasise division rather than reflect essential continuity. Some literature on the subject appears to dwell on distinctions, such as "active" and "inactive" sites, which can only be meaningful if sensory impressions such as aircraft noise or the smell of lime-burning can be taken into account. The Shropshire approach is designed to create a framework for practical use rather than a museum type classification.

Fitness for purpose is the other guiding principle. The entire Landscape Characterisation exercise, including the proposed LCA phase, is seen as a way of creating a framework for better management of the Shropshire landscape. It will need to be accepted and understood by a range of professional specialisms and will need to function as part of the general Environmental Record. Information on the creation of particular field-patterns will inform responses to Hedgerow Notification consultations. A better understanding of the process of attrition will help to design proposals for strengthening landscape character through agri-environment schemes. The addition of LCA layers to the Environmental Record's GIS will provide context ("stitch together") disparate information on archaeological sites, historic buildings, settlement history, etc., as well as on common land, individual habitats, transport routes, etc. None of the uses envisaged require an elaborate approach, which could easily be developed in the future in response to specific questions about specific areas. Rather, a bold, vigorous and pragmatic approach is required, one which can be completed within the time and resources available and which can be communicated to and understood by a largely non-archaeological audience.

Appendix 2

Table 1 - Principal data sources used in the Shropshire HLC project.

Data group	Data sub group	Description and use to HLC project
Digital 1:10,000 map	-	Base for HLC mapping
Digital 1 st ed. 6" OS map	-	Main source of documentary evidence for previous HLC character.
1 st ed. 1" OS maps	-	Useful for understanding landscape of the early 19 th century
Historic County Maps	Rocque's County Map	County map of 1752. Somewhat schematic but useful for identifying commons.
	Baugh's County Map	County map of 1809. Selective in what it represents but useful for tracking the progress of enclosure and identifying parks and gardens
	Greenwoods County Map	County map of 1827. Selective in what it represents but useful for tracking the progress of enclosure and identifying parks and gardens.
Landscape description units	-	Basic LCA recording units.
1st edition OS map digital data sets data	Farmsteads	Various data sets digitised from 1 st Ed. 6" OS map (drawn up in the 1880s) as preparation for the Landscape Character Assessment . Useful for showing pre-20 th century land use, extent of settlements etc. Some sub-groups can be used directly as HLC character types (i.e. parklands, orchards).
	Hamlets	
	Orchards	
	Parklands	
	Townships	
	Unenclosed lands	
	Villages/ settlement	
Woodland cover		
Digital Arial Photographs	Vertical aerial coverage at the county at 1: 10,000 scale (1983 edition).	Complete stereoscopic aerial photographic coverage for the county
	UK Perspectives Digital aerial photographs	GIS based digital aerial photographs dated taken between c.1999-200.

SMR	Central Marches Historic Towns Survey (CMHTS)	Defines areas of pre-1800 settlement, which in many cases forms the core of modern settlements. Useful for HLC settlement character type, where settlements still exist. Also useful for showing previous character types where settlements have since shrunk or disappeared.
	Industrial Survey	Desk based survey of industrial remains in Shropshire. Records currently held on 1:10,000 paper maps.
	Paper 1:10,560 base maps	Provide map evidence for the county in the middle of the 20 th century (editions fall between 1954 & 1964)
	Digital SMR base map layer.	Interim measure intended to make paper SMR base maps available to GIS users. Useful for quick recovery of PRN numbers.
	Shropshire Historic Parks and Gardens	Survey of all parks and gardens of historic interest in Shropshire (Stamper 1993).
Forestry Commission indicative forestry type	-	Forestry Commission data, derived from analysis of aerial photographs, showing current woodland type. Useful for HLC woodland character types.

Table 2 - Additional supporting data sources used during the Shropshire HLC project.

Data group	Data sub group	Description and use to HLC project
Victoria County History parish volumes.	-	Three volumes of parish histories for Ford and Conover hundreds, Telford and Wenlock, Upper Corvedale and the Stretton Hills
Foxall Tithe Award Field Name Map Transcriptions	-	Electronically scanned copies of the Foxall Tithe Award Field Name Map Transcriptions, which provide field names for each parish as recorded by the Tithe Award maps. Maps only became available in an easily useable electronic form in the latter stages of the project but provided a useful interpretive 'check'.

Appendix 3

Definition of Interim Historic Landscape Character Types.

Firstly, an additional field called *Definition Number* is added to the HCLApolygons2 table. Character groups are defined by placing a number within this field. These numbers are derived in the following ways.

1. Unimproved Land.

Description	Definition Number	Criteria
Heathland	54	<i>Ground Type</i> = Heathland; <i>Elevation</i> = Lower Ground
Moorland	1	<i>Ground Type</i> = Moorland; <i>Elevation</i> = Higher Ground
Unimproved open hill pasture	2	<i>Ground Type</i> = Hill Pasture; <i>Elevation</i> = Higher Ground; <i>Enclosed?</i> = No
Unimproved enclosed hill pasture	33	<i>Ground Type</i> = Hill Pasture; <i>Elevation</i> = Higher Ground; <i>Enclosed?</i> = Yes
Other common	51	<i>Ground Type</i> = left blank; <i>Enclosed?</i> = no; and no previous historic landscape character.
Other unimproved ground	52	<i>Ground Type</i> = left blank; normally has a previous historic landscape character.

2. Fieldscapes.

- An additional field called *Fieldscape Group* is added to the HLCApolgons2 table.
- An update enquiry is then run on the *Fieldscape Group* field using the following expression – Str([HLCApolygons2].[FieldSizeLUTID]) & Str([HLCApolygons2].[FieldShapeLUTID]) & Str([HLCApolygons2].[OtherInternalBoundaryMorphologyLUTID])
- After running the update query the *Fieldscape Group* field will contain a three number code, which derives from the 'lookup tables' for *Field Size*, *Field Shape* and *Other Internal Boundary Morphology* (e.g. 1 1 11, 2 1 4 etc). This code, in combination with the presence or absence of other specified attributes (see below), is used to define the character types. Before doing this, however, the data is further sorted using the following rules.

Rules for Sorting 'Fieldscape Group' Codes

(when the symbol → = becomes)

1 1 6 → 1 1 11 when *Previous Character Group* field not 4. Water and Valley Floor – since the fields within these polygons are not assumed to result from post-medieval drainage

All X X 5s → X X 4s since entries of both S-curves (5) and dog-legs (4) in the *Other Internal Boundary Morphology* field is taken as an indicator of medieval strip field cultivation.

2 1 4 → 1 1 4 since both small and small - medium irregular fields with some dog leg boundaries are assumed to be the product of similar historical processes (i.e. piecemeal enclosure).

2 2 4 → 1 2 4 since both small and small - medium rectilinear fields with some dog leg boundaries are assumed to be the product of similar historical processes (i.e. piecemeal enclosure).

2 2 6 → 1 2 6 since both small and small – medium rectilinear fields with some internal boundaries that also follow water courses are likely to be the product of similar historical processes (i.e. post-medieval drainage of wetlands).

3 1 6 → 3 1 11 when *Previous Character Group* not 4. Water and Valley Floor – since medium-large irregular fields with some boundaries that also follow watercourses are unlikely to result from the drainage of wetlands, unless noted otherwise.

4 1 6 → 4 1 11 when *Number of Fields Lost Since OS 1st edn 6" Map Made* ≥ 10 – since the fields within these polygons are likely to result from the creation of very large post-1945 fields.

4 2 11 → 3 2 11 when *Number of Fields Lost Since OS 1st edn 6" Map Made* < 10 – since these fields unlikely to be the result of the creation of very large post war fields.

4 2 11 → 4 1 11 when *Number of Fields Lost Since OS 1st edn 6" Map Made* ≥ 10 – since fields within these polygons likely to be the result from the creation of very large post war fields.

- After this initial sort some polygons can be ascribed definition numbers (e.g. 34 -37 – see table below).
- Once this is complete a further advanced sort is conducted

All 2 X Xs → 1 X Xs since the distinction between small and small-medium fields is now longer needed.

Description	Definition Number	Criteria
Irregular squatter enclosure	34	<i>Fieldscape Group</i> codes 1 1 11 or 2 1 11 and noted as squatter enclosure within the <i>Attribute Notes</i> field.
Rectilinear squatter	35	<i>Fieldscape Group</i> codes 1 2 11 or 2 2 11 and noted as squatter enclosure within the

enclosure		<i>Attribute Notes</i> field.
Paddocks/ closes	36	<i>Fieldscape Group</i> codes 1 1 11 or 2 1 11 and <i>Other External Boundary Morphology</i> = 8 (settlement edge) and <u>not</u> assigned a Definition No. of 34 or 35
Small assarts	37	<i>Fieldscape Group</i> codes 1 1 11 or 1 1 4 or 1 2 4 or 1 2 6 & <i>Previous Attribute Group</i> = 3 (Woodland)
Large assarts with sinuous boundaries	38	<i>Fieldscape Group</i> codes 3 1 11 or 3 2 11; <i>Predominant Boundary Morphology</i> = 2 (Sinuous) & <i>Previous Attribute Group</i> = 3 (Woodland).
Late clearance/ assarts	39	<i>Fieldscape Group</i> codes 1 2 11 or 3 1 11 or 3 2 11; <i>Predominant Boundary Morphology</i> = 2 & <i>Previous Attribute Group</i> = 3
Small irregular fields	40	All <i>Fieldscape Group</i> codes 1 1 11 that can not be ascribed another Definition Number.
Piecemeal enclosure	41	<i>Fieldscape Group</i> codes 1 1 4 and 1 2 4 that have not been assigned another Definition Number.
Reorganised piecemeal enclosure	42	<i>Fieldscape Group</i> codes 3 1 4 or 3 2 4 OR <i>Fieldscape Group</i> codes 1 1 4 or 1 2 4 where no. of fields lost ≥10.
Drained wetlands	43	<i>Fieldscape Group</i> codes 1 1 6 or 1 2 6 or 3 1 6 or 3 2 6 and <i>Previous Category</i> = 4
Planned enclosure	44	<i>Fieldscape Group</i> codes 1 1 11 or 1 2 11 or 3 1 11 or 3 2 11 and <i>Predominant Boundary Morphology</i> = 1 (straight) and <i>Secondary Boundary Morphology</i> = 11 (None)
Other small rectilinear fields	45	<i>Fieldscape Group</i> codes 1 2 11 or 1 2 6 not assigned another Definition Number
Other large rectilinear fields	46	<i>Fieldscape Group</i> codes 3 2 11 or 3 2 6 not assigned another Definition Number
Large irregular fields	47	<i>Fieldscape Group</i> codes 3 1 11 not assigned another Definition Number.
Very large post-War fields	48	<i>Fieldscape Group</i> 4 1 11 or 4 1 4 or 4 1 6.

3. Woodlands.

- An additional field called *Wood Group* is added to the HCLApolygons2 table.

- An update query is then run on the *Wood Group* field using the following expression - Str([HLCApolygons2]![PredomBoundaryMorphologyLUTID]) & " " & [HLCApolygons2]![AncientSemiNatural] & Str([HLCApolygons2]![FCDesignationLUTID])
- After running the update query the *Wood Group* field will contain a three number code, which derives from the 'lookup tables' for *Predom. Boundary Morphology, Ancient Semi-natural?* (yes/no field where -1 = yes and 0 = no) and *FC Designation* (e.g. 1 -1 7, 2 0 4 etc). This code, in combination with the presence or absence of other specified attribute is used to define the character types.

Description	Definition Number	Criteria
Broadleaved ancient woodland	3	Wood Group codes 3 -1 1, 2 -1 1, 1 -1 7, 1 -1 1
Mixed ancient woodland	4	Wood Group codes 2 -1 4, 1 -1 4, 2 -1 2
Replanted ancient woodland	5	Wood Group codes 2 -1 6, 1 -1 2
Broadleaved woodland with sinuous boundaries	6	Wood Group codes 2 0 1
Mixed woodland with sinuous boundaries	7	Wood Group codes 2 0 4, 3 0 4
Coniferous woodland with sinuous boundaries	8	Wood Group codes 2 0 2, 3 0 2
Other woodland with sinuous boundaries	9	Wood Group codes 2 0 7, 2 0 6, 3 0 7, 2 0 3
Broadleaved plantation	10	Wood Group codes 1 0 1
Mixed plantation	11	Wood Group codes 1 0 4
Coniferous plantation	12	Wood Group codes 1 0 2, 2 -1 2
Other plantation	13	Wood Group codes 1 0 7, 1 0 6, 1 0 3, 2 -1 6

4. Water and Valley Floor.

Description	Definition Number	Criteria
Miscellaneous floodplain fields	14	Wetland Type = Floodplain, Attribute Notes = Misc. Floodplain Fields
Moss/ raided bog	15	Wetland Type = Raised Bog/ Moss

Artificial lake/ pond	16	<i>Wetland Type = Open Water, Type of Open Water = Artificial Lake</i>
Reservoir	49	<i>Wetland Type = Open Water, Type of Open Water = Reservoir</i>
Natural open water	53	<i>Wetland Type = Open Water, Type of Open Water = Natural Open Water</i>

5. Industrial.

Description	Definition Number	Criteria
Industrial complex	17	<i>Industrial Type = Industrial Complex</i>
Active stone quarry	18	<i>Industrial Type = Stone Quarry, Active? = Yes</i>
Abandoned stone quarry	19	<i>Industrial Type = Stone Quarry, Active? = No</i>
Disused lead/ copper mine	55	<i>Industrial Type = Disused Metal Ore Mine/ Spoil Tips</i>
Sand/ gravel quarries	56	<i>Industrial Type = Gravel Quarry</i>
Colliery (disused and working open cast)	57	<i>Industrial Type = Disused colliery/ Spoil tips</i>
Other industrial	58	<i>Industrial Type = (left blank)</i>

6. Military.

Description	Definition Number	Criteria
Disused ordnance depot	20	<i>Type of Military Instillation = Ordnance Depot, Current Use of Military Site = Active, Non-Military</i>
Former military airfields	21	<i>Type of Military Instillation = Airfield, Current Use of Military Site = Active, Non-Military Use OR Abandoned</i>
Disused barracks	22	<i>Type of Military Instillation = Barracks, Current Use of Military Site = Active, Non-Military Use OR Abandoned</i>
Active military	59	<i>Current Use of Military Site = Active, Military Use</i>

7. Parks and Gardens.

Description	Definition Number	Criteria
Parks and gardens	23	<i>Type of Park etc.</i> = Garden/ 'designed' landscape
Golf course	24	<i>Type of Park etc.</i> = Golf course
Sports field	25	<i>Type of Park etc.</i> = Sports field OR race course
Other parklands, gardens and recreational	27	<i>Type of Park etc.</i> = Other parkland

8. Settlements.

Description	Definition Number	Criteria
Historic settlement core	28	<i>Settlement Type</i> = Historic
Pre-1880s settlement	29	<i>Settlement Type</i> = Industrial
Redeveloped pre-1880s settlement	50	<i>Settlement Type</i> = Post-war OR Post-1914 AND <i>Previous Historic Landscape Character</i> = Pre-1880s Settlement.
Post-1880s settlement	30	<i>Settlement Type</i> = Post-war OR Post-1914

9. Orchards.

Description	Definition Number	Criteria
Pre-1880s orchards	31	<i>Present on 1st edn 6" OS Map?</i> = Yes
Post-1880s orchards	32	<i>Present on 1st edn 6" OS Map?</i> = No

Definition of Interim Previous Historic Landscape Character Types.

Previous historic landscape character types are assigned to polygons (where possible) in the same way as current historic landscape character types. An additional field called *Previous Character No.* is inserted into the HCLApolygons2 table. Numbers are then allocated to this field in the following ways.

1. Unimproved Land.

Description	Previous Character No.	Criteria
Unimproved open hill pasture	1	<i>Previous Character Description = Hill pasture.</i>
Moorland	2	<i>Previous Character Description = Moorland.</i>
Heathland	3	<i>Previous Character Description = Heathland.</i>
Other unimproved ground	4	<i>Previous Character Description = Other Unimproved Ground</i>
Other common	5	<i>Previous Character Description = Common grazing.</i>

2. Fieldscapes.

Description	Previous Character No.	Criteria
Iron Age/ Roman field system	47	<i>Previous Character Description = Iron Age/ Roman field systems</i>
Strip fields	6	<i>Previous Character Description = Strip fields. AND Period of Previous Character = Medieval.</i>
Small assarts	7	<i>Previous Character Description = Small assarts</i>
Large assarts with sinuous boundaries	8	<i>Previous Character Description = Large assarts with sinuous boundaries.</i>

Late clearance/ assarts	47	<i>Previous Character Description = Late clearance/ assarts</i>
Paddocks/ closes	9	<i>Previous Character Description = Paddocks AND Period of Previous Character = Medieval OR Post-Medieval; OR Previous Character Description = Small/ Small – Medium rectilinear/ irregular fields – sinuous boundaries AND Other external boundary morphology = 8 (Settlement Edge).</i>
Other small fields	10	<i>Previous Character Description = Other small fields</i>
Piecemeal enclosure	11	<i>Previous Character Description = Small/ Small-medium irregular/ rectilinear enclosure – sinuous boundaries AND Period of Previous Character = Post-Medieval AND Other Internal Boundary Morphology = 4 (Dog Leg) OR 5 (S-Curve).</i>
Reorganised piecemeal enclosure	12	<i>Previous Character Description = Medium-large irregular/ rectilinear fields – sinuous boundaries AND Period of Previous Character = Post-Medieval AND Other Internal Boundary Morphology = 4 (Dog Leg) OR 5 (S-Curve).</i>
Planned enclosure	13	<i>Previous Character Description = Small/ Small-medium/ Medium- Large Rectilinear fields-straight boundaries</i>
Squatter enclosure	14	<i>Previous Character Description = Squatter Enclosure</i>
Other large fields	15	<i>Previous Character Description = Medium-large rectilinear fields-sinuous boundaries.</i>
Drained wetland	16	<i>Previous Character Description = Small-medium/ Medium-large rectilinear fields-straight boundaries AND Other Internal Boundary Morphology = 6 (Following watercourse)</i>

3. Woodland.

Description	Previous Character No.	Criteria
Ancient broadleaved woodland	17	<i>Previous Character Description = ANSW broadleaved</i>
Other broadleaved woodland	18	<i>Previous Character Description = Unknown broadleaved</i>
Mixed woodland	19	<i>Previous Character Description = Unknown mixed woodland</i>

Plantation woodland	20	<i>Previous Character Description = Mixed plantation OR Plantation Woodland OR Unknown plantation.</i>
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4. Water and Valley floor.

Description	Previous Character No.	Criteria
Miscellaneous floodplain fields	21	<i>Previous Character Description = Mixed Floodplain Fields</i>
Natural open water	22	<i>Previous Character Description = Open Water</i>
Floodplain marsh	23	<i>Previous Character Description = Floodplain Marsh</i>
Artificial water bodies	36	<i>Previous Character Description = Artificial water bodies</i>
Moss/ raised bog	24	<i>Previous Character Description = Moss/ raised bog</i>

5. Industrial.

Description	Previous Character No.	Criteria
Colliery	25	<i>Previous Character Description = Colliery.</i>
Lead/ copper mine	26	<i>Previous Character Description = Lead/ copper mine</i>
Stone quarry	27	<i>Previous Character Description = Stone Quarry.</i>
Brickfield/ clay pit	34	<i>Previous Character Description = Brickfield/ clay Pit</i>
Other industrial/ extractive	39	<i>Previous Character Description = Other industrial/ extractive</i>

6. Military.

Description	Previous Character No.	Criteria
Barracks	28	<i>Previous Character Description = Barracks</i>
Airfield	40	<i>Previous Character Description = Airfield</i>
Ordnance depot	41	<i>Previous Character Description = Ordnance depot</i>

7. Ornamental, parks and recreational.

Description	Previous Character No.	Criteria
Parks and gardens	29	<i>Previous Character Description = Garden/ 'Designed' Landscape</i>
Deer park	30	<i>Previous Character Description = Deer Park</i>
Race course/ sports fields	43	<i>Previous Character Description = Race course OR Sports field</i>
Allotment gardens	42	<i>Previous Character Description = Allotment gardens</i>

8. Settlement.

Description	Previous Character No.	Criteria
Medieval settlement	31	<i>Previous Character Description = Displaced Settlement OR Historic</i>
Historic settlement core	44	<i>Previous Character Description = Historic settlement core</i>
Pre-1880s settlement	32	<i>Previous Character Description = Pre-1880s settlement</i>
Post-1880s settlement	45	<i>Previous Character Description = Post-1880s settlement</i>

9. Orchards.

Description	Previous Character No.	Criteria
Pre-1880s orchard	33	<i>Previous Character Description = Orchard</i>

Appendix 4

Agri-environment Targets for the Historic Environment: A Guide to the G.I.S. Demonstration.

Final Draft.

Andy Wigley

Natural and Historic Environment Team, Shropshire County Council

October 2002

1.0 Introduction

This document is intended to act as a guide to two GIS data sets which identify a number of potential agri-environment ‘target areas’ in the Severn-Vyrnwy Land Management Initiative (hereafter SVLMI) project area. These target areas flag up particular parcels of land on the basis that they possess certain attributes relating to the *historic* environment. As such, both data sets are intended to demonstrate how Landscape Character Assessment and Historic Landscape Character Assessment might be used to inform various land management issues in the future. This paper details why particular attributes of the historic environment were selected for this demonstration, how the data sets themselves were constructed and outlines what some of the management priorities for these areas might be.

2.0 Selection of historic environment attributes for agri-environment targeting.

For the purposes of this demonstration ‘*historic environment attributes*’ can be defined as particular elements of historic environment which can be quantified and spatially defined. Two basic kinds of historic environment attributes have been selected: -

- Historic environment attributes derived from the *historic landscape character types* defined by the Historic Landscape Character Assessment (hereafter HLCA) of the SVLMI project area (Wigley 2002). These character types are generic, in the sense that they occur in different parts of the landscape but in each case the area to which they are applied will possess similar qualities. They also operate at the ‘landscape scale’, since they are applied to areas of no less than 1ha. For the purposes of this demonstration four historic landscape character types have been selected as potential candidates for agri-environment targeting. Their definitions and the reasons behind their selection are summarised in Table 1.
- Historic environment attributes constituted by *historic environment designations*. Since the features to which they have been applied are deemed to be of local and national importance it was decided that they should be included. Records of these designations are held within the Shropshire Environmental Record, although they are issued and administered by English Heritage and/or The Department for Culture, Media and Sport. It is important to bear in mind the distinction between site specific designations (e.g. Scheduled Ancient Monuments and Listed Buildings) and area designations (e.g. Registered Parks and

Gardens, Conservation Areas¹). Their definitions are summarised in Table 2.

Table 1 – Summary of historic environment attributes based on historic landscape character types selected for this demonstration.

Historic Environment Attribute.	Definition	Reason for selection
Piecemeal Enclosure (see Fig. 1)	<p>“Piecemeal enclosure can be defined as those fields created out of the medieval open fields by means of informal, verbal agreements between farmers who wished to consolidate their holdings (Johnston 1996). Within Shropshire this process appears to have been well under way by the late medieval period, and a number of 16th century commentators regarded the county as largely enclosed (Kettle 1989: 84). These areas have field patterns comprised of small irregular or rectilinear fields. At least two boundaries will have ‘s-curve’ or ‘dog-leg’ morphology, suggesting that they follow the boundaries of former medieval field strips.” Wigley 2002: 13.</p>	<p>Because of the historic processes behind their formation, these areas are likely to preserve some of the oldest field patterns in the SVLMI project area. Together with the small size of the fields, this makes the character of these area particularly vulnerable to field amalgamation. In addition, in some plots the remains of medieval strip cultivation (i.e. ridge and furrow) will survive as extant earthworks, although later ploughing will have destroyed them in others. Where they survive, such archaeological features are susceptible to modern cultivation technologies, which are capable of destroying them in a very short space of time.</p>

¹ Conservation Areas are designated and administered by District or Borough Councils.

<p>Wetlands (see Fig. 2)</p>	<p>This historic environment attribute combines a number of different historic landscape character types: -</p> <ul style="list-style-type: none"> - Mosses/raised bogs – areas of which survive as wet peatlands. The formation of the organic sediments in these areas will usually extend back to the earlier part of the Holocene (Leah et al 1998) - Drained wetlands – areas where the majority of the field boundaries follow drainage ditches, indicating that they have been drained and converted to farmland. The soils in these areas will be predominantly organic, since they are derived from peatlands. - Very large post-war fields that are based upon drained wetlands – areas where <i>current</i> historic landscape character is ‘Very Large Post-War fields’ and <i>former</i> historic landscape character is defined as ‘Drained wetlands’ (for definitions of these terms see Wigley 2002). In other words, these are areas where post-war agricultural improvement has resulted from the amalgamation of fields created through the drainage of wetlands. <p>Miscellaneous floodplain fields – Fields on the floodplain which do not have a diagnostic morphology and which will have traditionally been used as meadows.</p>	<p>English Heritage’s <i>Strategy for Wetlands</i> has now made the management of wetland areas a key priority for the historic environment sector. These areas will contain archaeological and palaeoenvironmental evidence in varying states of preservation, depending upon current and historic land use. They also host wetland habits, which in many cases support a rich abundance of wildlife. However, both the archaeological residues and the ecosystems in these areas are highly susceptible to damage by modern intensive agriculture.</p>
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Historic Environment Attribute.	Definition	Reason for selection
<p>Other areas of small fields that have lost < 10 fields since the publication of the 1880s 1st ed. 6" Ordnance Survey map (see Fig. 3).</p>	<p>This historic environment attribute combines two historic landscape character types: -</p> <ul style="list-style-type: none"> - Small irregular fields – miscellaneous small irregular fields which lack the diagnostic features that would enable them to be assigned to another historic landscape character type. These areas are likely to include small meadows and closes. - Other small rectilinear fields – miscellaneous small rectilinear fields which lack the diagnostic features that would enable them to be assigned to another historic landscape character type. These areas are likely to include small meadows and closes. <p>In addition, only areas with below average field loss since the publication of the 1st ed. 6" Ordnance Survey (e.g. < 10 fields) have been selected.</p>	<p>Although on the basis of the HLCA alone it is difficult to assign a date to the field patterns in these areas, it is reasonable to assume that they represent some of the oldest fieldscapes in the SVLMI project area. In addition, the below average field loss enables us to demonstrate that these areas have changed little over the past 120 years. Both of these factors mean that the historic landscape character of these areas is vulnerable to change through field amalgamation.</p>
<p>Ancient Semi-Natural Woodland.</p>	<p>This historic environment attribute combines two historic landscape character types: -</p> <ul style="list-style-type: none"> Ancient broadleaved woodlands – Areas of woodland identified by the Forestry Commission as being composed of broadleaved species and designated by English Nature as being Ancient Semi-Natural. Mixed ancient woodland - Areas of woodland identified by the Forestry Commission as being composed of mixed species and designated by English Nature as being Ancient Semi-Natural. Areas of woodland, which English Nature have designated as Ancient Semi-Natural by English Nature but the Forestry Commission has identified as consisting of coniferous species, have <i>not</i> but included (these areas have been assigned to the 'Coniferous plantation' historic landscape character type). 	<p>These woods are likely to date back to the medieval period, although later planting will have taken place in the case of mixed ancient woodland. Until the early 20th century they would have been maintained through regular management cycles, which provided a sustainable supply of timber. They may contain a number of archaeological features (e.g. remains of prehistoric/Romano-British field systems, earthworks relating to woodland industries such as charcoal burning etc.) and will also provide some of the richest woodland habitats. As a result the character of these areas is likely to be severely degraded by felling activity and other changes of landuse.</p>

Fig. 1 – Example of an area of ‘piecemeal enclosure’ at Dovaston.

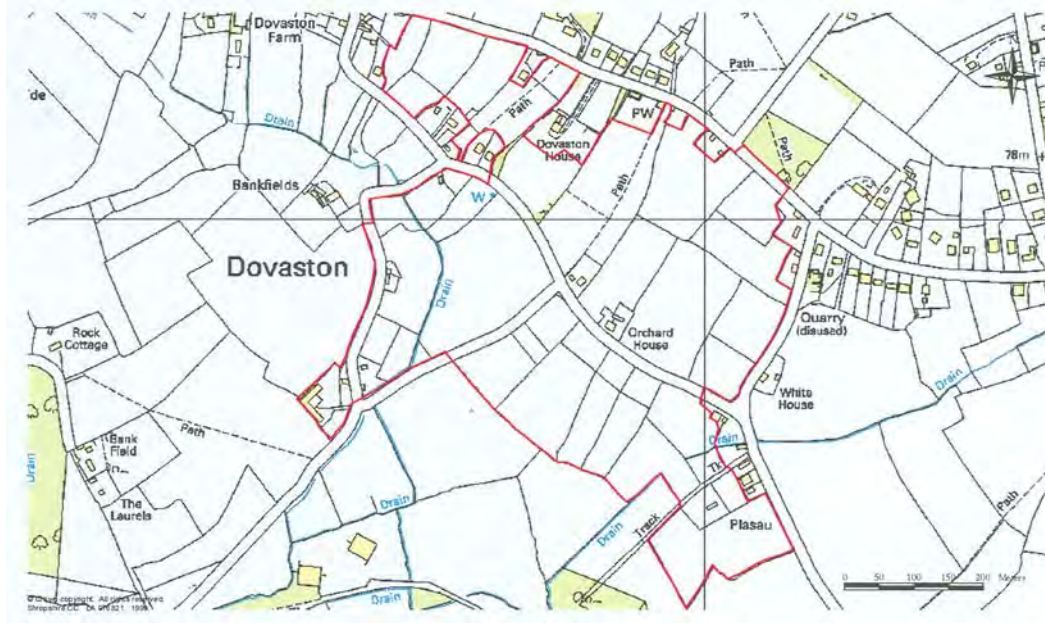


Fig. 2 – Example of an area of ‘drained wetland’ east of Babbinswood

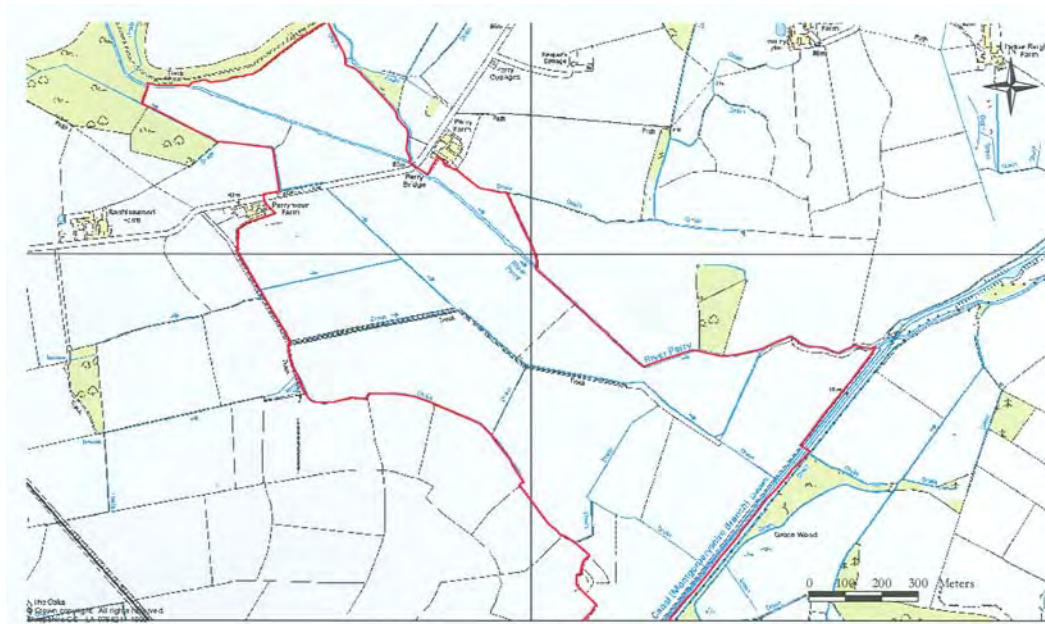


Fig. 3 – Example of an area of ‘other small irregular fields’ (with below average field loss) near West Felton.



Table 2 – Summary of historic environment designations selected for this demonstration.

Historic environment designation.	Type	Definition
Listed Buildings	Site specific	Buildings which are protected under the terms of the Planning (Listed Buildings and Conservation Areas) Act 1990 because they are deemed to be of special architectural or historic interest.
Scheduled Ancient Monuments	Site specific	Archaeological monuments which are protected under the terms of the Ancient Monuments and Archaeological Areas Act 1979. Selected because they are deemed to be fine examples of their class and are therefore of national significance. Whilst these sites may be protected in this way, scheduled status does not necessarily guarantee that a monument will be managed sympathetically. This is particularly true of monuments which lie in farmland (and other areas) and are not subject to specific management agreements.

Historic environment designation.	Type	Definition
Conservation Areas	Area designation	Areas designated by local authorities and protected under the terms of the Planning (Listed Buildings and Conservation Areas) Act 1990 because they are deemed to architectural or historic interest such that it is desirable to preserve or enhance them. These designations generally apply to settlements and are therefore unlikely to cover areas of farmland. None-the-less they have been included in the demonstration for the sake of inclusiveness.
Registered Parks and Gardens.	Area designation	Areas of parkland included in English Hertiage's <i>Register of Parks and Gardens of Special Historical Interest in England</i> because they are deemed to be national importance.

3.0 Methodology.

For the purposes of this demonstration it was decided that target areas should be identified at two scales: -

- At the level of the Landscape Description Units (LDU) defined by the Shropshire Landscape Character Assessment.
- At the level of the 'HLCA polygons', which form the basic unit of analysis of the Shropshire HCLA .

In spatial terms, the LDU's represent larger units than the HLCA polygons and therefore operate at a smaller scale. Mapping at these two scales thus provides both a broad and a more focused level of targeting.

In order to identify target areas which possess the historic environment attributes outlined above in the GIS environment two separate targeting shape files were created². These were based upon the LDU's and the HLCA polygons respectively. Within the attributes tables the original polygon identification codes were retained (in order to facilitate cross comparison). Additional numerical fields were then created for each of the historic environment attributes (see Table 3). A series of queries were run using the 'select by theme' command in order to ascertain which polygons intersected with a given historic environment attributes³. A simple binary yes/no code (i.e. 1 = Yes, 0 = No) was then entered into each field, depending upon the results of each query. Finally, a 'HE targeting' legend was created that can be applied to each of these fields (see Fig. 4).

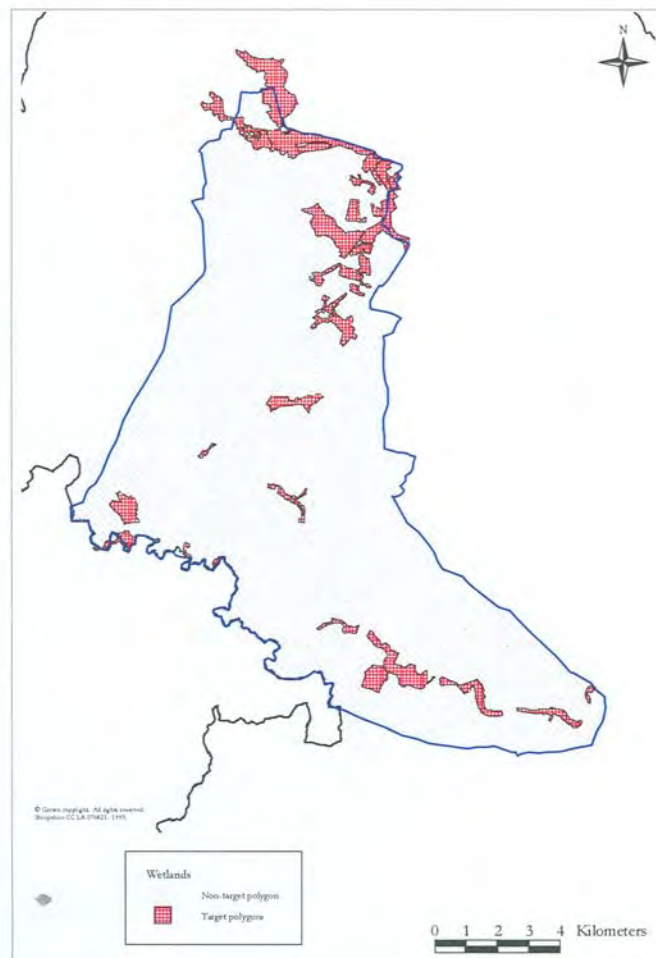
² svlmildu.shp = LDU based polygons; sv he targets2.shp = HLCA based polygons.

³ These were firstly identified either by manipulating the HLCA data in such a way that only certain historic landscape character types were displayed (see Table 1) OR by using the historic environment GIS shape files held within the Shropshire Environmental Record.

Table 3 – Summary of field names used in the GIS shape file attribute tables.

Historic environment attribute	Field name ⁴
Piecemeal enclosure	Piece enc
Wetland	Wetland
Other areas of small fields that have lost <10 fields since the publication of the 1880s 1 st ed. 6" Ordnance Survey map.	Othersmall
Ancient Semi Natural Woodland	ASNW
Listed Buildings	ListedB's
Scheduled Ancient Monuments	SAM's
Conservation Areas	Consareas
Registered Parks and Gardens	EHregpk

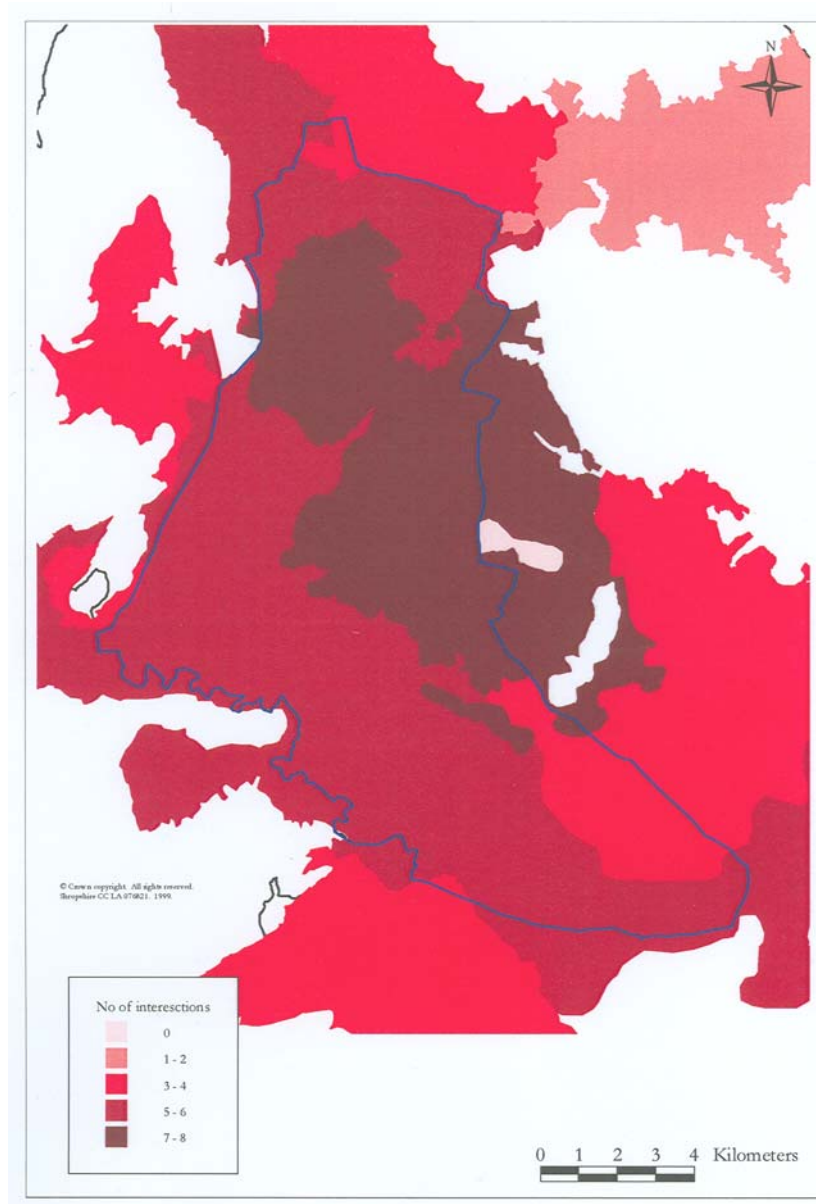
Fig. 4. – HLCA polygons with the 'HE targeting legend' applied to the Wetland historic environment attribute field.



⁴ Because of the way in which ArcView works these field names had to be abbreviations.

Finally, a summary field was also added in order to total up the number of times each polygon had intersected with an historic environment attribute. The results can be displayed using the 'graduated colour' function in ArcView's legend editor (see Fig. 5). An additional summary field ('Summary 3') was also created for the HLCA level polygons that details why each polygon has been targeted. This was constructed using an expression which concatenated the codes that were entered into each of the different historic attribute fields. This produced an eight digit binary code (e.g. 00000101) with a limited number of combinations (25 in total). In order to interpret these codes a legend ('summary of targets') was constructed which details what each one means in terms of the different historic environment attributes.

Fig. 5 – Summary of the number of times LDU's in the SVLMI project area intersect with historic environment attributes.



4.0 Implications for land management.

Each of the different historic environments attributes have different management requirements. Resolving what these are in detail lies beyond the remit of this exercise and requires discussion between specialists working for English Heritage and the other stakeholders. None-the-less, it is possible to outline a series of very broad management principles that might form part of a 'Code of Best Practice'. Listed Buildings and Conservation Areas have been excluded from the following discussion because such designations do not commonly apply to areas of farmland (although obviously Listed Buildings do exist *within* areas of farmland).

Piecemeal enclosure

Do's

- Undertake management of rank vegetation and scrub in areas of pasture containing extant ridge and furrow.
- Manage semi-natural grassland in areas of pasture in a sympathetic manner.
- Undertake sympathetic management of existing field boundaries (and larger trees within those boundaries).
- Enter into management agreements with English Heritage or DEFRA where earthwork complexes are present.

Don'ts

- Add or remove any further field boundaries.
- Plough or overstock fields containing earthworks of archaeological interest.

Wetlands

Do's

- Manage bank side trees and hedges in a sympathetic manner.
- Undertake management of rank vegetation and scrub in areas of floodplain pasture containing extant earthwork remains of water meadows.
- Seek to return areas of peatland to unploughed wet pasture in order to preserve surviving organic soils.
- Consult with English Heritage regarding best practice for the management of peatlands.
- Enter into management agreements with English Heritage or DEFRA concerning areas of former water meadows.

Don'ts

- Add additional land drains to low lying fields in floodplain or wetland locations.
- Plough or overstock fields containing earthworks of archaeological interest.

Other areas of small fields that have lost <10 fields since the publication of the 1880s 1st ed. 6" Ordnance Survey map.

Do's

- Manage semi-natural grasslands in areas of pasture in a sympathetic manner.
- Undertake sympathetic management of existing field boundaries (and larger trees within those boundaries).
- Enter into management agreements with English Heritage or DEFRA where earthwork complexes are present.

Don'ts

- Add or remove any further field boundaries.

Scheduled Ancient Monuments

Do's

- Enter into management agreements with English Heritage as a matter of priority.
- Undertake management of rank vegetation and scrub.

Don'ts

- Continue to plough within the scheduled areas around the monument.
- Overstock the fields within which the monument lies.

Registered Parks and Gardens

Do's

- Enter into management agreements with English Heritage or DEFRA as a matter of priority.
- Manage surviving parkland features in a sympathetic manner.
- Seek to enhance areas of former parkland which are currently given over to other forms of land management.

Don'ts

- Remove any surviving elements of the parkland.
- Convert former areas of parkland to arable.

5.0 References.

- Johnston, M. 1996. *An Archaeology of Capitalism*. Oxford. Blackwells.
- Kettle, A. J. 1989. 1300-1500. In G. C. Baugh (ed.) *A History of Shropshire: Volume 4: Agriculture*. London. The Institute of Historical Research.
- Leah, M. D.; Wells, C. E.; Stamper, P.; Huckerby, E. and Welch, C. 1998. *The Wetlands of Shropshire and Staffordshire*. Lancaster. Lancaster University Archaeological Unit.
- Wigley, A. 2002. *The Shropshire Historic Landscape Character Assessment. Pilot Study 1 – The Severn Vyrnwy Area*. Unpublished report, Natural and Historic Environment Team, Shropshire County Council. Shrewsbury.

Appendix 5

Comments on the Historic Environment in the Proposed Morda (north of Maesbrook) Wet Washland (Site 7).

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Scheduled Ancient Monuments.

There is one Scheduled Ancient Monument within the proposed Morda Wet Washland (see Fig. 1) – a 380m section of Wat's Dyke (National Monument No. 33873), which lies immediately to the east of the sewage works at Mile Oak. Wat's Dyke is a putative early medieval linear earthwork, which is held to run from Besingwerk Abbey on the Dee estuary, southwards to Maesbury. It comprises of a large ditch, up to 5m wide and 2m deep, with an accompanying bank on the eastern side.

Scheduled Ancient Monuments are protected under the under the terms of the Ancient Monuments and Archaeological Areas Act 1979. Carrying out certain works to such sites requires permission, in the form of scheduled monuments consent, from the Secretary of State for Culture, Media and Sport. Part 2.2c of the Act, which relates to control of works affecting scheduled monuments, states that this includes "...any flooding or tipping operations on land in, on or under which there is a scheduled monument". It also applies to works that will affect the setting of a Scheduled Ancient Monument. It is, therefore, strongly recommended that advice is sort from the relevant Inspector of Ancient Monuments at English Heritage at an early stage in the proposed scheme.

Listed Buildings.

Buildings deemed to be of special architectural or historic interest are 'listed' and safeguarded under the terms of the Planning (Listed Buildings and Conservation Areas) Act 1990. There are six such listed buildings within the proposed Morda Wet Washland, details of which are summarised in Table 1 below. Most of these buildings are situated along the fringes of the proposed wet washland, often within larger hamlets or farm complexes that are likely to place other restraints upon the proposed scheme (see Fig. 1). It is unlikely that implementation of the washland scheme would result in physical intervention in the fabric of these buildings, and would not therefore require Listed Building Consent. However, it would still be advisable to consult with the Conservation Officer at the relevant district council (in this case Oswestry Borough Council) in those cases where a building might be flooded, or where measures are taken to prevent flooding of a listed building.

Table 1 – Summary of listed buildings in the proposed Morda Wet Washland.

Name	National Grid Ref.	Status/ Grade	Listing ref. ¹	ER PRN no. ²
Morton Bridge	SJ 31342319	II	1574-0/7/6	19320
Barn approx. 15m north-west of The Fields	SJ 30762521	II	1602-0/6/138	19859
Ball Mill	SJ 30412652	II	1602-0/6/176	15525
Maesbury House	SJ 30372570	II	1602-0/6/185	18751
Pump and basin approx 2m south of Maesbury House	SJ 30372569	II	1602-0/6/186	17344
St. Winifred's Well	SJ 32222443	II*	1602- 0/10/222	13169

Other Archaeological Sites and Historic Buildings.

Twelve other archaeological sites are known to lie within or partially within the area of the proposed washland, details of which are summarised in Table 2. Their locations are shown in Figure 2.

Guidance that safeguards important archaeological sites that are not designated as Scheduled Ancient Monuments is given in PPG16. Two of the main principles embodied within PPG 16 are that such sites should be physically preserved *in situ*, and that their settings should not be adversely affected by development. Where archaeological sites are known to exist that will be affected by a proposed development it is expected that the developer provides an assessment of them **before** a planning application is determined. Where such an assessment demonstrates that preservation *in situ* is either not required or impractical the developer is expected to conduct an investigation that records the remains prior to their destruction.

The proposed wet washland scheme is unlikely to threaten the sites that lie within it with destruction, except in any places where flood protection measures are to be constructed. However, in some instances it is possible that seasonal flooding might have an adverse effect upon a sites level of preservation and/or upon its setting. It is, therefore, suggested that advice is sought from the Planning Archaeologist at Shropshire County Council (currently in the process of being appointed) at an early stage and, where necessary, assessments of the likely impact of flooding is undertaken.

¹ The 'List ref.' refers the volume no. of the relevant List of Buildings of Special Architectural or Historic Interest, followed the sequence, map and item numbers.

² The 'ER PRN no.' represents the reference number that has been assigned to the building within the Shropshire Environmental Record.

Fig. 1 – Map showing the distribution of Scheduled Ancient Monuments and Listed Buildings in relation to the proposed Morda wet washland.

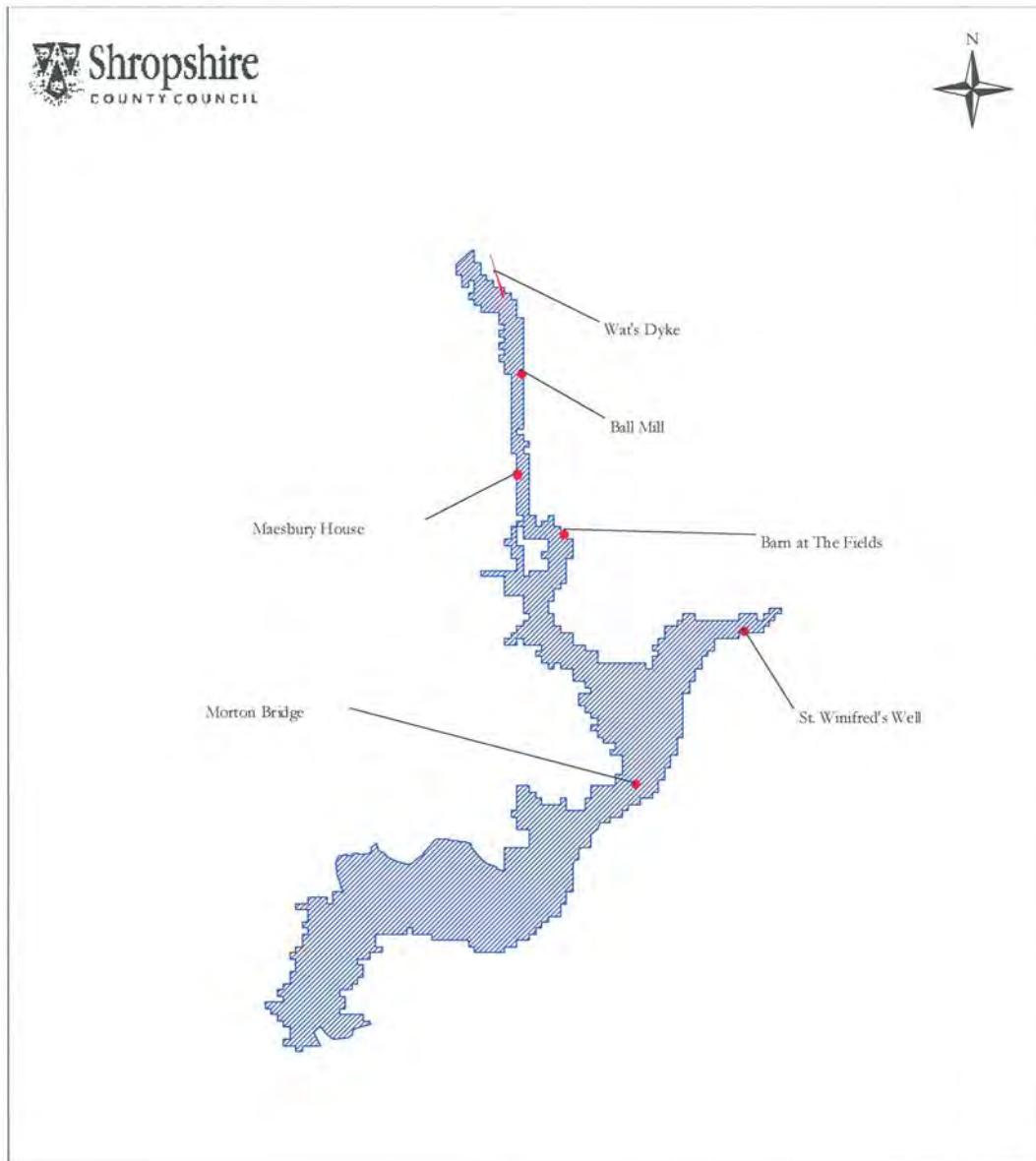
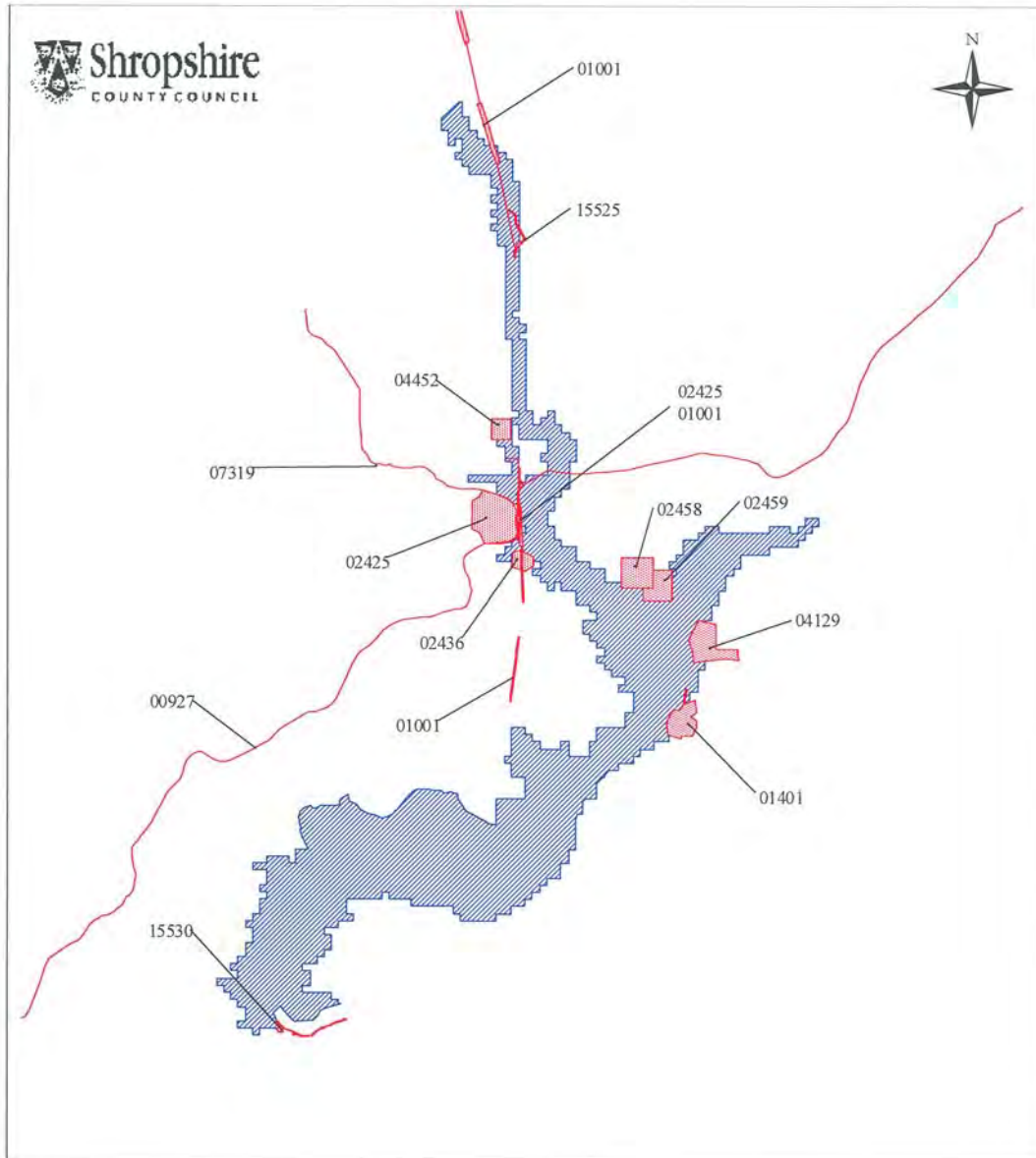


Table 2 – Summary of other archaeological sites and historic buildings in the proposed Morda Wet Washland.

ER PRN ref.	Name	Nat. Grid Ref.	Type	Period
00927	Montgomery Canal	N/A	Canal	Post Medieval (1700 AD – 1913 AD)
01001	Wat's Dyke	N/A	Dyke (Defence)/ Boundary Bank/ Frontier Defence	Migration (410 AD to 799 AD)
01401	Cropmark enclosure 0.6km NW of Osbaston	SJ 31562327	Enclosure	Early Iron Age to Roman (800 BC? To 409 AD?)
02425	Morton Farm	SJ 30262463	Ditch/ Field System	?
02436	Cropmark enclosure 400m east of Morton Farm	SJ 30452432	Polygonal Enclosure	Early Iron Age to Roman (800 BC? To 409 AD?)
02458	Cropmark enclosure 400m south-west of Lower Waen Farm	SJ 31252424	Circular Enclosure/ Ditch	Early Iron Age to Roman (800 BC? To 409 AD?)
02459	Cropmark enclosure 400m south of Lower Waen Farm	SJ 31402416	Circular Enclosure/ Ditch	Early Iron Age to Roman (800 BC? To 409 AD?)
04129	Cropmark 200m north of Maesbury Hall	SJ 31792377	Linear Feature	?
04452	Newbridge Enclosure	SJ 30452486	Oval enclosure	?
07318	Montgomery Canal (branch to mill at Maesbury Hall)	SJ 30452486	Canal	Post Medieval (1800 AD – 1913 AD)
07319	Gronwen Colliery (Morda) Trameway	SJ 28922607	Mineral Railway	Post Medieval (1800 AD – 1913 AD)
15525	Ball Mill (including mill race)	SJ 30412652	Building	N/A
15530	Llwyntidmon Mill and attached house, Llwyntidmon	SJ 28772108	Building	N/A

Fig. 2 – Map showing the distribution of other archaeological sites and historic buildings in relation to the proposed Morda wet washland.



Historic Landscape Character.

In order to assess the historic landscape character of the proposed Morda Wet Washland an additional 'buffer' of 500m was created around the edge of washland area within the GIS environment. This was then cross-referenced with the interim results of the Shropshire Historic Landscape Character Assessment (Wigley 2002). Figure 3 presents the results of this exercise. The definitions of the various different historic landscape character types are given in Table 3.

Fig. 3 – Map showing the historic landscape character of the Morda Wet Washland and the surrounding area.

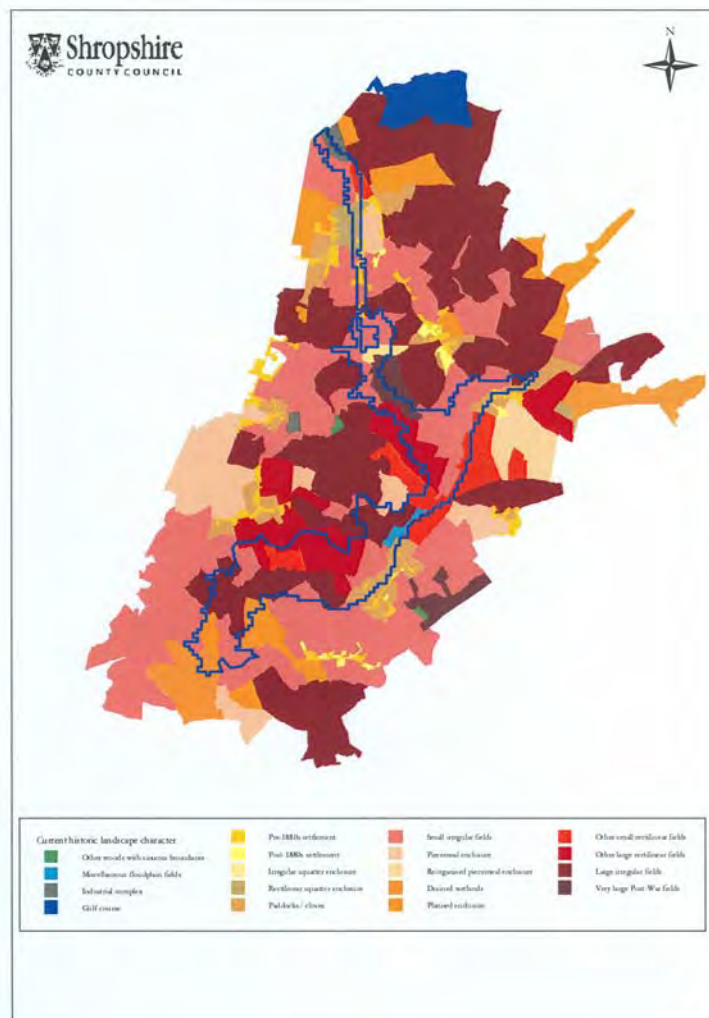


Table 3 – Definitions of the historic landscape character types in the proposed Morda Wet Washland.

Historic Landscape Character Type	Definition
Other woods with sinuous boundaries	Woods that either have no Forestry Commission composition designation (e.g. because they are < 2ha in size) OR have been identified as either having been felled or as consisting of young trees. However, the boundaries of the woods are predominantly sinuous.
Miscellaneous floodplain fields	Fields on river floodplains that do not fall into any of the more diagnostic Fieldscales categories. The fields in these locations will traditionally have been used as meadows. By the mid 17 th century the lush pastures in these areas were being used to fatten cattle (Edwards 1989). They may preserve earthwork remains of water meadows, which in Shropshire were created from the late 16 th century onwards.
Industrial complex	Modern industrial complexes. Includes industrial estates, large factories and sewage farms. Most will date to the latter half of the 20 th century.
Golf course	Modern golf courses identified as such on current maps.
Pre-1880s settlement	This category defines the extent of a settlement as marked on the 1 st ed. 6" OS map. In most cases this will effectively define the historic settlement core. However, for those settlements covered by the Central Marches Historic Towns Survey / Shrewsbury Urban Archaeological Database, this category will provide a measure of settlement growth since the period defined by the historic core (e.g. either over the course of the post-medieval and 19 th century OR over the course of the 19 th century, depending on the dates assigned by the Central Marches Historic Towns Survey to their settlement core).
Post-1880s settlement	This category defines the limit of a settlement shown on the current 1:10,000 HLCA base maps. Where other settlement categories exist, it provides a measure of settlement growth over the past 120 years (i.e. since the 1 st ed. 6" map).
Irregular squatter enclosure	Field systems principally comprising small irregular fields with sinuous or curvilinear boundaries. The overall field pattern has an unordered, 'organic', often amorphous, appearance. These areas are often associated with networks of lanes and access tracks and small cottages. In addition, they may be associated with mining, quarrying or other industrial activity. They are usually indicative of encroachment onto common land in the post-medieval or industrial periods.

Rectilinear squatter enclosure	Field systems principally comprising small rectilinear fields with straight boundaries. The overall field pattern has a more planned appearance than in areas of 'irregular squatter enclosure'. These areas are often associated with networks of lanes and access tracks and small cottages. In addition, they may be associated with mining, quarrying or other industrial activity. They are usually indicative of encroachment onto common land in the post-medieval or industrial periods.
Paddocks/closes	Small irregular fields distinguished from 'other small fields' character type by their location on the edge of settlements. In many cases these probably represent small meadows and paddocks.
Small irregular fields	Areas of small irregular fields that cannot be assigned to one of the other historic landscape character types. Includes small meadows and closes that do not occur next to settlement boundaries.
Piecemeal enclosure	Piecemeal enclosure can be defined as those fields created out of the medieval open fields by means of informal, verbal agreements between farmers who wished to consolidate their holdings (Johnston 1996). Within Shropshire this process appears to have been well under way by the late medieval period, and a number of 16 th century commentators regarded the county as largely enclosed (Kettle 1989: 84). These areas have field patterns comprised of small irregular or rectilinear fields. At least two boundaries will have 's-curve' or 'dog-leg' morphology, suggesting that they follow the boundaries of former medieval field strips.
Re-organised piecemeal enclosure	Areas of either small irregular or rectilinear fields that have lost 10 or more field boundaries since the 1 st ed. 6" map, OR areas of large irregular or rectilinear fields. In both cases there will be at least two field boundaries that exhibit 's-curve' or 'dog-leg' morphology. The field patterns in these areas result from the amalgamation of fields created through piecemeal enclosure. In most cases it can be demonstrated that this has occurred since the publication of the 1 st ed. 6" OS map.
Drained wetlands	The field patterns in these areas can be small or large, irregular or rectilinear. However, most of their boundaries will be defined by the course of drainage ditches, and some field boundaries may also follow water courses. The drainage of wetlands was underway in Shropshire by the 16 th century, after which some of these more extensive areas (e.g. the Weald Moors) began to specialise in livestock fattening (Rowley 1989). Some drained wetlands (e.g. Baggy Moor) were brought into cultivation during the later 18 th century and drainage operations and improvements continued into the 19 th and 20 th century (Leah <i>et al</i> 1998).

Planned enclosure	These areas are characterised by either small or large fields that share very straight boundaries, giving them a geometric, planned appearance. Laid out by surveyors, these field patterns result from late enclosure during the 18 th and 19 th centuries. This historic landscape character type, therefore, includes commons that were enclosed by Act of Parliament. Although this process was relatively insignificant in Shropshire when compared with other counties, it still resulted in the enclosure of approximately 25,800 ha (or 7.5% of the county) (Baugh and Hill 1989: 171).
Other small rectilinear fields	Areas of small rectilinear fields that cannot be assigned to one of the other historic landscape character types. Includes small meadows and closes that do not occur next to settlement boundaries.
Other large rectilinear fields	Areas of large rectilinear fields that have a significant number (i.e. as either predominant or secondary boundary morphology) of sinuous boundaries, and which can not be assigned to one of the other historic landscape character types. Includes some field patterns that have been created through the amalgamation of fields in the period since the publication of the 1 st ed. 6" OS map.
Large irregular fields	Areas of large irregular fields that have a significant number (i.e. either predominant or secondary boundary morphology) of sinuous boundaries, and which cannot be assigned to one of the other historic landscape character types. Includes some field patterns that have been created through the amalgamation of fields in the period since the publication of the 1 st ed. 6" OS map.
Very large Post-War fields	Very large fields (e.g. > 8.1ha and often significantly larger) created through the amalgamation of fields since the publication of the 1 st ed. 6" OS map. Almost certainly the result of Post-War agricultural 'improvements' designed to meet the requirements of intensive arable cultivation.

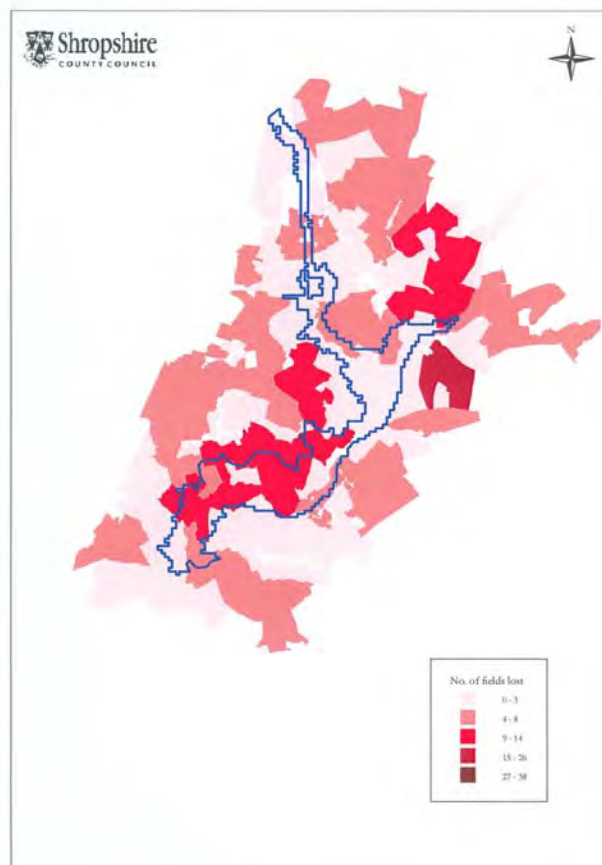
As we can see from Figure 3, the area both within and around the proposed wet washland is dominated by two different historic landscape character types: 'small irregular fields', and 'large irregular fields'. The topography of the area (i.e. low relief with large areas of floodplain and gently sloping valley side) make it ideal for meadowlands and pasture. Examination of field loss since the publication of the 1st edition of the 6" Ordnance Survey map (c 1880) reveals that field loss over much of the area has been low – moderate (see Fig. 4). In many of the areas of 'small irregular fields' the sinuosity of the field boundaries, together with the below average loss of fields since the 1880s, suggests that these patterns are potentially quite ancient, perhaps dating back as far as the late medieval period. The field loss data also suggests that, in those areas with moderate field loss between the hamlets of Crickheath and The Wood, some of the blocks of 'large irregular

fields' have been created through field amalgamation in the second half of the 20th century. The same applies to the areas of 'other large rectilinear fields' in this part of the wet washland area.

A change in the nature of the field patterns is discernable as one moves away from the edges of the wet washland, onto slightly higher ground and better drained soils. In these areas, blocks of 'piecemeal enclosure' and 'reorganised piecemeal enclosure' denote the existence of former medieval open field systems. The present field pattern was probably created through early enclosure of the former field strips, on a piecemeal basis, at some point between the late medieval and early post-medieval periods (i.e. between approximately the later 14th and the later 17th centuries). Subsequent reorganisation of the field pattern in some places since the publication of the 1st edition 6" Ordnance Survey map has produced areas of 'reorganised piecemeal enclosure'.

The area of 'planned enclosure' immediately to the east of the hamlet of Gwern y brenin, near the northern end of the washland, may result from the enclosure of formerly open

Fig. 4 – Map showing numbers of fields lost since the publication of the 1st ed. 6" OS map in the Morda Wet Washland and the surrounding area.



common land. The same might apply to the area of 'smaller irregular fields' that lies immediately to the east and south-east of the hamlet of Morton

Common. In both cases, however, further research is required to confirm these suggestions.

The settlement pattern in the area appears to consist almost exclusively of linear settlements, which stretch out along the roads, and dispersed farmsteads. Most of these settlements were in existence by the 1880s, and have not expanded to any significant degree since. However, it would be unwise to speculate when these settlements were first established without undertaking more detailed research.

The potential impact of the wet washland upon the historic landscape character of this area is potentially quite slight, given that much of the area was probably traditionally used for meadows and pasture land. It seems likely that the area within the proposed washland may have been more prone to prolonged winter flooding in the past, prior to drainage improvements in the second half of the 20th century. This said, it is desirable that further amalgamation of fields is avoided in those parts of the washlands that have 'small irregular fields' and low field loss since the 1880s. These field patterns are potentially ancient, and the landscape character of these areas would suffer as a result of further hedgerow loss.

It is also desirable that, where earthwork remains of water meadows and other water management features exist, they are **not** damaged by the implementation of the scheme. A significant number of drains, small water courses and mill races are visible on both the modern and the historic Ordnance Survey maps. It would be advisable, therefore, to undertake a more detailed archaeological assessment of the extent and level of preservation of these, and other now features, which relate to the history of water management in this area. If these do survive to any degree, restoring them as part of a flood management strategy could have potential benefits for the quality of both the historic and the natural environment in the wet washland zone.

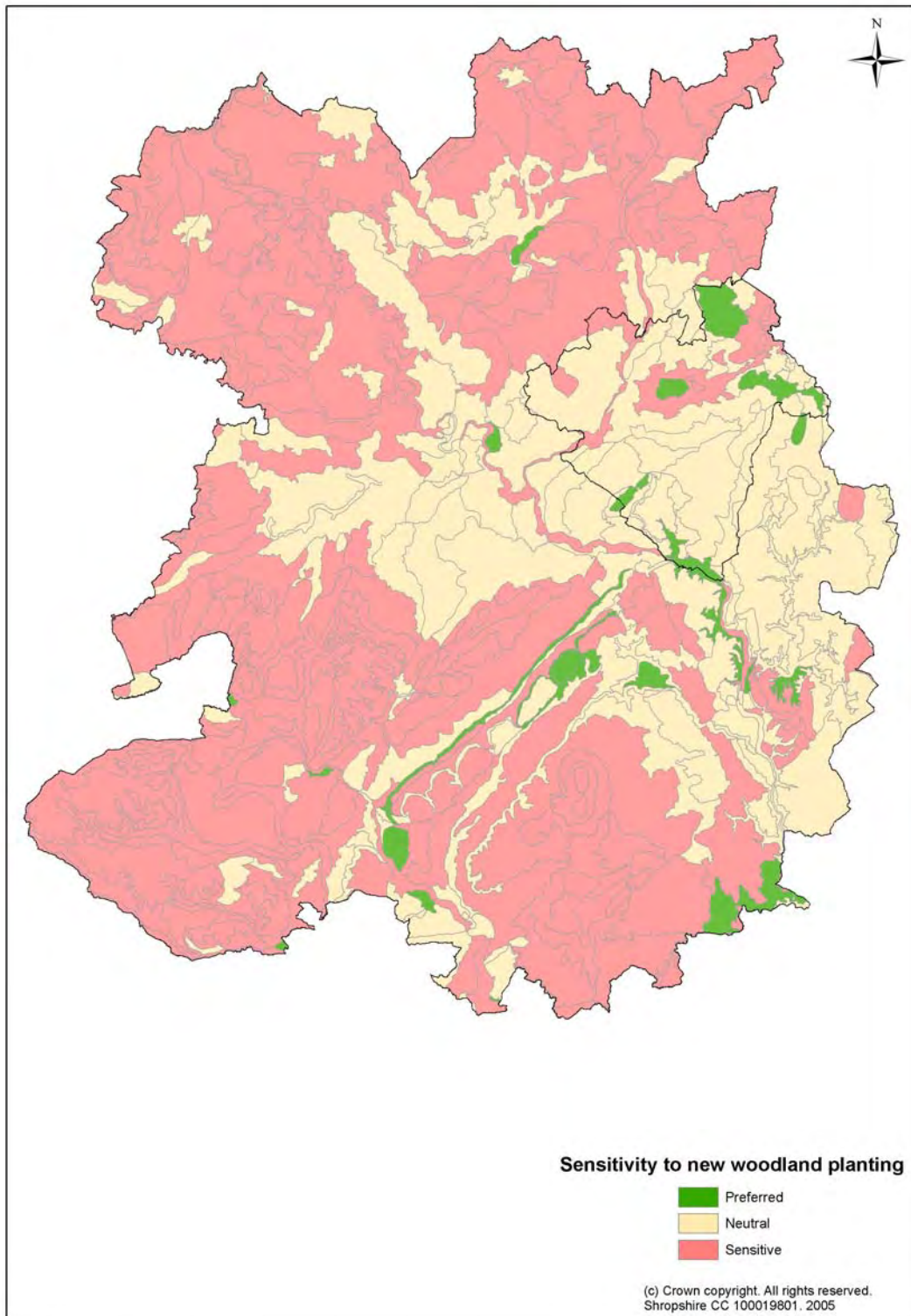
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Appendix 6

Figure 1 – Historic Environment Theme Woodland Opportunities Map for Shropshire (based on HLC data).



**West Midlands Woodland Opportunities Map: Historic Landscape Theme
for Shropshire .
Draft Decision Rule Statement.**

*Andy Wigley
Landscape Officer
Shropshire County Council
November 2006*

The Shropshire component of the 'Woodland Opportunities Map: Cultural Heritage Classification based on approach agreed with local stakeholders.' map is based upon the Shropshire Historic Landscape Character (HLC) assessment. It uses HLC data to determine the likely sensitivity of the historic character of the landscape to new woodland planting under Forestry Commission's English Woodland Grant Scheme. It was produced using a modified version of the methodology that was developed by Staffordshire County Council for the first version of the Woodland Opportunities Map. It does **not**, however, take into account any historic environment designations (e.g. SSSIs, NNRs, SAMs etc.).

Determining the sensitivity of HLC types.

Sensitivity weightings were assigned to each HLC type by making a judgement based upon the degree of 'time depth'¹ they exhibit, and their likely sensitivity to woodland planting (see Table 1). The key assumptions that underlie these judgements are as follows: -

- Most HLC types within the 'unimproved land' category are likely to be sensitive, except where they are the product of recent change.
- Ancient field patterns are likely to be sensitive to woodland planting; more recent ones less so. Exceptions are likely to exist, however, where a field pattern is a product of recent change.
- Woodland HLC Types are likely to be preferred, particularly recent plantations. Some site specific sensitivities may exist, however, in relation to ancient woodlands, which often contain archaeological earthworks of varying dates.
- Wetlands and floodplain fields in the 'Water and valley floor' category are likely to be sensitive. Those involving open water are unlikely to attract applications for planting schemes and are therefore neutral.
- 'Industrial' HLC types are likely to be either preferred or, in the case of those of greater historic interest, neutral.
- Sensitivities may exist for military HLC types because of their historic interest, although they originated in the 20th century. They have, therefore, been assigned to the neutral category.
- Historic parks and gardens are likely to be sensitive, whilst more recent 'ornamental, parkland and recreational' types less so.

¹ 'Time depth' represents the visible evidence for past phases of landscape evolution.

- Because planting applications are unlikely to be forthcoming for sites occupied by residential or retail buildings the settlement HLC types are neutral.
- Older orchards are likely to be sensitive, more recent ones less so.

Table 1 Sensitivity of HLC Types to new woodland planting.

Preferred	Neutral	Sensitive
Active stone quarry	Active military instillation	Drained wetlands
Broadleaved ancient woodland	Artificial lake/ pond	Golf course
Broadleaved plantation	Disused barracks	Heathland
Broadleaved woodland with sinuous boundaries	Disused lead/ copper mine	Irregular squatter enclosure
Colliery (disused and modern opencast)	Disused ordnance depot	Large assarts with sinuous boundaries
Coniferous plantation	Former military airfield	Miscellaneous floodplain fields
Coniferous woodland with sinuous boundaries	Historic settlement core	Moorland
Disused stone quarry	Industrial complex	Moss/ raised bog
Golf course	Large irregular fields	Other common
Mixed ancient woodland	Late clearance/ assarts	Other small fields
Mixed plantation	Natural open water	Other small rectilinear fields (when NOT later than 'post-1914')
Mixed woodland with sinuous boundaries	Other gardens and recreational	Paddocks/closes (when NOT later than 'post-1914')
Other plantation	Other industrial	Parks and gardens
Other unimproved ground	Other large rectilinear fields	Piecemeal enclosure
Other woodland with sinuous boundaries	Other parklands, gardens and recreational	Planned enclosure (when NOT later than 'post-1914' OR Previous Attribute Group = 'Unimproved Ground' OR 'Ornamental, parkland')
Other woods with sinuous boundaries	Other small rectilinear fields (when later than 'post-1914')	Pre-1880s orchard
Replanted ancient woodland	Paddocks/ closes (when later than 'post-1914')	Rectilinear squatter enclosure
Sand/ gravel quarry	Planned enclosure (when later than 'post-1914' OR Previous Attribute Group not = 'Unimproved Ground' OR 'Ornamental, parkland')	Reorganised piecemeal enclosure (when NOT later than 'post-1914')
Very large post-war fields (except when Previous Attribute Group = 'Unimproved Ground').	Post 1880s settlement	Small assarts
	Post-1880s orchard	Small irregular fields (when NOT later than 'post-1914')
	Post-1880s settlement	Unimproved enclosed hill pasture
	Pre-1880s settlement	Unimproved open hill pasture
	Pre1880s settlement	Very large post-war fields
	Redeveloped pre-1880s settlement	
	Reorganised piecemeal enclosure (when NOT later than 'post-1914')	
	Reservoir	
	Small irregular fields(when later than 'post-1914'['])	
	Sports field	

Each HLC polygon was classified in this way by firstly inserting an additional field called 'WOM_Sens' into the Attributes Table into a copy of the HLC GIS shapefile. A definition query was then run against each HLC type and a numeric sensitivity code was inserted into 'WOM_Sens' field as appropriate (see Table 2).

Table 2 HLC and LDU Sensitivity Codes

Level of Sensitivity	Sensitivity Code
Sensitive	3
Neutral	2
Preferred	1

Once this exercise was completed the codes were used to produce a sensitivity legend, so that HLC sensitivity could be displayed graphically.

Assigning HLC sensitivity weightings to the Landscape Description Units

The next stage involved using the HLC Type sensitivity information to assign a sensitivity weighting to the LDUs². This was done by calculating the proportion of each LDU that had been assigned to each of the HLC sensitivity categories, firstly by area and subsequently as a percentage. An additional series of fields were inserted into the LDU Attribute Table to contain each of these calculations. The percentage calculations were then used to assign an historic environment sensitivity weighting (using the same numeric coding system as before – see Table 2) to each of the LDUs using the following rules:

-

Where HLC Types >50% sensitive = Sensitive

Where HLC Types >50 preferred and HLC Types <20% sensitive = Preferred

Where HLC Types >50% neutral = Neutral

Once this initial sort has been completed, those LDU that remained unclassified were assigned a sensitivity weighting using the following rules: -

Where HLC Types sensitive % > HLC Types neutral % AND HLC Types sensitive % > HLC Types preferred % = Sensitive

Where HLC Types neutral % > HLC Types sensitive % AND HLC Types neutral % > HLC Types preferred % = Neutral

HLC Types preferred % > HLC Types neutral % AND HLC Types <20% sensitive = Preferred

HLC Types preferred % > HLC Types neutral AND HLC Types >20% sensitive = Neutral

² Landscape Description Units – the basic data holding unit for the Landscape Character Assessment, which represent distinct and relatively homogenous units of land.

The sensitivity weightings for the LDUs are defined³ as follows: -

Preferred - Woodland creation will generally fit well with cultural heritage and is encouraged

Neutral - Woodland creation should generally fit well with cultural heritage but sensitivities exist

Sensitive - Woodland creation will generally **not** fit with cultural heritage and could affect it

³ As published in the *Guidance notes for Woodland Opportunities Map (WOM) version 1* (Forestry Commission, March 2006).

Appendix 7

A Landscape History of the Upper Onny Valley

Andy Wigley, Sustainability Group, Shropshire County Council

Analysis of the landscape history of the upper Onny Valley has been conducted as part of the Shropshire Historic Landscape Characterisation Project, which is currently being conducted by the Sustainability Group at Shropshire County Council. This forms part of a national initiative directed and financed by English Heritage in partnership with various English local authorities. The aim is, for the first time, to produce overviews of the history of the modern landscape for entire counties, based upon an assessment of a restricted but holistic range of sources. The process involves examining a range of modern and historic maps using a sophisticated computer based GIS (Geographical Information System) programme, supported up by a powerful database system. The key principle is that the landscape as it exists today, and as it is depicted on the most recent editions of Ordnance Survey maps, forms the starting point for this assessment. This means that we are able account for very recent, as well as more ancient, aspects of the landscapes history.

The approach ultimately results in the production of a series of colour coded maps, which reflect the likely age of the various different components (e.g. fields, woods, settlements etc.) that make up the modern landscape. This information can then be used for various purposes, including the generation of better informed land management policies which seek to safeguard the historic environment and, as in this instance, to help members of the public to understand and celebrate their surroundings.

Whilst the aim is to characterise (i.e. assess and describe) the landscape as it exists today, the data which the project generates can also be manipulated to produce overviews of the landscape as it may have existed in the past. The example presented here represents an attempt to portray the medieval landscape of the Upper Onny Valley. Whilst it is not always possible to reconstruct what the landscape would have been like in all areas (hence the gaps), such maps provide a very useful means of understanding how the use of the land in the past has shaped the modern landscape.

Both maps show that the landscape of the upper Onny Valley is structured around the division between the higher land in the northern and eastern parts of the area, and the lower ground in the south. In places, for example around Myndtown, along the south-western edge of The Long Mynd, the distinction between these two zones remains sharp. Elsewhere, such as the area to the north of Norbury, it has been blurred by the different field patterns that reflect successive intakes and encroachments spanning several centuries.

Much of the higher ground would have been open moorland and rough grassland in the Middle Ages, and both the Stiperstones and The Long Mynd lay within medieval forests. It must be emphasised, however, that this does not imply that they were densely wooded but represents a legal designation that gave the king (or other noble) the right to keep deer and make forest law. These areas would have been subject to common grazing rights, and the holloways (deeply worn trackways) that would have used to drive stock up on

to the higher ground are still survive in some places today. For instance, a number of good examples can be seen on the flanks of The Long Mynd immediately above Asterton, where a series of trackways radiate out from the hamlet at the base of the slope.

Large blocks of moorland survive today on the Stiperstones ridge and The Long Mynd, with smaller pockets in the western part of the area on Heath Mynd and Black Rhadley Hill. Over time, however, the amount of open land has been gradually reduced, as successive generations have sought to enclose and improve the land. David Pannett and David Preshous are due to talk about this process in their guided walk around Norbury, but another good example can be seen to the east of Wentnor. As one follows the road out of the village towards Prolley Moor, it follows a slightly sinuous route as it passes through the older fields around the village. After it crosses the Crifftin Brook, however, it becomes much straighter and the surrounding fields become more regular and are defined by very straight field boundaries. Both the roads and the fields were almost certainly laid out at the same time by surveyors (as indicated by the 'planned enclosure' category on the current character map), as part of the enclosure of Prolley Moor in the 1850s. At the foot of The Long Mynd scarp the field pattern changes again, with the small, more irregular paddocks that run along the edge of the slope around Rose Cottage. The probably represent encroachments onto the common land by cottagers (identified as 'irregular squatter enclosure' on the current character), although whether they are earlier or later than the fields on Prolley Moor is difficult to tell without further research. Finally, an example of a large twentieth enclosure of an area of land on The Long Mynd can be seen to the north, along the road between Rose Cottage and Stanbatch.

On the lower ground, in the southern part of the upper Onny Valley, the field patterns tend to be more ancient. Although in places there has been some enlargement and amalgamation over the course of the twentieth century, the probable extent of medieval cultivation in the area can still be recognised. During the late medieval and early modern periods the common townland fields, with their characteristic long, narrow plots, would have been gradually enclosed. This process would have occurred on a piecemeal basis (hence the 'piecemeal enclosure' category on the current character map), through oral agreements between individual farmers seeking to consolidate their formerly scattered holdings. The fields which result from this process can be relatively easily identified, both on the maps and on the ground, because their boundaries often follow a sinuous course (like a reversed S), or have distinctive kinks ('dog-legs') in them. Particularly well preserved examples of such fields patterns can be found around Norbury and Wentnor. Away from these areas, wetter meadows and pastures can also be seen, particularly along the various stream courses and towards the northern end of the River East Onny around Bridges and Ratlinghope.

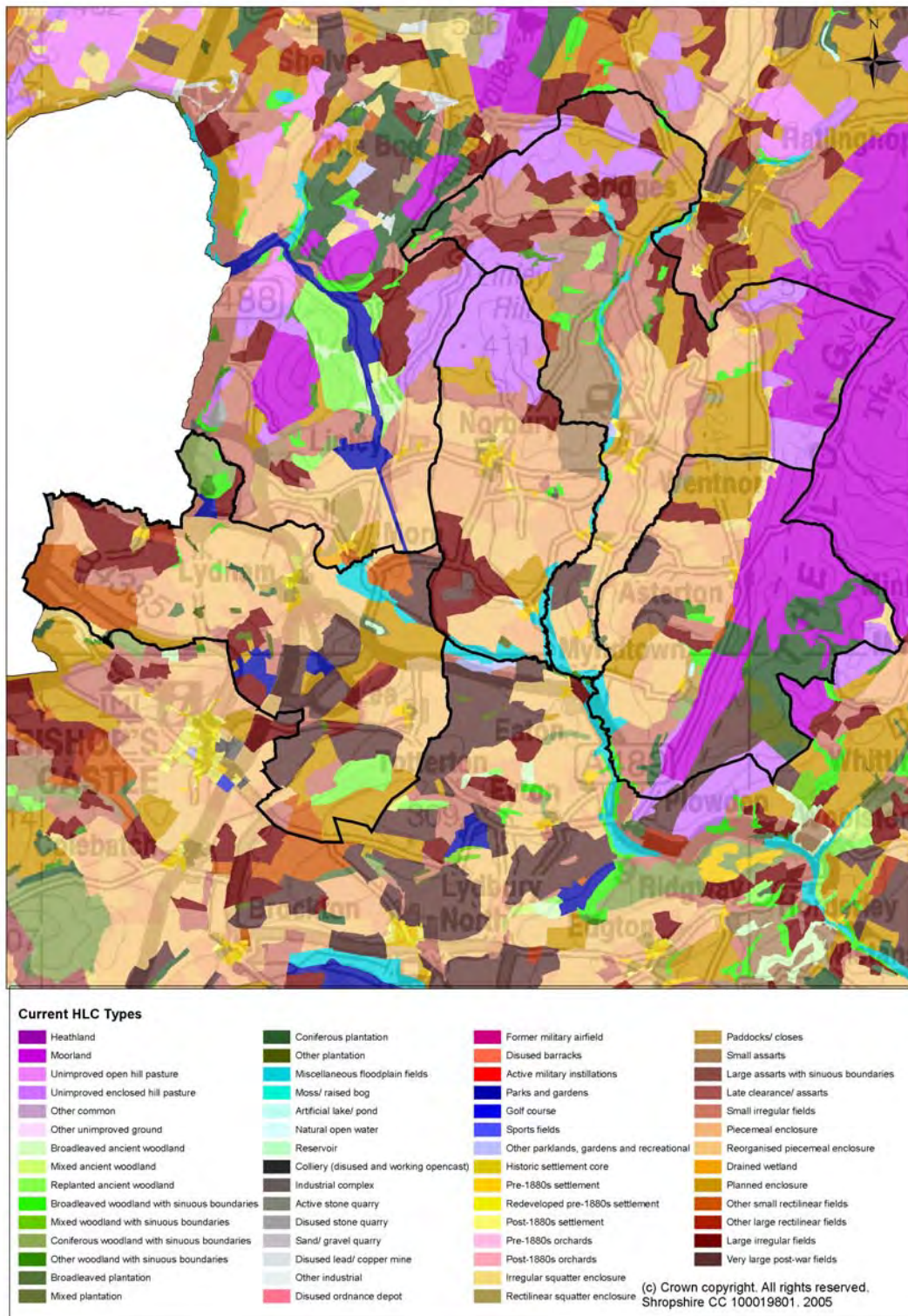
Much of the woodland that exists today in the Upper Onny Valley are nineteenth and twentieth century plantations. However, Linley Big Wood and Hayes Wood to the north of Linley Hall, which although they now have a mixed composition (i.e. consist of a mixture of broadleaved and coniferous species), have been identified by English Nature as being 'ancient-semi natural'. They may, therefore, have medieval origins. Another fairly sizable

block of woodland may also have once existed along the western side of the East Onny valley, between Walkmill and Kinnerton. In this area, the shape of the field boundaries, the pattern of dispersed farmsteads and the sinuous course of the roads all suggest that the fields in this area may have been created through the gradual clearance and enclosure (or 'assartment') of a tract of woodland. This process was well underway in Shropshire by the thirteenth century and continued throughout the medieval period and into early modern times. However, more documentary research is required before we can assign a date to the possible assarts in the upper Onny Valley.


The settlement pattern in the upper Onny Valley is again characterised by a split between the higher ground and the lower lying areas. In the upland parts of the area we can see a dispersed settlement pattern of scattered farms and isolated cottages, with the occasional smaller hamlet such as Ratlinghope and Medicot. When not obviously recent in date, many of these settlements probably date to the eighteenth or nineteenth centuries, and will often be associated with the enclosure of former areas of open land (e.g. the farms on Prolley Moor). In some cases, however, they may well have earlier origins (e.g. Adstone, Kinnerton, Medicott, Ratlinghope etc.), since recent survey work in the Clee Hills by the former Royal Commission on the Historic Monuments of England (now part of English Heritage), suggests that the medieval settlement pattern in Shropshire's uplands was also fairly dispersed.

On the lower ground, the settlement pattern is more nucleated, with the largest settlements represented by the villages of More, Norbury and Wentnor. We can also identify a second category of slightly smaller hamlets (e.g. Asterton, Hardwick, Myndtown and Whitcot), which comprise of two or more farms and perhaps a small number of cottages. The origins of both types of settlement probably lie in the medieval period. Beyond these villages and hamlets there are also a number of outlying farms, many of which probably range in date from the eighteenth-twentieth centuries.


Figure 1 – HLC map for Lydham, Myndton, Norbury and Wentnor Parishes, Upper Onny Valley.




Appendix 8

6. 


6. View SE from Two Crosses toward Folly Bank.
The regular fields, with very straight hedges, visible on Folly Bank are typical of the field patterns that were created when the open rough grazing land on the hills was enclosed in the 19th century. Such field patterns are visible through much of the 'high' Clun Forest.

5. 


5. Offa's Dyke on Edenhope Hill.
The Clun Forest has some of the best preserved sections of this long distance earthwork, probably constructed in the late 8th century on the orders of an English King, Offa, to mark the western frontier of the kingdom of Mercia.

4. 


4. The Kerry Ridgeway Nr. Dog & Duck Cottage.
Reputed to be a prehistoric ridge top trackway, the Kerry Ridgeway was used in more recent times by drovers moving stock from pastures in the Welsh hills for fattening and sale in the markets of lowland England.

3. 


3. View S of upper Unk valley, towards Mainstone, from Crinkling Wood.
Woodland survives on many of the steepest valley sides in the Clun Forest, and is particularly characteristic of the eastern side of this area. Originally these would have been ancient broadleaved woodlands, although in the 20th century many were at least partially replanted with conifers.

2. 


2. View E from Three Gates of ancient field pattern at Bryn.
The irregular shape of the fields and the curving lines of the hedgerows indicates that the field pattern around Bryn and Argoed, visible on the opposite side of the Unk valley, is an ancient one, and may date to the 15th or 16th centuries.

1. 


1. Paddocks and closes at Mardu.
The pattern of small fields and wayside cottages at Mardu is typical of a 'common edge settlement'. Situated at the head of a narrow valley, beyond the former (medieval) open fields associated with Whitcot Keysett, they were probably originally established at the margins of the common rough grazing land that once existed on the hillsides above.

7. 

7. View NE from Bicton Hill toward the Kerry Ridgeway.
Much of the land between the Kerry Ridgeway and Bicton Hill was improved after World War II, and would originally have been upland heath.

8. 

8. Heathland at Rhos Fiddle.
Open heathland is now restricted to a small number of locations in the Clun Forest but in the Middle Ages would have been much more extensive, probably covering much of the higher ground.

9. 

9. View S from Dowke Hill over the upper Teme valley.
The view southwards from Dowke Hill reveals another area of irregular ancient fields, at least some of which were probably created through the clearance of woodland that once covered the valley sides. Today, the landscape in this area remains a small scale patchwork of farmsteads, fields and small woods.

Shropshire County Council (2005)

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