

Our Wetland Heritage: An Integrated Approach Towards Managing Coastal Landscapes
Tool Kit: A Methodology for Assessing Historic Landscape Character

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PART 1: INTRODUCTION

In recent years there has been growing recognition of the social and economic importance of the historic environment. A small number of specific sites – such as archaeological monuments in the care of the State – can be preserved in an unchanging way, but for the vast majority of our historic assets the emphasis must be upon managing change within a dynamic environment: listed buildings, for example, are still lived in, and agricultural landscapes are still farmed. There are now rigorous procedures for ensuring the protection of individual nationally important archaeological sites (as Scheduled Ancient Monuments) and standing buildings (as individual Listed Buildings¹ and within the context of Conservation Areas), while the recording of archaeological remains that will be affected by development has been covered by PPG16 and its successor *Planning Policy Statement 5*.² There are now well-established procedures for assessing the archaeological potential of a proposed development site with a desk-top assessment of existing data followed by field-based evaluation. The emphasis in such work, however, is on two facets of the historic environment: below ground archaeology (either flattened through ploughing, or surviving as earthworks) and upstanding features such as buildings. In recent years there has also been a growing appreciation that the ‘historic landscape’ as a whole is of great cultural value and should be taken into consideration during planning decisions and in countryside management, and it is this which is the focus of this study.

The term ‘historic landscape’ refers to the present day, functioning, patterns of settlement, fields, land-uses (woodland, industry, recreation etc), and communication systems that make up our countryside and townscapes (in contrast to ‘relict landscapes’ that are earthworks and other upstanding remains which, while still visible and so contributing to the character of an area, have gone out of use). The concept was developed in the 1990s to stress the time depth and cultural importance of features within the historic environment that remain in daily use (e.g. Rippon 1996). We all appreciate the historic value of a medieval church and the earthworks of a deserted medieval village, but what has not been so widely appreciated is that the field boundaries surrounding these sites are also often medieval in date and were used by the same farmers who lived in that village and worshipped in the church. Importance is not just a factor of age, however, and whether a field system is 9th century or 19th century it is still a valuable part of our heritage. In 1991 this was recognised in a Government White Paper *This Common Inheritance* that invited English Heritage to prepare a list of landscapes of historic importance to complement the *Register of Parks and Gardens of Special Historic Interest*. The intention was to identify landscapes of particular historical importance and therefore worthy of greater protection, but English Heritage concluded that a simple Register was not appropriate because the whole landscape has a historic dimension and so is of value. Instead they sponsored a series of ‘Historic Landscape Characterisation’ projects (HLCs) carried out by/on behalf of planning authorities (mostly counties, along with some AONBs and National Parks).³ In Scotland a similar approach was adopted – known as ‘Historic Land-Use Assessment’ – while the Welsh approach is called ‘Landmap’.⁴ Details of the historic landscape characterisations that have been carried out for a particular area will be available through the local Historic Environment Service. These techniques are an important step forward in raising awareness of the time-depth present within the modern countryside, and have produced a rapid assessment of historic landscape character across much of the country. We are now at the stage, however, where more detailed research is required in particular locations and this paper outlines how such a piece of work should be carried out. In particular, this Toolkit stresses the need to add depth to the traditional focus of HLC that has been on the morphology of field systems, by incorporating other facets of landscape character such as place-names and vernacular architecture through what can be called historic landscape analysis (Rippon 2004; in press).

¹ This paper was written in March 2011 when it was unclear whether government proposals to unify ‘Listed Buildings’ and ‘Scheduled Ancient Monuments’ into a single list of ‘historic assets’ will be implemented.

² <http://www.communities.gov.uk/publications/planningandbuilding/ppg16>; now replaced by *Planning Policy Statement 5: Planning for the Historic Environment* (<http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps5/>)

³ <http://www.english-heritage.org.uk/professional/research/landscapes-and-areas/characterisation/>

⁴ Scotland: <http://jura.rcahms.gov.uk/HLA/Map>; Wales: <http://landmap.ccw.gov.uk/>

A note on terminology and key concepts

- The **historic landscape** refers to the present-day patterns of fields, settlements, communication systems (including roads, footpaths, canals, railways, and airfields), and land-uses (including agricultural, rough ground, woodland, recreation, and defence/military).
- **Relict landscapes** are the above ground remains of cultural landscapes that have gone out of use and, although no longer performing their original function, still contribute to the character of the present day historic landscape (e.g. ruined buildings and earthworks).
- **'Historic Landscape Characterisation' (HLC)** (note capitalisation) is the term used for the English Heritage sponsored work carried out at a county scale. There are, however, a variety of other ways that the historic landscape can be studied and the term **'historic landscape analysis'** is used when referring to this broader field of research (Rippon 2004; in press). Note that 'historic landscape analysis' is not a specific technique, but an umbrella term for a wide range of methodologies: 'Historic Landscape Characterisation' is an example of – or a sub-set of – historic landscape analysis.
- **Vernacular architecture** refers to local traditions of building materials and design.

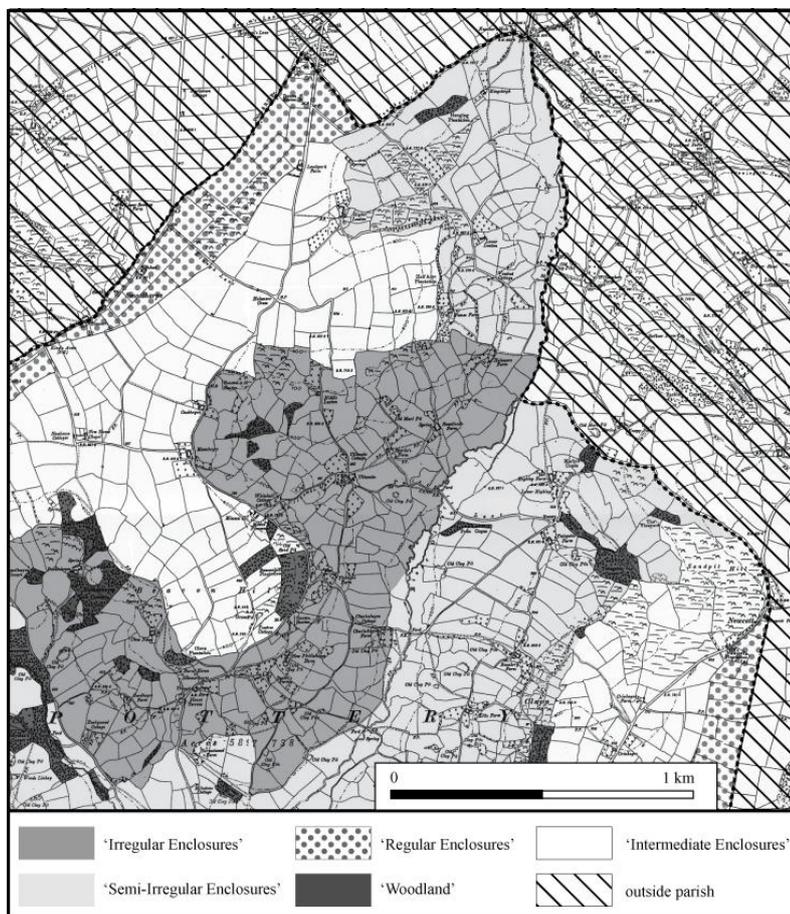


Figure 1: example of a simple historic landscape characterisation (from Rippon in press). 'Irregular enclosures' are small irregular-shaped fields suggestive of piecemeal enclosure of woodland and open moorland in the medieval period. 'Regular Enclosures' are fields with dead-straight sides that were created following the enclosure of common pasture in the post medieval period. 'Intermediate Enclosures' are characterised by long, relatively straight roads (though rarely with exactly parallel sides) which run through blocks of broadly rectilinear fields that lack the dead-straight sides of 'Regular Enclosure'. 'Semi-Irregular Enclosures' are characterised by a patchwork of fields which are neither highly irregular nor noticeably rectilinear in shape, and are associated with narrow, winding lanes.

PART 2: A MULTI-DIMENSIONAL APPROACH TO ASSESSING HISTORIC LANDSCAPE CHARACTER

There is a variety of schemes for assessing historic landscape character. Historic Landscape Characterisation is essentially a form of morphological classification based on the land-uses and field-boundary patterns depicted on maps: once urban areas, woodland, industry, recreational uses, and unenclosed land are delimited, we are essentially left with an agricultural landscape of hedged, banked or ditched fields whose different plan forms can be subdivided into different types (e.g. Figure 1). The morphological characteristics of each type of field boundary pattern usually tell us something about the history of that particular fieldscape. Large areas of rectilinear fields, for example, with dead straight sides and sometimes right-angled corners, were clearly laid out using advanced surveying techniques in the relatively recent past, and may result from the enclosure of open fields or common land through Act of Parliament in the 18th or 19th century (e.g. ‘Regular Enclosures’ on Figure 1). There are, however, many aspects of historic landscape character that traditional Historic Landscape Characterisation does not take into account including the settlement pattern, local styles of architecture, the language of landscape preserved within place-names and field-names, and the cultural associations of a particular place, and raising their profile is a particular aim of this Toolkit.

The suggested scheme for historic landscape analysis outlined below does take into account this far broader view of historic landscape character, and is designed to be used in two ways: assessing the historic character of one particular landscape, and comparing the character of contrasting areas across a wider region. For a detailed and authoritative piece of work this will require the skills of an experienced practitioner, as interpreting maps and documents, understanding the complex history of a standing building, or unravelling the meaning of a place-name, are complex issues. There are, however, some relatively straight-forward sources and techniques that require less experience, and what follows is designed as a guide to these.

The various strands of evidence that contribute to historic landscape character can be studied in one of two ways: some facets can be mapped in detail, while others can only be assessed more broadly. For example, it is possible to plot the location of every residential building within a landscape using easily accessible maps, and so characterising the settlement patterns of a study area is relatively simple. In contrast, it is not possible to understand the architectural history of every building, as for older structures it is essential to carry out a careful survey of its interior in order to unravel its history. Listed Buildings records, and in particular the website ‘Images of England’ (<http://www.imagesofengland.org.uk/>) can be consulted to give an impression of the character of many surviving pre-c.1840 structures, but this can at best only give a general, qualitative impression of the built environment.

2.1 Defining a study area

For development-led research, or countryside management work carried out for a particular land-owner, the geographical scope of the project will be prescribed by the client. This may not, however, make for an ideal study area for appreciating the history of a landscape as it may comprise only part (or parts) of a larger block of countryside or townscape that can only be understood when studied in its entirety. Ideally, a larger study area should therefore be employed to place a particular development in context, and where possible that study area should embrace complete, coherent, blocks of landscape such as whole ancient ecclesiastical parishes⁵ or an entire topographical zone. An example of this is shown on Figure 2. In the left hand column there is a series of maps that show how the South Essex Marshes changed over time, with a vast area of intertidal saltmarsh in the early medieval period that saw very limited reclamation later in the medieval period, but far more extensive embankment in the 17th century. This ‘big picture’ could be reconstructed because the historic landscape analysis looked at the whole wetland area, not just the fragments that fall within a series of actual and proposed RSPB nature reserves. The right hand column shows what the results would have looked like if the project had just examined the area of the reserves, although in practice it would have been difficult to achieve even this limited understanding because the fragmentary evidence for former tidal creeks and sea walls within each reserve would have been extremely difficult to interpret.

⁵ There is an important distinction between civil and ancient ecclesiastical parishes. The latter originated in the 10th to 12th centuries and were the smallest territorial units in the medieval landscape, used for both ecclesiastical and civil administration. Civil parishes are modern administrative units that have often been created through amalgamating several smaller ancient ecclesiastical parishes, or by creating entirely modern boundaries. When trying to understand the history of a landscape, it is essential that it is ancient ecclesiastical parishes that are used when defining the boundaries of a study area.

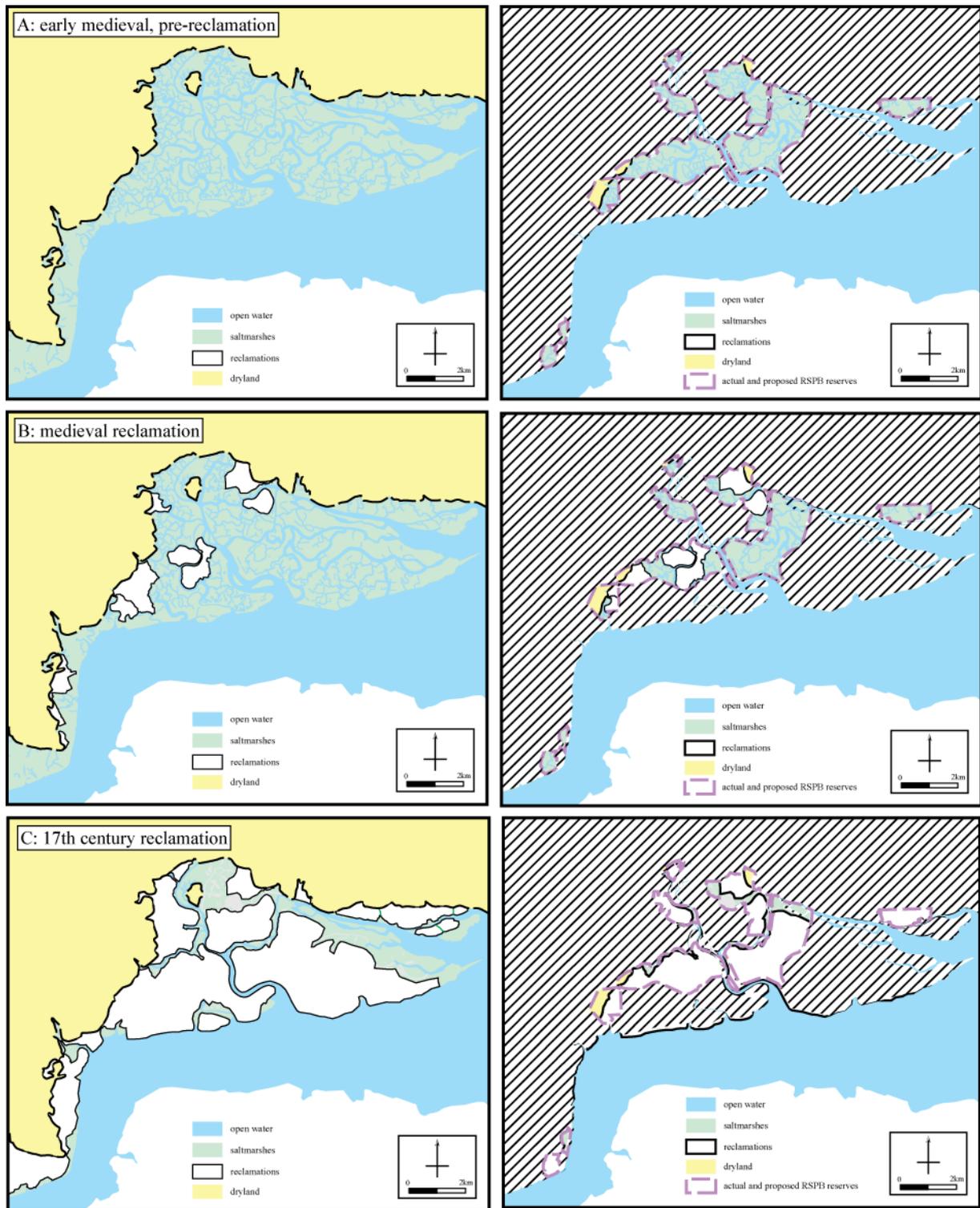


Figure 2: Results from the South Essex Marshes project. The left hand column shows how the area changed over time, with a vast area of intertidal saltmarsh in the early medieval period, that saw very limited reclamation later in the medieval period, but far more extensive embankment in the 17th century. This ‘big picture’ could be reconstructed because the historic landscape analysis looked at the whole wetland area, not just the areas within a series of actual and proposed RSPB nature reserves. The right hand column shows what the results would have looked like if the project had just examined the area of the reserves, although in practice it would have been difficult to achieve even this limited understanding because the fragmentary evidence for former tidal creeks and sea walls within each reserve would have been extremely difficult to interpret (after Rippon and Wainwright 2011).

2.2 The method in summary

A successful analysis of historic landscape character must be carried out by an experienced practitioner, and what is laid out here is a suggested list of landscape components that should be taken into consideration. All landscapes are, however, different and this template may have to be modified when applied to particular places. Whereas current schemes of HLC tend to focus upon morphological aspects of the landscape – notably field boundary patterns – a holistic assessment of the historic landscape also needs to take into account other features such as place-names, vernacular architecture, and cultural associations. Table 1 provides a template for the work that could be carried out, identifying some of the questions that could be asked, while Table 2 (at the end of this report) provides an example of a completed form for the South Essex Marshes.

Table 1: template (see Table 2, at the end of this report, for a completed example)

Extent of study area			
Definition of study area boundaries			
Landscape component	Question	Evidence	Sources
Basic components of the physical environment			
Geology	What are the underlying geology, soils, topography and drainage pattern that together form the physical character of the study area?		
Soils			
Topography/relief			
Drainage pattern			
Current agricultural potential			
Basic physical components of the historic landscape (as evident on the Ordnance Survey First Edition Six Inch map of c.1860)			
Settlement pattern	What are the key physical components of the historic landscape (settlement patterns, communication systems, field boundary patterns, and unenclosed land)?		
Road network			
Field boundary pattern			
Unenclosed land			
Other facets of the historic landscape			
Vernacular architecture	What are the distinctive characteristics of the local architecture, and how do these contribute to the historic landscape character?		
Place-names	Are there any place-names that are particularly characteristic of this landscape, and what do they tell us about its history?		
Field-names	Are there any field-names that are particularly characteristic of this landscape, and what do they tell us about its history?		
Field boundary form	What is the characteristic form of the field boundaries?		
History of land-use	What are the predominant patterns of land-use, and how have these affected the landscape character?		
Non-agricultural land-uses	Are there non-agricultural features of the landscape that form an important part of its character?		
Relict landscapes	Are there features such as earthworks or ruined buildings that are now abandoned but which still contribute to the character of the historic landscape? If so, what do they tell us about the history of this landscape?		
Cultural associations			
Past perceptions	How was this landscape perceived by past travel writers and visitors to the area (e.g. was this a fertile agricultural landscape, or a hostile wilderness)?		
Folklore	How was this landscape perceived by local communities?		
Historical associations	Does the landscape have particularly strong cultural associations that contribute to its character and importance?		

PART 3: THE METHOD IN DETAIL

3.1. Base layers of primary data

The starting point of any historic landscape analysis is a series of basic layers of primary data. The most convenient way of storing, manipulating and presenting this data is electronically, for example in a Geographical Information System (GIS), although computer screens are small and the landscape is large, so when characterising the morphology of the landscape in particular it is essential to have access to hardcopy mapping that allow simultaneous comparisons of morphology across wide areas. Three basic layers of data are:

1. **Modern Ordnance Survey mapping** (must be a minimum of 1:25,000 in order to show field boundaries). Gives key information on the physical landscape (contours, drainage systems, coastlines etc), and the historic landscape as it exists today. Digital data available through Digimap (<http://edina.ac.uk/digimap/index.shtml>).
2. **Ordnance Survey First Edition Six Inch to the Mile mapping** (1:10,560) of the mid to late 19th century. The earliest mapping to cover the whole country at a uniform scale and shows the landscape before modern urban expansion and agricultural intensification (that in many areas has led to extensive loss of field boundaries). These maps will need to be reduced in scale and geo-referenced to the modern mapping, and contain a wealth of information including the patterns of fields, road and settlements, drainage and flood defence systems, the territorial framework within which the landscape was exploited, and place-names (e.g. Figure 3). Digital data is available through Digimap (<http://edina.ac.uk/digimap/index.shtml>).
3. **Ancient ecclesiastical parish boundaries**. In most cases these are the parish boundaries shown on the Ordnance Survey First Edition Six Inch maps. An electronic transcription of all the parish boundaries as depicted on the tithe maps of c.1840 is available in Kain and Oliver's (2001) *Historic Parishes of England & Wales* (available online: <http://www.ahds.ac.uk/history/collections/hpew.htm>).

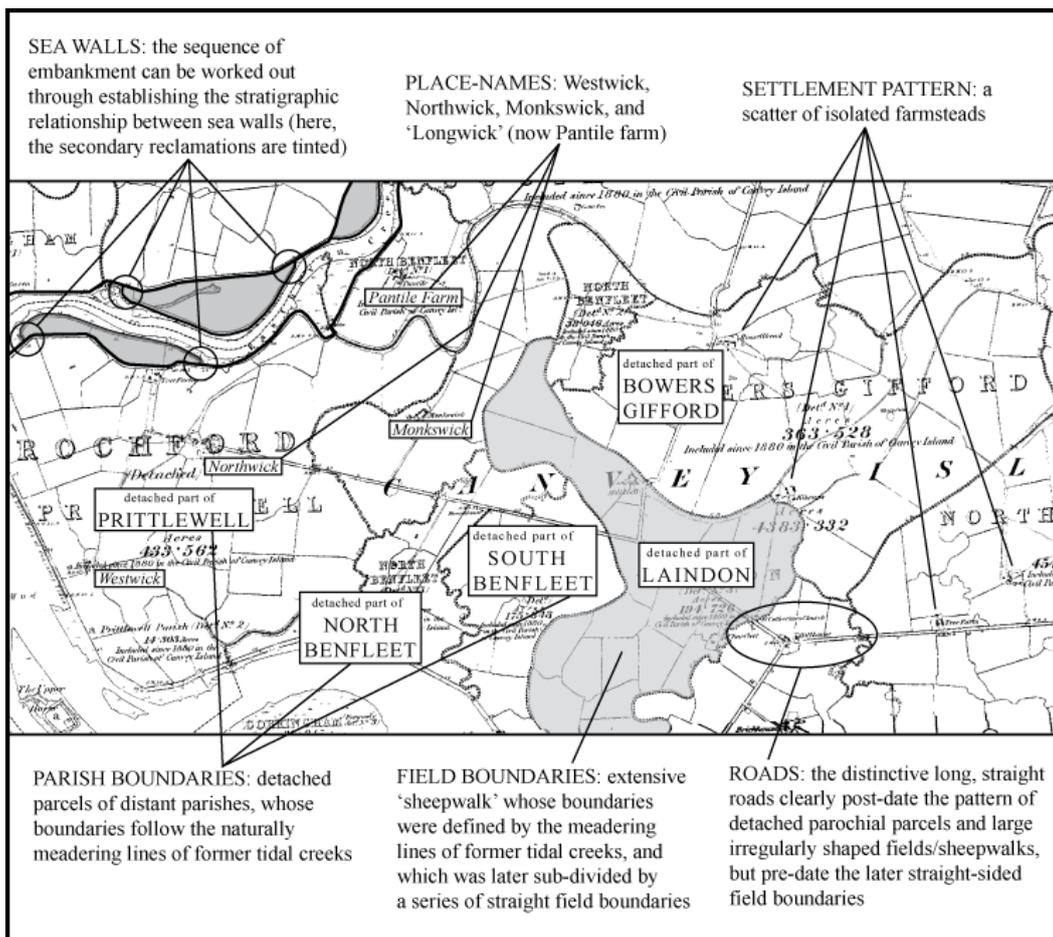


Figure 3: Extract from the Ordnance Survey First Edition Six Inch map covering part of the South Essex Marshes, with added interpretation.

Two other layers of data will be useful if available:

- **Aerial photographs** (that will require rectification), most notably those taken in a series of flights undertaken by the RAF in the late 1940s and which show the landscape before late 20th century agricultural intensification destroyed so much of the countryside
- **LiDAR** ('Light Detection and Ranging') data. LiDAR is a form of aerial reconnaissance that accurately maps topography. On flat landscapes such as reclaimed wetlands it has sufficient resolution to detect subtle but significant natural and man-made features. At present, only limited parts of the country have been surveyed, most notably the Environment Agency's work in flood risk areas.

3.2. The Physical Landscape

A variety of other primary source material can be added to the GIS (all enlarged/reduced to the same scale and geo-referenced using the modern Ordnance Survey mapping). These can include:

3.2.1. Geology: The rocks that lie beneath the surface of the landscape influence relief, drainage, and soils, that together have a profound effect upon the character of the countryside, for example in influencing agricultural practices and the materials used in traditional local building techniques. One of the reasons why the British landscape is so rich and varied in its character is that its geology is so complex, and it is therefore important to gain a basic understanding of the geology of a study area. The British Geological Survey (formerly the Institute of Geological Sciences) mapping is available at a variety of scales (<http://www.bgs.ac.uk/catalogue/home.html>). A good starting point is the 1:625,000 (about 1 inch to 10 miles) mapping that covers the whole of mainland Britain in two sheets (north and south), with separate versions for the 'solid' (i.e. underlying bedrock) and 'drift' (i.e. later, superficial deposits such as alluvium). The larger scale 1:250,000 series covers mainland Britain in 33 sheets, with separate maps for 'solid' and 'quaternary' (i.e. drift) available for many areas. The most detailed mapping of the whole country is 1:50,000 which covers mainland Britain in 360 sheets, each covering 30 km east to west and 20 km north to south. There is an accompanying 'memoir' describing the geological sequence (e.g. Ussher 1902; Edwards 2000), while a series of 'regional guides' provide a more general overview (e.g. Edmonds *et al.* 1975). Digital data is available through Digimap (<http://digimap.edina.ac.uk/main/index.jsp?useJS=true>).

3.2.2. Soils: The geology that forms the foundations of our landscape has been subject to a variety of natural processes (weathering) and cultural activities (notably ploughing) that have produced the surface soils of today. Soils in England and Wales have been mapped by the National Soil Resources Institute based at Cranfield University (formerly the Soil Survey of England and Wales). A simplified map at a scale of 1:1,000,000 (Avery *et al.* 1975) is a very useful summary of the main characteristics of the different soil types, while the most detailed mapping which covers the whole of England and Wales is published in five sheets at a scale of 1:250,000 (Mackney *et al.* 1983). Selected areas have been surveyed at 1:25,000, 1:50,000, or 1:63,360 (<http://www.silsoe.cranfield.ac.uk/nsri/services/pdf/publicationslist.pdf>). These detailed maps have an accompanying 'memoir' that describes the soils in that area, as well as providing a useful summary of the underlying geology (e.g. Clayden 1971). A summary soil maps is available on the MAGIC website (<http://www.magic.gov.uk/staticmaps/regional.htm>).

3.2.3. Topography: Topography is shown on modern Ordnance Survey mapping at scales of 1:250,000 ('Travel Map' series), 1:50,000 ('Landranger' series), and 1:25,000 ('Explorer' series). On modern editions of Ordnance Survey maps, data on relief takes the form of contours, although some older series used much clearer cartography, with different coloured tints between the contours giving an instant impression of the topography of a region. The early 19th century One Inch to One Mile series (1:63,360) presents topography in an altogether different way with hachures used to denote steeper slope. This is a more schematic and subjective way of representing significant topographical features but one that is very effective, particularly for a newcomer to an area who wants a simple introduction to the overall lie of the land. It is now possible to undertake a 'virtual' flight across a landscape using the website Google Earth (<http://earth.google.com/>).

3.2.4. Drainage: Drainage systems are depicted on all Ordnance Survey mapping, and 1:25,000 Explorer series maps are particularly useful in that they show field boundaries in wetlands as blue, reflecting the permanently high water table in these areas. The smaller-scale 1:50,000 Landranger series do not show individual field boundaries but, like the Explorer series, they do depict streams and rivers. Finding the names of particularly minor rivers and streams can be a challenge as they often do not appear on modern maps, though searching a variety of older Ordnance Survey map series, particularly the larger scales, usually locates a name. Within a historic landscape study the major rivers and streams should be transcribed to the GIS in a single layer, and the wetland areas identified in another. The location of the fen-edge will show up clearly on any LiDAR data. If that is not available then its approximate extent can be determined from the 1:50,000 geological maps (and any soil maps that exist for a particular area), although establishing the exact location of the fen-edge requires more careful analysis of the landscape through the examination of maps (in many areas the fen-edge is marked by a field boundary) or even fieldwork.

3.2.5. Current agricultural potential: there are two assessments of how geology, soils, topography, and drainage combine to influence the agricultural potential of area:

- ‘Agricultural Land Classification’ (Ministry of Agriculture, Fisheries and Food, 1979) which is available online (<http://www.magic.gov.uk/staticmaps/regional.htm>)
- ‘Land Use Capability’ as defined by the Soil Survey of England and Wales (Mackney 1979).

3.3. Physical components of the historic landscape

Using the base layers of primary data in the GIS, various physical components of the historic landscape can now be characterised. The ultimate aim of this is a holistic view of landscape character that embraces all of its components, but for the purposes of characterisation it can be helpful to disaggregate it into its separate components (see Rippon 2004, 21-6). For most areas of countryside this involves looking at four key components – settlement patterns, road networks, field boundary patterns, and unenclosed land (rough pasture and woodland) – while in particular environments there are additional key character-defining components such as flood defences. The following analysis is based upon characterising patterns on the Ordnance Survey First Edition Six Inch maps of c.1860-1880.

3.3.1. Settlement pattern

Settlement patterns across Britain vary enormously ranging from large, nucleated villages in the East Midlands through to small hamlets and isolated farmsteads in the West Country. Roberts and Wrathmell (2000; 2002) have characterised the settlement patterns across England, and this is an excellent starting point for any historic landscape study. They mapped settlement in a simple, morphological way: a dot for each nucleation, and a form of shading for different densities of dispersed settlement based on the number of settlements within four square kilometre boxes. That approach was appropriate for a study that had to cover the whole country, although for more detailed local research it is important to see settlement in the context of the territorial framework within which the landscape was managed (i.e. parishes), and the nature of the field systems that surrounded the settlements. An historic landscape study will need to develop a typology of the settlement patterns present within its study area, of which the following scheme is an example (from Rippon in press). Four types of settlement pattern are identified based on the Ordnance Survey First Edition Six Inch maps, each divided into two sub types, with a fifth category of parish where the pre-18th century settlement pattern has been destroyed by later development (these are all illustrated elsewhere: Rippon in press):

- **Type A:** Village based settlement patterns (i.e. a large cluster of farmsteads, cottages and service provision such as a church, manor house, smithy, inn, school etc) where any isolated farmsteads appear to post-date the enclosure of former open fields that once covered the majority of land in the parish. Includes villages that have at their core a planned block of tenements, and more amorphous plans that appear to have grown more slowly. This type can be sub-divided into:
 - Type A1: parishes with a single village whose open fields embrace most of the land in the parish.
 - Type A2: large parishes with a large central village and a number of smaller hamlets, each associated with open fields, that altogether embrace most of the land in the parish.

- **Type B:** Largely village based settlement patterns, but with some dispersed settlement in peripheral parts of the parish. This type can be sub-divided into:
 - Type B1 where the village is clearly associated with a former open field.
 - Type B2 where there is little evidence in the morphology of the 19th century historic landscape for the village having been surrounded by open field.
- **Type C:** More dispersed settlement pattern characterised by small nucleations (hamlets) and some isolated farmsteads. This type can be sub-divided into:
 - Type C1: parishes with several hamlets, one or more of which was associated with small open fields. Settlements around the parish churches may show some of the characteristics of villages, notably the inclusion of service provision (church, school, shop, inn etc) and cottages that could have housed non-agricultural workers, alongside working farms. Unlike true villages, however, these were one of many settlements in the parish, and the land farmed from them covered only a small proportion of the parish.
 - Type C2: parishes with several hamlets but little evidence in the morphology of the 19th century historic landscape of associated open fields
- **Type D:** Strongly dispersed settlement patterns (hamlets and isolated farmsteads) and closes that do not appear to have been former open fields. There are two variants:
 - Type D1: wholly dispersed settlement patterns with no significant nucleations
 - Type D2: parishes with a wholly dispersed rural settlement pattern but also a substantial nucleated settlement that originated as a small medieval town.
- **Type E:** Parishes that are unclassified due to the loss of the medieval landscape, for example through urban expansion or the creation of landscape parks and gardens.

Within a historic landscape study, settlement patterns can be mapped in a variety of ways. Each settlement could be marked by a symbol, with different symbols representing different forms of settlement (e.g. isolated cottage, isolated farmstead, hamlet, village etc), or each parish could be given a form of shading that corresponds to the type of settlement pattern.

3.3.2. Road networks

The network of roads and trackways that linked settlements is an important part of landscape character, and can be very informative of a landscape's history: long straight roads of uniform width are likely to be recent, while sinuous lanes of irregular width and wide verges are likely to be ancient. A simple typology of roads can be prepared, while mapping them also provides a physical framework around which the rest of the landscape can be analysed.

3.3.3. Field boundary patterns

Characterising fieldscapes is at the heart of the various schemes of Historic Landscape Characterisation (HLC), for which there are various guides available and published examples (e.g. Rippon 1996; 2004; 2006; in press; Herring 1998; Aldred and Fairclough 2003). Essentially, an HLC regards each parcel of land (e.g. an agricultural field) as a discrete 'polygon', which has certain 'attributes' or properties. The methodologies adopted in the earlier English Heritage sponsored HLCs varied from county to county as both the philosophy behind HLC, and the technology available, were both new and evolving. The pilot project in Cornwall, along with its immediate successors were paper-based, and entailed ascribing each parcel of landscape to one of a series of pre-determined 'historic landscape types' (e.g. 'Medieval Fields', 'Ancient Woodland' etc) which in turn were simplified into 'zones' (e.g. 'Anciently Enclosed Land' which included field systems of prehistoric and medieval type) (Herring 1998). The next generation of HLCs saw several methodological changes. Most notable was the use of GIS (though by digitising paper-based work rather than using a fully electronic map-base) which allowed every single parcel of landscape to be assessed and/or tagged with a set of 'attributes' (size, shape etc) to which an interpretation could then be added to define blocks of uniform 'historic landscape character type'. These second generation HLCs took longer than the earlier examples, but dispensed with the use of earlier cartographic sources, lacked such detailed interpretative commentaries, and moved towards more morphological descriptions based upon the modern Ordnance Survey mapping. Later HLCs in England started to see GIS reach its full potential in that the 'base-map' was itself electronic. The use of GIS also facilitates the integration of HLC with other sources (e.g. digitally rectified air photographs, early cartographic sources, and other databases such as Sites and Monuments Records). This allowed

each 'polygon' to be tagged with increasing numbers of attributes, and while there was a tendency for strongly morphological descriptions these could be interpreted through further appropriate tags. Another key aspect of this 'generation' of HLCs was the distinguishing of present and past historic landscape character where the two differed significantly.

When carrying out an historic landscape study any existing HLC should be consulted, although a bespoke characterisation could also be carried out in which case four basic principles should be born in mind. Firstly, that with an infinite variety of field shapes and sizes, grouping them into types is an inherently subjective process that must be based upon experience and professional judgement: an historic landscape characterisation should be regarded as *an* interpretation of the evidence, not the definitive answer. Secondly, if the aim is to understand the history of the landscape then the characterisation should be based on the oldest surviving cartographic sources that cover the entire study area (usually the Ordnance Survey First Edition Six Inch maps of *c.* 1880) as these reflect the landscape before the ravages of modern agricultural intensification. Thirdly, some historic landscape character types are more clearly defined than others, and as such the most effective way of working is to quickly delimit the more straight forward types (e.g. 'Woodland', 'Unenclosed Land' and 'Late Enclosure'), and then spend longer tackling the remaining, more complex, areas. Fourthly, the identification of morphological types must be a separate process from determining their age and understanding the processes that lay behind their creation: description must be kept separate from interpretation. The latter made easier by adding depth to the characterisation by looking at additional categories of data such as patterns of land-ownership and land-occupancy as recorded in the Tithe Surveys of *c.* 1840 (e.g. where former open fields were enclosed in a piecemeal way, through the agreement of the local community, then patterns of land-holding may be very fragmented, reflecting the scattered distribution of strips in the former open field). This is illustrated elsewhere (Rippon in press).

3.3.4. Unenclosed land

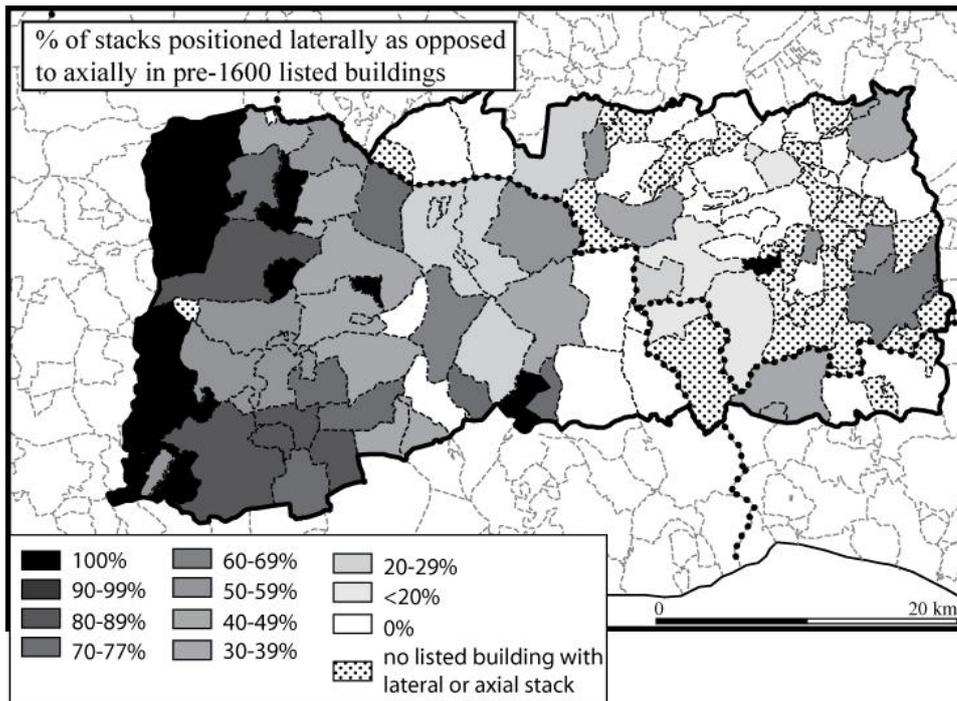
By the 19th century most of the lowland landscape was enclosed and agriculturally improved, although in upland areas there remained large areas of open, unenclosed rough pasture. Even in the lowlands there survived small areas of unenclosed common, along with areas of woodland and intertidal saltmarsh. These unenclosed areas form an important part of landscape character, and can be mapped from the Ordnance Survey First Edition Six Inch maps.

3.4. Other facets of historic landscape character

The analysis of settlement patterns, road networks, field boundary patterns, and unenclosed land is essentially a study of morphology based on the 19th century Ordnance Survey First Edition Six Inch maps, but there are other facets of the settlement pattern and field systems that ideally we should take into account.

3.4.1. Vernacular architecture

The traditional approach of historical geographers towards characterising settlement is to look purely at its distribution across the landscape (i.e. settlement patterns: see above). There are, however, two other ways that settlements contribute to landscape character: the styles of architecture (discussed here) and their place-names (considered below). A detailed assessment of vernacular architecture will require professional advice, although a rapid drive-through survey will reveal some of the immediately apparent characteristic features and building materials of that particular landscape. All buildings built before 1700 which survive in anything like their original condition are listed, as are most of those built between 1700 and 1840. The listed building records can be consulted at <http://bonline.english-heritage.org.uk/Login.aspx> (includes grid references which are absent from <http://www.imagesofengland.org.uk/> although this database includes a photograph of most buildings), and an assessment of these records will similarly reveal some of the immediately apparent characteristic features and building materials of that particular landscape. An example of how regional variation in vernacular architecture can contribute to landscape character is shown in Figure 4 (and discussed in depth in Rippon in press).



three-room cross-passage plan with axial stack (Kingstone, Somerset)

three-room cross-passage plan with lateral stack (Tiverton, Devon)

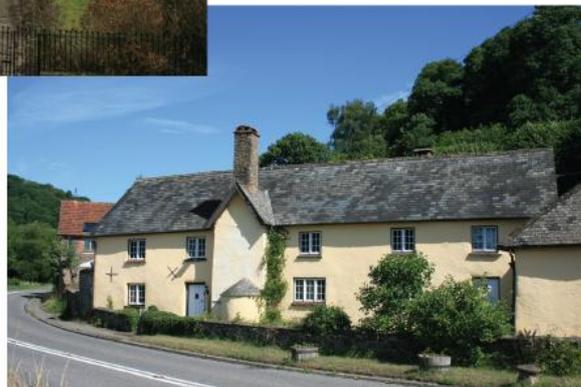


Figure 4: regional variation in where the chimney stack was located in late medieval and early modern houses across a study area straddling the Blackdown Hills in eastern Devon, southern Somerset and western Dorset. An 'axial stack' was located within the house, normally backing onto the passageway that led from the front door through to the back of the house, and was characteristic of areas to the east of the Blackdown Hills. A 'lateral stack' was located on the outside of the building, and is characteristic of areas to the west of the Blackdown Hills.

3.4.2. Place-names

A neglected aspect of landscape character that is not taken into consideration in traditional schemes of HLC is its place-names. If one was blindfolded and taken to a crossroads in a well-wooded landscape with signposts for Rolvenden, Benenden, Biddenden, and Tenterden then the dominance of '-den' place-names would suggest that you

are in the Weald of Kent, Surrey and Sussex.⁶ If the places on the signposts were Trewithen, Polmassick, and St Ewe then you are likely to be in Cornwall, while Agglethorpe, Melmerby, Swinthwaite, and Coverdale are characteristic of Yorkshire. These examples of place-names forming an important part of landscape character are related to the history of these areas: the survival of extensive wood-pasture in the Weald, the lack of Anglo-Saxon influence in Cornwall, and the presence of Scandinavian settlers in the north of England. There are also significant differences in the language of landscape that are related to local dialects, such as the term used for drainage channels on the wetlands surrounding the Severn Estuary: reens in Monmouthshire, rhynes in Somerset, and rhines in Gloucestershire. Interpreting the meaning of place-names is a complex issue, and modern forms can be a very unreliable indication how they originated. Many counties have detailed volumes published by the English Place-Name Society (<http://www.nottingham.ac.uk/english/ins/>) that explain both parish names and individual farmstead and other minor names, and such volumes contain a wealth of information on locally distinctive names (e.g. Figure 5).

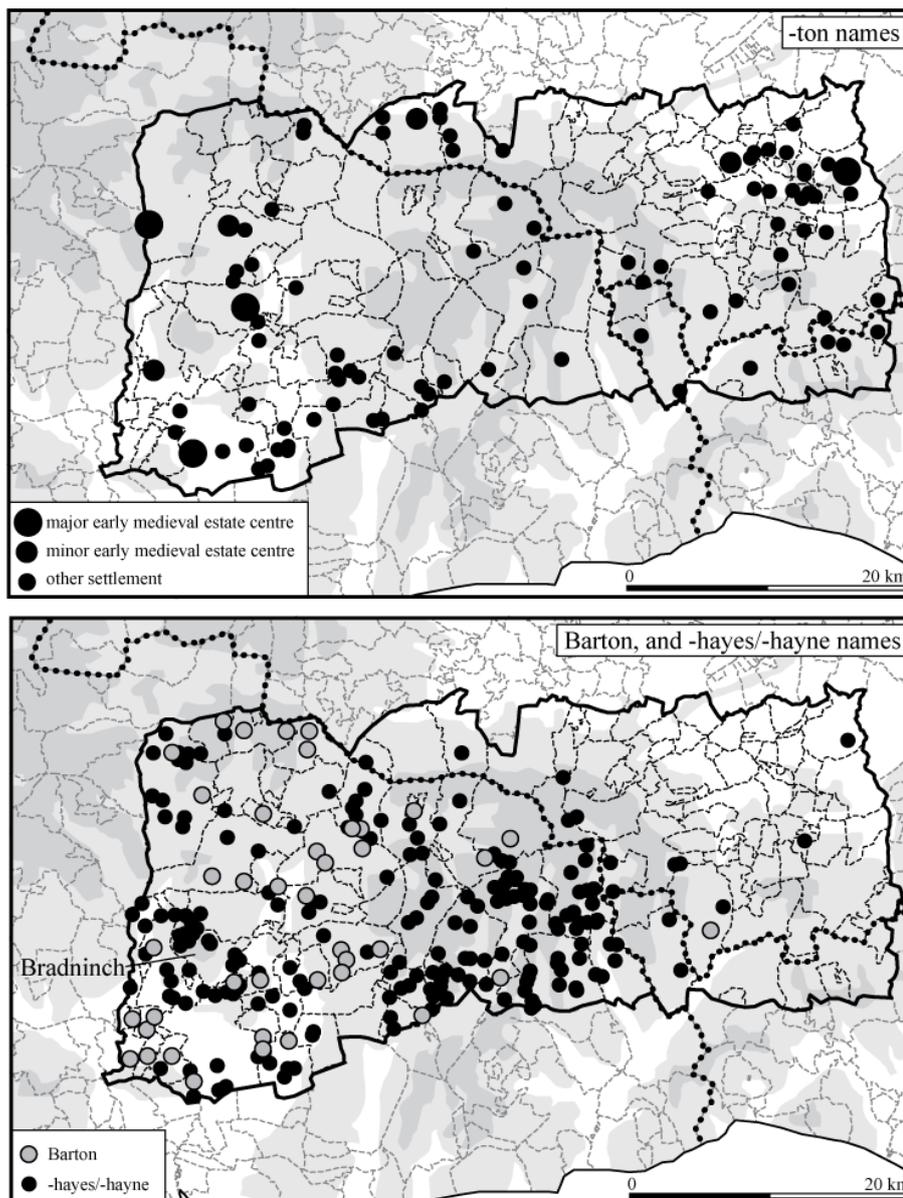


Figure 5: selected place-names across a study area straddling the Blackdown Hills in eastern Devon, southern Somerset and western Dorset (Rippon in press).

⁶ Of the eighteen large parishes of the Kentish Weald, eleven have ‘-den’ place-names: Benenden, Bethersden, Biddenden, Frittenden, High Halden, Hormonden, Marden, Newenden, Rolvenden, Smarden, and Tenterden.

3.4.3. Field-names

In some areas field-names form a distinctive part of landscape character. In Figure 6, for example, the western part of the study area (in east Devon) was characterised by ‘park’ field-names that in this region was a word used for an enclosed field (another local field-name for an enclosed field, ‘Gratton’, is also a characteristic feature of this landscape). In the central area (corresponding to the high ground of the Blackdown Hills) arrish/errish etc are very common, which appear to have been used for land recently brought into cultivation (the field-names ‘brake’ and ‘breach’ are also characteristic of this area). In the east of the study area (the lowlands of central Somerset) there are large numbers of ‘furlong’ names that reflect the former extent of common field in this area.

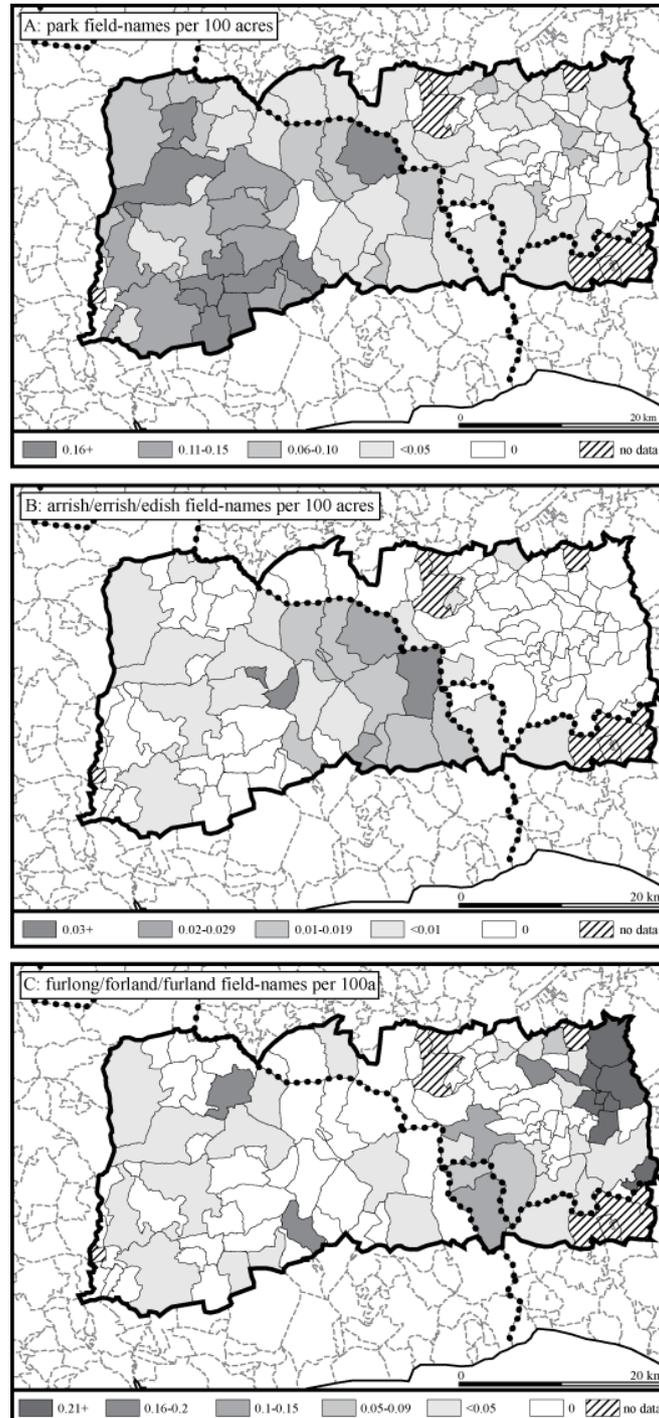


Figure 6: selected field-names across a study area straddling the Blackdown Hills in eastern Devon, southern Somerset and western Dorset (Rippon in press).

3.4.4. Field boundary form

In traditional HLC it is the morphology of the field boundary patterns that is characterised, but the nature of the field boundaries themselves can be a particularly characteristic feature of a landscape (e.g. the water-filled ditches of the South Essex Marshes, contrasting with the hedges, ditches and small banks on the adjacent dryland areas).

3.5. History of land-use

An integral part of a landscape's character is its pattern of land-use, which across the majority of our rural countryside is primarily agricultural. A variety of easily accessible sources make it possible for a rapid assessment to be made for most regions:

3.5.1. Land Utilisation Survey of the 1930s

In the 1930s there was a remarkable project to map land-use field by field across the whole country known as *The Land Utilization Survey of Britain*. The results were published in a series of county reports (e.g. Somerset: Stuart Menteth 1938), while a summary map is available online (<http://www.visionofbritain.org.uk/maps/index.jsp>).

3.5.2. The Tithe Survey, c.1840

As part of the surveys carried out following the Tithe Commutation Act of 1836, a report (the 'Tithe File') was produced for each parish that discussed the acreage and yield of crops, the animal husbandry, and a general description of the local soils and agricultural practices (Kain 1979, 227). Roger Kain's (1986) *An Atlas and Index of the Tithe Files on Mid-Nineteenth Century England and Wales*, the data for which is available electronically (<http://ahds.ac.uk/catalogue/collection.htm?uri=hist-1659-1>), uses the Tithe Files to provide an overview of agricultural practices across the entire country.

3.5.3. Crop Returns of 1801

Although the Tithe apportionments of c.1840 provide the earliest field-by-field descriptions of land-use across most of the country, there are several earlier written sources that provide qualitative accounts of regional variation in farming practice. Two of these relate to the period of the Napoleonic War in the late 18th century when Britain was no longer self-sufficient in grain, and a series of poor harvests along with the threat of invasion led to growing concerns over the nation's food supply. In 1793 'The Board of Agriculture and Internal Improvement' was set up and immediately arranged for a series of county-based surveys to be prepared (see 'Agricultural writers of c.1800' below), along with an attempt to obtain statistical information on the state of British agriculture. The most comprehensive of the latter was the Crop Returns survey of 1801 whereby printed forms were distributed by the Home Office to all the bishops, and from them to parish incumbents, whereby the clergy were asked to state the acreage sown since the previous year's harvest with wheat, barley, oats, potatoes, beans, peas and turnips. This data has been transcribed (Turner 1982a; 1982b; 1983a; 1983b) and is available electronically (<http://ahds.ac.uk/catalogue/collection.htm?uri=hist-5156-1>).

3.5.4. Agricultural writers of c.1800 (Kerridge's 'farming countries')

In c.1800 the agriculture in each English county was also described in a series of reports prepared by agricultural writers of the day for the Board of Agriculture, such as Charles Vancouver's (1808) *General View of the Agriculture of the County of Devon*. Summaries of these various county reports were brought together in William Marshall's (1808; 1809; 1811; 1815; 1817) *Review and Abstract of the County Reports to the Board of Agriculture from the Several Agricultural Departments of England*. These accounts have been studied by Eric Kerridge (1967) who used them to map a series of 'farming countries' that he thought were largely determined by the underlying geology, which is reflected in the names he gave them (e.g. 'chalk', 'poor soils' [the heathland of South East Dorset], 'western waterlands' [the Somerset Levels], and 'Vale of Taunton Deane').

3.5.5. Probate inventories of the 16th to mid 18th centuries (Thirsk's 'farming regions')

In the early post medieval period we have another category of document that provides information from which patterns of land-use can be reconstructed: probate inventories that were produced upon the death of a property owner. They have been studied by Joan Thirsk (1967; 1984) who identified a series of farming types (e.g. 'Mixed

farming: sheep and corn’, and ‘Open pasture: cattle and sheep rearing’) that when mapped reveal England’s ‘farming regions’ in the 15th to 18th centuries (published in the *Agrarian History of England and Wales* volumes IV and V.1). Whilst the data Thirsk studied described agricultural production in particular estates, the ‘farming regions’ she identified are based on a series of generic types, closely linked to physical landforms such as ‘wolds and downland’ and ‘marshland’, rather than being unique character areas.

3.5.6. *Inquisitions post mortem and manorial records of estate management*

For the mid 13th to mid 15th centuries documentary sources that contain information relating to land-use survive for only a small number of estates. There are broadly two sets of records: *Inquisitions post mortem* drawn up by the Crown, and surveys and account rolls that formed part of the records of estate management created by the larger landowners. *Inquisitions post mortem* were surveys carried out upon the death of one of the king’s tenants-in-chief (Campbell and Bartley 2006). These *Inquisitions* are listed in the *Calendar of Inquisitions Post Mortem*, published by the Public Records Office, although this only gives a list of the manors held by each of these major landowners: the detailed surveys are unpublished but Bruce Campbell (2006) used some 9,300 of these in his *England on the Eve of the Black Death: An Atlas of Lay Lordship, Land and Wealth 1300–49*. For some medieval estates there are other records that describe land-use, notably manorial surveys and annual account rolls that record acreages sown with different crops, and their yields, as well as the livestock held. Campbell (2000) used such records for 529 demesnes in his *English Seignorial Agriculture, 1250–1450* as well as *England on the Eve of the Black Death*, and such records have also been used in numerous local studies of medieval agriculture (e.g. Fox 1999).

3.5.7. *Domesday survey of 1086*

The Domesday Book provides a range of land-use data for each manor, notably the numbers of ploughteams (from which an estimate of the extent of arable cultivation can be made), along with the areas of woodland, meadow, and pasture. Domesday is most readily available in a series of county-based translations published by Phillimore (e.g. Thorn and Thorn 1985), and the complete edition edited by Williams and Martin (1992), while much of the data is mapped and discussed county by county in a series of regional studies published by the historical geographer H. C. Darby and his colleagues (e.g. *The Domesday Geography of South-West England*: Darby and Welldon Finn 1967).

3.5.8. *Regional variation in medieval and post medieval population and wealth*

In addition to information on patterns of agriculture, the intensity with which the landscape was exploited can also be gauged through looking at the distribution of population and wealth at different points in time. Domesday contains information on both, and these are mapped for each county in the Domesday Geography series (e.g. Darby and Welldon Finn 1967). The Lay Subsidies of 1327, 1332 and 1334 are individually incomplete but can be combined to provide almost complete national coverage (Glasscock 1975, map 1; Campbell and Bartley 2006). The Poll Tax records of 1377–81 record both the number of tax payers and the tax they paid in those areas in which records have survived (Fenwick 1998; 2001; 2005). Sheail (1972; 1998) has used the Lay Subsidies of 1524–5 to map the distribution of taxable population and wealth, and while these have been mapped at a very small scale for the whole country, the primary data for individual parishes remains unmapped.

3.6. Relict landscapes

The term ‘historic landscape’ refers explicitly to components of a townscape or the countryside that are still functioning: buildings that are still occupied, fields that are still cultivated, and mines that are still working. In most areas, however, there are features from the past that have gone out of use but which are still visible and form part of the character of today’s landscape, and these represent physical evidence for changes in land-use. On parts of the South Essex Marshes, for example, distinctive corrugations on the surfaces of some fields were created through a brief episode of ploughing that interrupted an otherwise long history of pastoral land-use. Earthworks such as these form what are referred to as ‘relict landscapes’, and where present their contribution to historic landscape character should be assessed.

Two particular sources of information are of great value in studying relict landscapes: aerial photographs and LiDAR data. Earthworks that at ground level can be difficult to discern are often far easier to see from the air, especially in early morning or late evening when the sun is low and casting long shadows. A particularly important series of aerial photographs was taken in the 1940s by the RAF across most of the country, and which is now housed

in the National Monuments Record in Swindon (copies can sometimes be found in historic environment services and local studies libraries). English Heritage are currently funding the National Mapping Programme (NMP) which aims to transcribe all the archaeological evidence showing up on existing aerial photographs and this should be the starting point in a historic landscape study, although the researcher should also consult the original photographs as the NMP will not have included features of the historic landscape that have gone out of use (e.g. relict sea walls, plough furrows, etc).

3.7. Non agricultural land-uses

In some landscapes non-agricultural land-uses form a very significant part of its character and these will need studying too. This will include industrial remains, recreational land-uses, and military facilities.

3.8. Cultural associations

In addition to its physical components, part of a landscape's character is emotional: the way that it is perceived by outsiders and the local community, and the cultural associations that it has. These associations may be with a specific place, or a broader area, and as such cannot be mapped in the same way as we can characterise field boundary patterns, but they can still be added into qualitative accounts of landscape's character.

3.8.1. *The perception of the landscape*

An aspect of historic landscape character is the way that people in the past have perceived the landscape: some areas may have a long tradition of being fertile agricultural heartlands, while others were seen as hostile and marginal landscapes. There are several relatively accessible sources that give us detailed insights into how travellers in the past perceived the landscape through their travels at a national scale, and within individual counties these will usually be supplemented by local writers some of whose work may be published (enquiries at a local studies library should reveal these).

The earliest detailed account we have of the English landscape is the itinerary of John Leland, written between 1538 and 1546. Several editions have been published, of which John Chandler's (1993) is the most user-friendly, in that the text is written in modern English and there are maps of each county showing the routes that Leland appears to have travelled, although the most accurate transcription of the text is that of Lucy Toulmin Smith (1906–10, reprinted 1964). He describes the Blackdown Hills, south of Honiton in Devon, for example, as 'fairly good ground'. In contrast to the low lands to the east, between Bridport and Beaminster as having soils that were 'exceptionally good all the way, and this stretch of country is almost the best in the whole of Dorset for arable, pasture and wood' (Chandler 1993, 123, 131–3). Another great 16th century traveller was William Camden who published his description of Britannia, in Latin, in 1586, and which is available in various later translated editions including Edmund Gibson's (1695) *Camden's Britannia: A geographical description of the flourishing Kingdoms of England, Scotland, and Ireland and the Islands adjacent from the earliest antiquity*. In this we hear, for example, that the area around Taunton was 'beautified with green meadows [and] abounds in delightful orchards', while Exmoor was 'a filthy barren' place (Gibson 1695, 30).

In the 17th and 18th centuries there are increasing numbers of such sources including surveys of individual counties (e.g. Tristram Risdon's *Chorographical Description or Survey of the County of Devon*, finished in c.1630, but not published until 1811). Another useful source are the reports of the Royal Society's 'Georgical Committee' of the 1660s that established a series of enquiries into the state of agriculture in the shires, based on a series of questions concerning both arable and pasture (though unfortunately only those for Cornwall, Devon, and parts of Dorset, Gloucestershire, Kent, and Yorkshire were received: Leonard 1932). Other great travel writers whose works contain a wealth of topographical data were Celia Fiennes (1682-98; Morris 1984) and Daniel Defoe (1742). The 18th and 19th centuries saw a fashion for writing county histories and these contain valuable descriptions of how the landscape was perceived (see Currie and Lewis (1994) for a general guide to these histories).

In the late 18th century, Britain was no longer self-sufficient in grain, and a series of poor harvests, along with war with France and the threat of invasion, led to growing concerns of the nation's food supply. In 1793 the Board of Agriculture and Internal Improvement was set up, and almost immediately arranged for a series of county-based surveys to be prepared. These were qualitative accounts, presenting the views – and prejudices – of their authors, but do provide a detailed and systematic impression of how the agricultural potential of the landscape was

perceived. They were published in a series of individual county-based reports, with titles such as *A General View of the Agriculture of the County of Devon with Observations on the Means of its Improvement* (Vancouver 1808). A complete set of summaries brought together by William Marshall (1808; 1809; 1811; 1815; 1817) in *The Review and Abstract of the County Reports to the Board of Agriculture from the Several Agricultural Departments of England*. The format of the county reports are broadly similar – describing the buildings, rural occupations, implements used, arable regimes, livestock etc – although the extent to which local variations are treated does vary.

3.8.2. Folklore

In addition to the relatively rational ways that these past travel writers and agriculturalists described the landscape, we can also get an insight into how local communities perceived their environment through looking at folklore, which is particularly good at identifying what were perceived dangerous wildernesses beyond the settled and enclosed land of a community (e.g. Phythian Adams 1999, 134-8; Franklin 2006, 152).

3.8.3. Historical associations

The strongly morphological approach of English Heritage's Historic Landscape Characterisation programme also fails to take into account the cultural associations that a landscape may have. In Essex, for example, the series of estuaries that penetrate deep inland means that the eastern half of the county has strong maritime connections, with a number of traditional small fishing ports still surviving (e.g. Leigh-on-Sea), and the numerous small creeks and landing places are also said to have been the haven for smugglers (Morrison 1900).

These are some of the sources that can add depth to our understanding of landscape character, and a case-study is given in Table 2 below.

Table 2: Case study – The South Essex Marshes

Extent of study area	South Essex Marshes		
Definition of study area boundaries	Thames Estuary to the south and east; the fen-edge to the north and west		
Landscape component	Question	Evidence	Sources
Basic components of the physical environment			
Geology	What are the underlying geology, soils, topography and drainage pattern that together form the physical character of the study area?	The South Essex Marshes are uniformly estuarine alluvium.	Lake 1986
Soils		Soils of the Wallasea 2 Association, being deep, stoneless clayey soils, calcareous in places, where groundwater is controlled by ditches and pumps.	Mackney <i>et al.</i> 1983
Topography/relief		Until the 20 th century, the flat topography of the South Essex Marshes was broken by a single feature: a natural bedrock island immediately west of Pitseahall Fleet. Today, the area is dominated by the artificially raised ground of a refuse tip.	
Drainage pattern		By the 19 th century, the South Essex Marshes could be divided into three areas: Canvey Island, and the reclaimed marshes of Stanford le Hope, Corringham, Fobbing, Vange and Bowers Gifford to the west, and South Benfleet, Hadleigh and Leigh-on-Sea to the north. Before the early 17 th century reclamations, however, the area was in fact an archipelago of many small islands some of which probably correspond to the sheepwalks recorded in Domesday that were detached parcels of inland parishes.	
Current agricultural potential		Grade 3 in terms of both Land Use Capability and Agricultural Land Classification (ie land with just moderate limitations).	Mackney 1979; Ministry of Agriculture, Fisheries and Food, 1979
Basic physical components of the historic landscape (as evident on the Ordnance Survey First Edition Six Inch map of c.1860)			
Settlement pattern	What are the key physical components of the historic landscape (settlement patterns, communication systems, field boundary patterns, and unenclosed land)?	Settlement on the South Essex Marshes consisted of a small number of isolated farmsteads.	
Road network		Two distinct types of road are found on the South Essex Marshes: 1. sinuous lanes of irregular width that were the droveways linking farms and pastures on the marshes with the adjacent dryland areas. These lanes are embedded within the pattern of large, irregular-shaped fields, suggesting that they are relatively early features in the landscape that date to the periods of medieval and post medieval reclamation. 2. long, straight roads that in particular traverse Canvey Island. They post date the landscape of large irregularly-shaped fields defined by former saltmarsh creeks.	
Field boundary pattern		The field boundary pattern on the South Essex marshes is relatively uniform, and appears to have two main phases. 1. The earliest is a series of large, irregularly shaped fields whose boundaries often utilised the natural lines of former saltmarsh creeks. Some are found in the probable medieval reclamations in Bowers Gifford, Fobbing, Corringham and Stanford le Hope, while the early 17 th century reclamations were also sub-divided in this way. 2. The sub-division of these fields by long, dead-straight boundaries.	
Unenclosed land		All of the land within the sea walls was enclosed. By the 19 th century unenclosed land was restricted to small areas of saltmarsh in front of the sea walls alongside the major creeks (there was none along the southern coast - what intertidal marshes once existed have been lost to erosion). There was no woodland in this landscape	
Other facets of the historic landscape			
Vernacular architecture	What are the distinctive characteristics of local architecture, and how do these contribute to historic landscape character?	Most of the farms that existed in the 19 th century have been demolished, although the local vernacular architecture in south Essex was weather-boarded timber framed houses (e.g. Tree Farm on Canvey, now demolished). On Canvey Island two famous and distinctive octagonal local buildings known as ‘Dutch Cottages’ are reminders of the contribution that Dutch colonists made to creating the landscape of today (they have date plates of 1618 and 1621)	RCHM(E) 1923, 24 Pevsner 1954, 97 RCHM(E) 1923, 23

Place-names	Are there any place-names that are particularly characteristic of this landscape, and what do they tell us about its history?	<p>Three place-names were particularly characteristic of this landscape of limited medieval reclamation and a long history of pastoral land-use:</p> <ul style="list-style-type: none"> • <i>Wick</i>: a place-name that on the Essex marshes is associated with dairies, cheese-making sheds and shepherds huts; in 1586, for example, William Camden refers to ‘dairy sheddes ... that they call there “wickes”’ on Canvey island. Some of these are still reflected in the names of local landmarks, such as Knightswick Road and Southwick Road on Canvey Island. • <i>Cote</i>: a place-name element that has two meanings in marshland landscapes - a salt production site and as a dairy/raised refuge area for sheep. As there is no evidence of medieval salt production in our study area, the ‘cotes’ were presumably sheep-cotes. • <i>Werd/Ward/Worth</i>: a particularly important marshland place-name in Essex which is associated with medieval reclamation. Some of these are still reflected in the names of local landmarks, such as Labworth Road on Canvey Island. 	<p>Cracknell 1959, 12-13</p> <p>Reaney 1935, 149</p> <p>Reaney 1935, 148-9,</p>
Field-names	Are there any field-names that are particularly characteristic of this landscape, and what do they tell us about its history?	The field names on the South Essex Marshes are remarkably uniform in their character, mostly being of the ‘Marsh’ or ‘Ten Acres’ type. What is noteworthy, however, is the absence of field-names indicative of medieval reclamation that are found so widely on other reclaimed wetlands in southern Britain (e.g. ‘Ham’ and ‘Mead’).	
Field boundary form	What is the characteristic form of the field boundaries?	Most field boundaries are water filled drainage ditches, although some follow old sea walls.	
History of land-use	What are the predominant patterns of land-use, and how have these affected the landscape character?	This is a landscape whose character is shaped by its long history of predominantly pastoral land-use. Detached parcels of inland parishes reflect the access those communities had to the rich grazing on the intertidal saltmarshes, and may correspond to the ‘pasture for x sheep’ recorded in Domesday. In the 12 th and 16 th centuries there is some documentary evidence for limited reclamation and arable cultivation, but the marshes were largely left unreclaimed and used for grazing sheep (see ‘wick’ and ‘cote’ place-names above). The Thameside Marshes were famed for their dairy products, and particularly their fine cheeses. When all the marshes were reclaimed in the early 17 th century the large fields that were created were clearly for pastoral use.	
Non-agricultural land-uses	Are there non-agricultural features of the landscape that form an important part of its character?	<p>There was a short-lived brickworks at Corringham.</p> <p>The Thames Estuary played an important part in the defence of Britain during the Second World War, for which evidence survives across the South Essex Marshes including gun emplacements, pillboxes, anti-glider ditches, a decoy for the Shell haven oil refinery, and bomb craters.</p>	<p>Medlycott and Gascoyne 2006</p>
Relict landscapes	Are there features such as earthworks or ruined buildings that are now abandoned but which still contribute to the character of the historic landscape? If so, what do they tell us about the history of this landscape?	<p>1. Fleets: substantial water-filled channels representing former tidal creeks that have been cut off from the Estuary through the construction of sea walls across their line. Some still survive as local landmarks, such as Pitseahall Fleet in Pitsea Marsh.</p> <p>2. Saltmarsh surface: a lack of ploughing in some areas means that earthworks survive of the original saltmarsh surface, characterised by the meandering depressions of former tidal creeks.</p> <p>3. Sea walls: 19th century maps show a large number of embankments that no longer functioned as sea walls as the former saltmarshes in front of them had been reclaimed. These formed a particularly distinctive feature of this landscape, although few survive today.</p> <p>4. Plough ridges: linear corrugations on the surface of some fields were probably created through ploughing. They have previously been called ‘stetch’ the term used elsewhere in East Anglia for the local variant of ‘ridge and furrow’, but in various examples on the South Essex Marshes they are clearly 20th century in date. The Tithe surveys of c.1840 do record some areas as having ‘arable’ land-use, though at least some of this ridging may simply have been to aid drainage in areas of pasture.</p>	<p>Medlycott and Gascoyne 2006</p> <p>Martin and Satchell 2008</p>

Cultural associations			
Past perceptions	How was this landscape perceived by past travel writers and visitors to the area (e.g. was this a fertile agricultural landscape, or a hostile wilderness)?	<p>In 13th and 14th centuries, parts of Canvey Island were within the manors of Milton and Southchurch Hall that belonged to the Priory of Christ Church, Canterbury, in Kent. The predominant land-use appears to have been the grazing of sheep on what remained saltmarsh, although surviving accounts record the digging of ditches and building of sea walls suggesting some attempts at reclamation.</p> <p>The dominant perception of this landscape before the 17th century, however, was as an extensive area of saltmarsh grazed by sheep and famed for its dairy production. In 1586 Camden said Canvey was ‘...so low that often times it is quite overflowne, save for the hillocks cast up, upon which the sheepe have a place of refuge ... For it keepeth about foure thousand sheepe, whose flesh is of a most sweet and delicate taste, which I have seene young lads taking women’s function, with stooles fastened to their buttocks to milk, yea and to make cheeses of ewe’s milk in those dairy sheedes [sheds] of theirs that they call there “wickes”’.</p> <p>In 1594, Norden wrote a very similar account: ‘Near the thames mouth ... are certain ilandes called Canvey Ilandes, low merishe grounds, and for that the passage ouer the creeks is unfit for cattle, it is onlie conuerted to the feeding of owes, which men milke and thereof make cheese (suche as it is) and of the curdes of the whey they make butter once in the year which serueth the clothiers’.</p>	<p>Nichols 1926-8; 1930; 1932a; 1932b</p> <p>Brown 2006, 143</p> <p>Cracknell 1959, 14</p> <p>Cracknell 1959, 14</p>
Folklore	How was this landscape perceived by local communities?	The many creeks of the South Essex Marshes were said to have been a haven for smugglers.	Morrison 1900
Historical associations	Does the landscape have particularly strong cultural associations that contribute to their character and importance?	<p>The involvement of Dutch engineers and colonists in the reclamation of Canvey is well known, and it is widely believed that the famous engineer Cornelius Vermuyden was responsible (reflected, for example, in the naming of the Cornelius Vermuyden School and Art College on Canvey Island: http://www.corver.essex.sch.uk/historyandbadge.shtml).</p> <p>There was also Dutch involvement in some of the other South Essex Marshes. In 1623, for example, the registers of Corringham church record the burial of ‘Powell, a Dutchman living in Ooze’ (‘Ooze’ is presumably Oozedam, the ‘dam’ place-name being a distinctive feature of Dutch water engineering). The church registers of Fobbing and Vange also refer to Dutchmen, and in c.1623 Sir Henry Appleton conveyed a marsh in Fobbing to a Dutchman Gile Vande Putte.</p>	<p>Pevsner 1954, 97</p> <p>Cracknell 1959, 20</p> <p>Grieve 1959, 25</p> <p>Cracknell 1959, 18</p>

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