

Guide to Somerset's HLC

1 HLC project and background

1.1 Introduction

The Historic Landscape Characterisation (HLC) project for Somerset and Exmoor National Park (NP) was carried out between 1999-2000 with funding from English Heritage within the Environment & Property Department, Somerset County Council.

The project developed a method of identifying the historic landscape character of the present-day landscape, defining the landscape through a series of attributes, primarily the morphology of field boundaries, as well as processes of enclosure and measurement of past landscape changes. The Somerset method was based on the philosophy used in the Cornwall's Historic Landscape Characterisation, though the increased use of GIS and its adoption in the techniques of characterisation since that project allowed a more complex characterisation method to be used (see **2 Mechanisms of characterisation**).

The results of the project form a permanent and renewable database, reflexive to changes in the landscape or in the concepts of historic landscape. The project database allows other datasets to lie within it for assessment and analysis. It is envisaged that the database will be used alongside the SMR, providing information to local government officers, contractors and the general public, and form part of a strategy for the conservation of an integrated landscape policy for Somerset.

1.2 Project philosophy

The project used a number of philosophical considerations that underpin HLC and Somerset's methodology.

- Historic landscape character of the present-day landscape;
- Defining interactions in the landscape through time;
- Comprehensive coverage, all parts of the landscape are characterised;
- Archaeological approach at looking at the landscape created by human societies over many millennia;
- Landscape is the main source of information;
- Interpretation and perception as perceived by people;
- Landscape is dynamic not static and the HLC is flexible to changes in perceptions and in the physicality of landscape.

1.3 Major sources

The major sources for characterising the historic landscape were the paper **1:25000 OS** maps. The date of the individual maps established the present-day base-line of the project. These ranged between 1996 and 1999. A second stage of digitising the character entities using the digital **LandLine OS** data was carried out, dated between 1999 to 2000. The character entities were assessed against changes between the paper and digital map bases, matching the date of characterisation with the date of the source. An earlier map base, the **2nd edition 6" to 1 mile OS** maps dating to *circa* 1905, was used to assess the extent of boundary loss. This

therefore measured boundary loss between 1905 and 2000, over a long period, in which there were highs and lows of boundary removal. What is gathered is an overall trend in the removal of boundaries. Other sources were used during the characterisation stage and are listed and how they relate to character types in Appendix 2.

1.4 Summary of results

The county of Somerset, including Exmoor, totals 3,506 sq km. The Devon side of Exmoor covers 198 sq km, making a total of 3,704 sq km characterised by the project. The current land-use of Somerset was assessed and divided into 3 main components: the enclosed, unenclosed and other. The enclosed landscape covers 85% (3,149 sq km) of the landscape of study area. It comprises field patterns and woodland, and, in essence, it is this that defines the historic landscape character. The unenclosed landscape, which includes unenclosed land and coastal land, covers 7% (259 sq km) of the landscape of Somerset. The rest of the landscape, other landscape, including settlement, orchard, historic parkland, recreation, industry and other modern land-uses, covers 8% (296 sq km).

Each of the landscape components is further divided into sub types which represent more detailing about the current land-use. For example the enclosed landscape is divided into field patterns of enclosed land and wetland reclaimed. Likewise the enclosed woodland is divided into ancient woodland (semi-natural), ancient woodland (replanted), coniferous plantation and other woodland (i.e. everything not the first 3).

Focus for HLC is on the enclosed landscape, particularly its field patterns, and the description that follows is concerned with this part of the landscape. However, during any assessment of the landscape all parts are considered as the character including the most recent additions; character does not assign value to any part of the landscape, it identifies distinct areas of character which can be managed appropriately.

The enclosed landscape, particularly the field patterns therefore represents the most complex part of the database. There are several areas of data fields assigned in the database to describe the form, shape, pattern of the boundaries, the processes involved in their creation and present state, commentary on past changes to these and their interpretation, as time-depth, date of enclosure origins and previous land-use.

In this way, a complex description concerned with understanding the processes that have shaped the landscape as it is in the present-day has been undertaken. Each historical process has left an imprint in the landscape. Commentary and interpretation of the historic landscape evolution can be presented therefore as a map based and/or statistical analyses.

The development of a framework within which landscape policy, strategy and research can sit, to reflect on the changes that occur, not only to the historic landscape, but also, to the present-day one, when the landscape is perhaps re-assessed in 10 years time, should eventual follow from the initial work carried out in this project.

See detailed **Descriptions of the Enclosed landscape** date of enclosure interpretative types.

2 Mechanisms of characterisation

There are several stages to the characterisation method. They are described here in order that a broader understanding of the characterisation method will assist in the understanding of the data and consequently the results produced.

2.1 Stage 1 Initial characterisation

The first stage of characterisation is the Initial characterisation, which is a description of the raw data, or Attributes, derived from the 1:25000 OS maps. These are grouped as the Initial character types.

It applies the first stage of the concept of characterisation in producing a dataset from which models of historic landscape can be built.

2.1.1 Methods of identifying character

The characterisation method uses the structure, mentioned above, of dividing the landscape into Enclosed, Unenclosed and Other Components. Each part of the landscape was systematically characterised. The Other and Unenclosed Components, which was mostly derived from the 1:25,000 OS maps, was captured first. The Enclosed Component characterisation method used the 1:25,000 maps, along with the 2nd edition 6" OS maps. The technique used has been described in the project reports with examples (see Aldred 2001a & b).

To summarise, 4 steps were used to characterise the Enclosed landscape. In each of the entities the predominant form and pattern was assessed and assigned.

[Step 1] The field patterns were assessed individually and grouped into the forms Regular or Irregular. ***This makes comment of whether the field patterns are planned, planned but were affected by later alterations, or unplanned. Planned patterns will over have a Regular form, whereas altered planned and unplanned have an Irregular form.***

[Step 2] The entities are divided into the boundary types, or the patterns, within the group, as straight, sinuous, mixed or other. ***By identifying the pattern within the group further comment on the planned or organic development of enclosure and its date can be made.***

[Step 3] The entities were further divided by the size of the individual fields within group into small (0-3 hectares), small – medium (3-6 hectares), medium (6-12 hectares) and large (12 hectares +). ***The size of fields within the group suggest the possible land-use of the field at the time of enclosure and how it might have changed over time. When combined with the attributes in Step 1 –2, and 4, a greater understanding about the processes of enclosure can be made.***

Steps 1-3 are used to identify the character types entities.

[Step 4] Further assessment of other attributes are included, such as overall perceived pattern, boundary indicator and boundary loss, which all indicate the way historical processes have developed the field boundaries. ***A greater understanding and therefore delineation of the data can be carried out from including more information about the field boundaries and patterns identified by Steps 1-3.***

2.1.2 Data transfer

A Geographical Information System (GIS) is used to hold, display and analyse the data. MapInfo is used, but the data can be converted in most

formats, ArcGIS included. The characterisation data first mapped using the 1:25,000 OS maps, were then manually transferred into digital data, digitised at a 1:12500 scale, over the LandLine OS map 1:1,250/2500. Different scales of view will change the perception of the field pattern groupings with minimal diffusion, i.e. the core of the region, the direct correspondence between different data capture-scales, but to keep consistency to the data, its capture should be the same throughout to normalise the differences that can occur due to differing data capture and digitisation at different scales.

Each entity is assigned information into the data fields which describes the features within it, explaining why it has been drawn. This method of data capture should be applied when new additions are added, though the initial paper stage can be excluded, as can the digitisation of boundaries with the use of DNF LandLine data sets.

2.1.3 Data structure

Information should be assigned to each character entity, as summarised in 2.1.1, entered as abbreviated codings .

There were subsequent changes to the Somerset HLC in line with the recommendations produced during the HLC Method Review. These are detailed below.

The structure of the data during the original characterisation process consisted 19 data fields:

ID	Unique number assigned to each drawn entity
Character type straight)	Combination of Form and Pattern e.g. 1.1 (Regular
Group type	The Form of pattern, whether Regular or Irregular, or wood, settlement etc.
Size	Predominant field size
Indicator entity	Description of the processes of enclosure within the
Pattern	Description of the organisation of the pattern
Farm	Indicates what types of farms are within the entity
Period estimated data	Suggested period of the entity based upon factual or
Confidence assigned	Assessment of the confidence of the Period when
Interpretation entity	An estimate of the type of previous land-use of the
Enclosure method	If known, the type of enclosure method
Boundary loss	Comparison between 1905 and 2000 to assess the level of boundary removal
DB from a data set	The source information of the entity if directly taken
Name	Used in conjunction with the settlement character type
Area	Calculation of the area (sq km) using the GIS
Picture	Directory for attached images

Eastings	Centroid of the entity calculated from the GIS
Northings	Centroid of the entity calculated from the GIS
Morphology	A text description of the character type
P_land	An integer value given when the entity is interpreted
Chron	An integer value given when the entity is interpreted

Not all the data fields are completed, although Id, Character type, Group type, Size Interpretation, Boundary loss, Area, Eastings, Northings and Morphology are required fields.