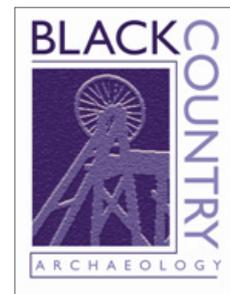
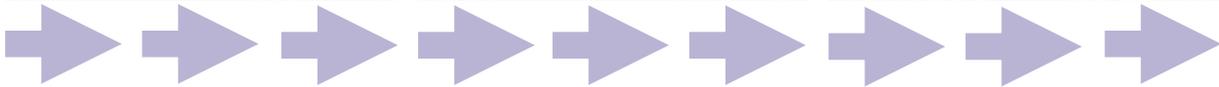
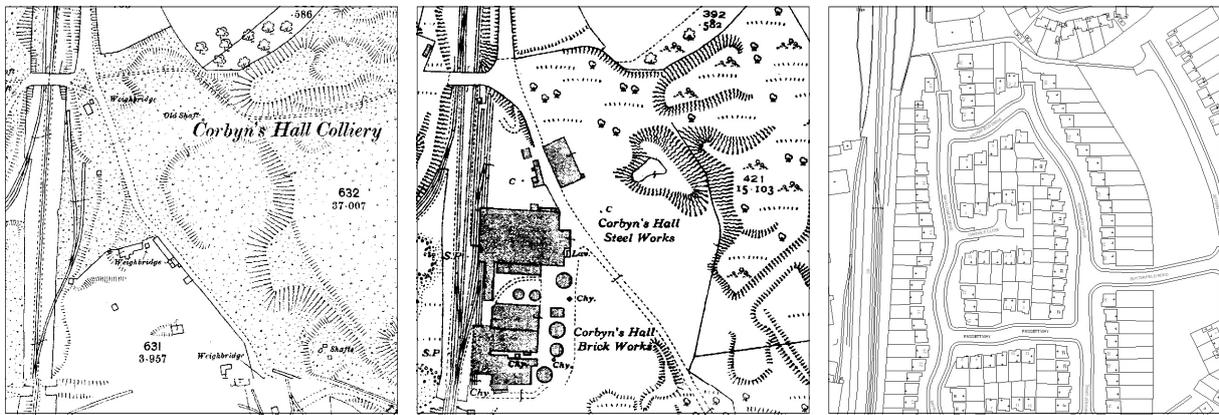


The Black Country An Historic Landscape Characterisation

English Heritage Project Number 3638 Main

First Report
2009



Paul Quigley
Black Country
Archaeology Service

Acknowledgements

This study has been funded by English Heritage as part of its national programme of Historic Landscape Characterisation. It was conducted by the Black Country Archaeology Service, based within Wolverhampton City Council, on behalf of the four Black Country local authorities.

The project commenced in 2004 with the appointment of Debbie Langley as Project Officer. Debbie compiled the database and undertook much of the early work on the Character Area profiles before her departure for Staffordshire County Council.

Paul Quigley succeeded Debbie in 2007 and has been responsible for the subsequent analysis of the data, for the completion of the Character Area Profiles, and for the compilation of the report. Mike Shaw, the Black Country Archaeologist, has acted as Project Manager throughout the life of the project.

We are particularly grateful to Graham Fairclough and Roger M Thomas of English Heritage who commissioned the project, and to Sue Whitehouse, Conservation Officer at Wolverhampton City Council, who provided conservation and policy advice.

Front Cover

A sequence of maps showing three phases of the same piece of landscape at Corbyn's Hall, Pensnett, in Dudley. Not untypical of the Black Country more generally, these can be characterised as (from the left) a phase of mineral extraction (1880), industry (1938) and housing (2000).

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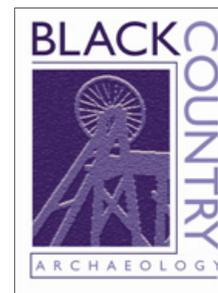
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*Black Country Historic Landscape Characterisation

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The Black Country: An Historic Landscape Characterisation* Executive Summary



Anything more than a superficial glance at the modern Black Country reveals an intricate pattern of use and re-use of land, streets, buildings, and other structures. This complexity, a product of hundreds of years of recycling of physical resources to meet human demands, is easily misunderstood without the appropriate research tools.

This Historic Landscape Characterisation (HLC) aims to be a tool in understanding the landscape as it exists today, by placing it firmly in a context of the historical development of its constituent parts. The purpose of producing this understanding is to assist the sensitive management of the built environment in the future.

Section 1 introduces the reader to some of the more general features of the process of HLC, to the particular landscape of the Black Country, and to the way in which HLC has been applied in this case.

HLC aims to be an open, transparent process of representing the landscape, and **Section 2** lays out in some detail the way in which the record has been assembled. This includes a discussion of the sequence of maps and aerial photographs which have formed the basis of the data, together with the systems of classification used to distinguish different types of modern and past landscape.

Although a subsequent publication will present more detailed analysis of the database, Sections 3 and 4 of this report outline some ways in which the data can be interpreted. **Section 3** considers how the HLC record can be used to produce broad overviews of land use, periods of origin and surviving character. It also shows how past transformations of the area (such as the historic switch from 19th century mining to 20th century suburban residential streets) can be represented and examined by HLC data.

Section 4 analyses the data by using it to create more than 50 *Character Areas*—zones within each of which the landscape shares something in common. **Section 5** then goes on to profile the modern and historic environment within each of these Character Areas with a view to improving our understanding of the character and local distinctiveness of each location.

Following brief conclusions, a series of four **Appendices** provide the technical detail of the categories of landscape used within the data as well as a copy of the original project design.

The programme of Historic Landscape Characterisation in the Black Country is expected to continue until 2010. As mentioned above, a second report will use the data to provide a greater level of analysis of the Black Country landscape. Additionally, a number of reports have been prepared, and others proposed, to examine the data relating to particular areas or aspects of the landscape. Details of the outputs from the programme can be found at: www.wolverhampton.gov.uk/hlc.

*English Heritage Project Number 3638 MAIN.

1. Introduction

1.1 HISTORIC LANDSCAPE CHARACTERISATION

This study is part of a longer-term series of projects aimed at establishing a new information resource on the historic character of the English landscape. Historic Landscape Characterisation (abbreviated here to HLC), the approach which has been applied in order to create this resource, is a process which has been supported financially by English Heritage, and is based on a number of consistent principles*.

Perhaps most important of these is that the process considers every part of the landscape, creating a seamless record of the whole area under consideration. This feature of HLC distinguishes it from other processes for recording the historic landscape, such as the designation of heritage assets, which are necessarily selective. HLC is also value-free, at least in its initial phases. Put differently, HLC is a process which seeks to create a neutral description of the landscape, rather than to assign value to particular parts of it in order to support their protection over other parts.

Despite this, value can be assigned in a later, more detailed phase of the use of HLC data. In this way, assessments of the value of buildings, sites or landscapes can be used with HLC data to inform impact assessments at various scales, or to measure sensitivity to development, for example.

*More information about the English Heritage programme of HLC, and links to many relevant documents (such as *Conservation Bulletin 47*, which is devoted to the topic of Characterisation) can be found at www.english-heritage.org.uk/characterisation.

**English Heritage Project Number 3638 MAIN.

In making a record of the landscape in this way, it is hoped that it will form an analytical framework which will support a better understanding of the way our local environment has developed: a framework which can, in subsequent stages of research, also be used to better assess the 'value' of all the surviving features of the historic environment.

The Black Country Historic Landscape Characterisation** was one of the first to be undertaken in a heavily urbanised metropolitan area.



Two images of the Black Country: both part of the local landscape.

The relatively recent application of HLC to urban areas has meant that its use in the Black Country has necessarily involved some adaptation.

In particular, the Black Country HLC has had to face questions which may not have been confronted during the time the approach was developed and honed in generally rural environments. In this context, some have argued that the use of the term 'landscape', which perhaps creates mental images of scenic rural environments, is inappropriate in the Black Country. Instead, the terms 'townscape' or 'cityscape' have been offered as alternatives.

However, given the need to be consistent, and also that the Black Country is not entirely urban (despite the predominance of the built environment), the term landscape has been used in a generic sense to encompass all types of environment.

Indeed the *European Landscape Convention* (or ELC) supports this interpretation of the word. The ELC, put forward by the *Council of Europe* in 2000, defines landscape as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. Furthermore, the Convention itself covers 'natural, rural, urban and peri-urban area... (and) concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes'.

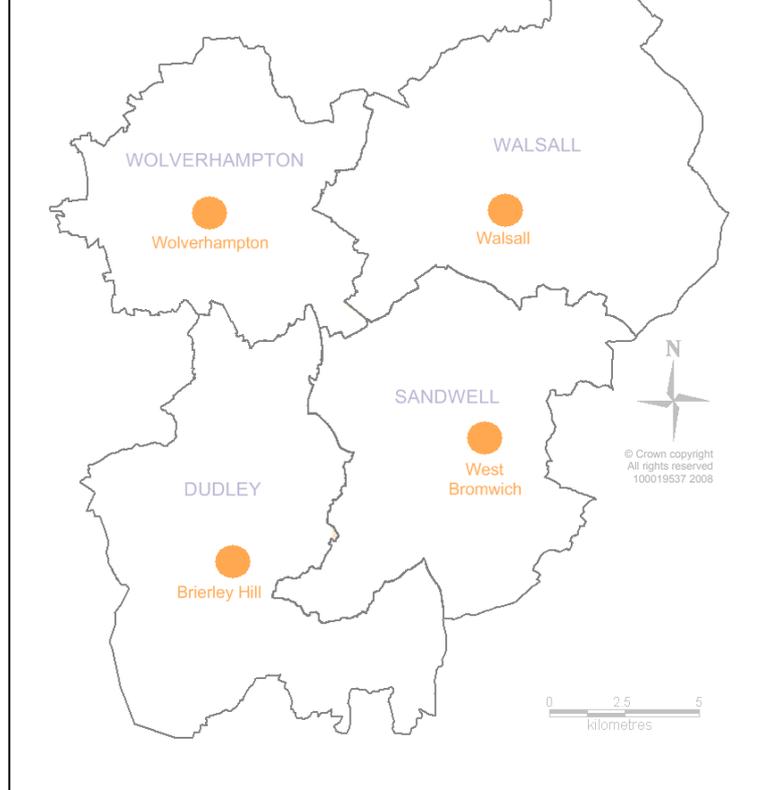
1.2 THE BLACK COUNTRY LANDSCAPE

Although the term 'Black Country' is often used mistakenly by journalists and others to describe Birmingham, or the West Midlands conurbation, the Black Country is in fact a distinct area to the west of Birmingham, roughly equal in size to it. Together,

Figure 1.1: The Black Country in the West Midlands Region



Figure 1.2: The Four Black Country Local Authorities



the Black Country and Birmingham comprise the West Midlands conurbation.

To the visitor, perhaps one of the immediately noticeable aspects of the area is its lack of a single large commercial hub at its centre, a feature which might be expected for an urban area of its size. Instead, the multiple centres of settlement set it apart from other urban centres such as its neighbour Birmingham.

In historic terms the Black Country as a distinguishable part of the region has been defined by its geology, perhaps more than other parts of the landscape of central England. More particularly, the presence of the South Staffordshire Coalfield at the centre of the area of what are now referred to as the four Black Country local authorities (Dudley, Sandwell, Walsall and Wolverhampton) is undoubtedly the most important feature in the creation of the unusual urban landscape we see today.

Indeed, although for the purposes of this study we have taken the term Black Country to be the same as the entire area within the boundaries of the four local authorities (Figure 1.2), it is worth acknowledging that, for many, the Black Country is only that area which lies immediately over the coalfield.

Whatever definition is used, the importance of the area covered by the study is perhaps illustrated by the fact that, in the 21st century, the network of industrial towns which coalesced to form the Black Country is home to a million people, and part of the largest centre of population in England outside London. As Figure 1.1 illustrates, it also lies immediately adjacent to Birmingham, the administrative centre of the West Midlands region .

1.3 CHARACTERISATION IN THE BLACK COUNTRY

Section 2 of this report outlines the procedure used to assemble the data on which the study has been based.



The former landscape of extraction which arguably defined the Black Country

However it is worth highlighting some of the characteristics of the HLC in the Black Country which distinguish it from similar previous studies in other areas.

As has been mentioned, current local government arrangements comprises four local authorities, i.e. three Metropolitan Boroughs and the city of Wolverhampton. These represent the only tier of local government, and so the Black Country is different to a two tier structure of county and districts which exists in many other areas where HLC has been carried out.

It follows that there are also four planning authorities, and each of the authorities has its own conservation functions. Sandwell and Dudley Councils have their own archaeology staff, while Walsall and Wolverhampton currently share an archaeology service.

The study differs from a small number of HLC studies in its use of geographical information systems (GIS), and it was also the first to use a module designed to input and manipulate HLC data within the ExeGesIS HBSMR system*. This has the advantage of giving the BCHLC a relatively close link to sets of other relevant data, in particular the Historic Environment Record for Walsall and Wolverhampton.

*ExeGesIS Spatial Data Management Ltd's Historic Building, Sites and Monuments Record (www.esdm.co.uk/hdsmr.asp)

2. The Methodology of Data Collection

2.1 SOURCES OF DATA

Our characterisation of the Black Country landscape is based on a desk-based examination of published sources, largely maps and aerial photographs, as summarised in Table 2.1.

The core of the analysis is based on a sequence of the Ordnance Survey's 1:2,500 maps (25 inches to approximately one mile) published from the 1880s until the 1930s. The importance of this series of maps to the HLC data is illustrated by the number of references to them in the HLC records. More than 9 out of 10 of the short descriptions written of each parcel of land refer to at least one of the four editions.

The coverage of the available digital versions of these four editions within the boundary of the Black Country is illustrated by Figure 2.1. Information available from the first two editions covers most of the Black Country with the exception of parts of southern Dudley. That from the later editions is also missing some coverage. In particular, the fourth edition, limited as it was by the outbreak of the Second World War, has the most partial coverage of all the four editions, especially in the northern half of the Black Country, i.e.

Wolverhampton and Walsall. Nevertheless, in general terms, this sequence of four maps forms the key set of building blocks for our characterisation.

In terms of information about the older periods of the landscape, little was available in historical maps before

Table 2.1: Summary of Maps and Aerial Photographs Used as Sources

Year of Publication (Survey)	Map / Photograph	Digital Coverage (within the area of the four local authorities)
1998 ¹	Dudley in 1300 by Hemmingway et. al.	See Figure 2.2
1775	William Yates' map	Staffordshire (See Figure 2.3)
1782-1799	Parish maps of Dudley etc. (see Table 2.2)	Various
1812-1838	Parish and other maps (see Table 2.3)	Various
(1814) ²	Ordnance Surveyor's drawing of Stourbridge	Between them, these four maps cover the area of the four local authorities, with the exception of the western edge of Dudley. In particular, the map of Wolverhampton covers most of the modern Black Country.
(1814) ²	Ordnance Surveyor's drawing of Bridgnorth	
(1816) ²	Ordnance Surveyor's drawing of Wolverhampton	
(1817) ²	Ordnance Surveyor's drawing of Sutton Coldfield	
1839-1852	Tithe maps (See Table 2.4)	Various. See Figure 2.4 for total coverage
1884-1890 ³	1:2,500 Ordnance Survey map: 1st Edition	See Figure 2.1
1902-1903 ³	1:2,500 Ordnance Survey map: 2nd Edition	See Figure 2.1
1914-1924 ³	1:2,500 Ordnance Survey map: 3rd Edition	See Figure 2.1
1937-1938 ³	1:2,500 Ordnance Survey map: 4th Edition	See Figure 2.1
2000	<i>Land-Line</i> electronic map data	Full
1999-2001	Aerial photography	Full

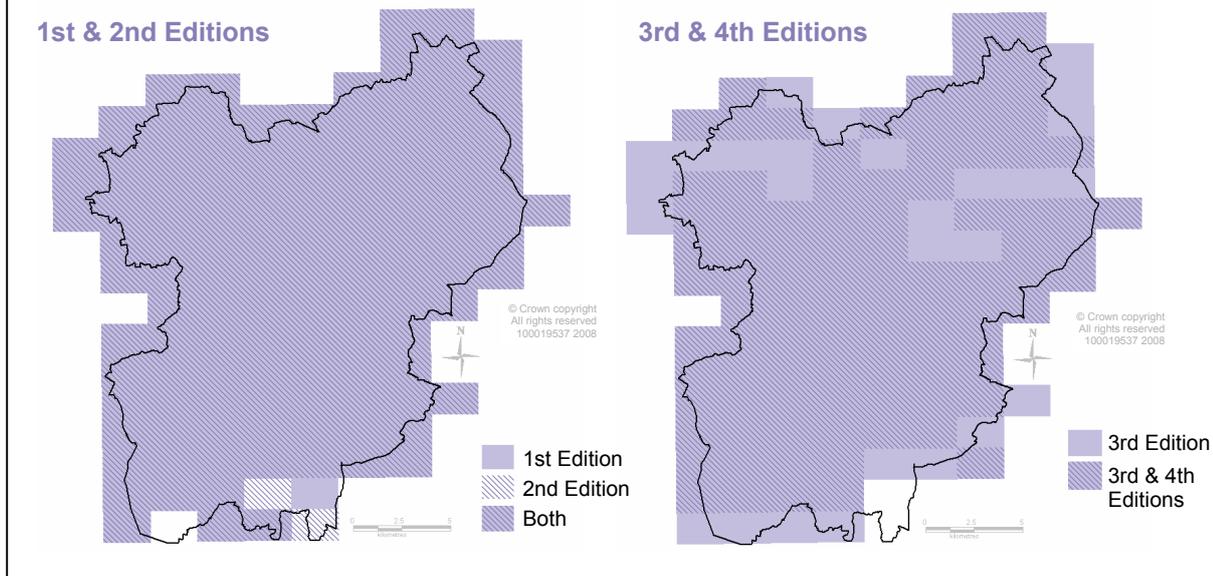
Notes:

¹This is a reconstruction of the Medieval landscape.

²The Ordnance surveyors' drawings were drafted at a scale of 2 inches to 1 mile but were not published. Digital copies for the Black Country were acquired from the British Library.

³These ranges are included as a guide: individual map tiles may have been published outside of these limits.

Figure 2.1: Coverage of the Ordnance Survey's 1:2,500 Maps of the Black Country



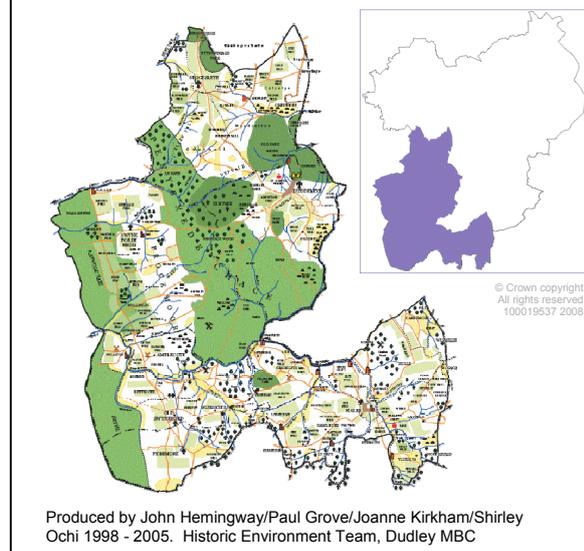
the late 18th century. Although not a contemporary survey, one valuable resource was the reconstructed medieval landscape mapped by Dudley MBC Historic Environment Team, illustrated in Figure 2.2. As might be expected, coverage of the map was restricted to the area of the modern local authority.

Among those sources with wider coverage, the oldest map used was Yates' survey of Staffordshire, published in 1775 at a scale of 1 inch to 1 mile. The south-eastern part of this map encompassed most of what is now the Black Country, shown in Figure 2.3. Other 18th century sources included parish and other local maps, the most valuable of which was perhaps for the Parish of Oldswinford in 1782. This was useful both because of its relatively wide scope, and also because it covered an area outside of Staffordshire (in modern Stourbridge, in the south-west of the Black Country) which was not generally covered by Yates' map of that county drawn in the previous decade.

For the purpose of recreating the early 19th century landscape, the most important source was the set of four unpublished surveyor's maps produced by the Ordnance Survey between 1814 and 1817 (listed in Table 2.1). In addition, several other maps from that period were used, in particular the 1822 map of Kingswinford Parish - useful as it provided information on the small part of the west of Dudley which was not covered by the 1814-1817 surveyors' drawings.

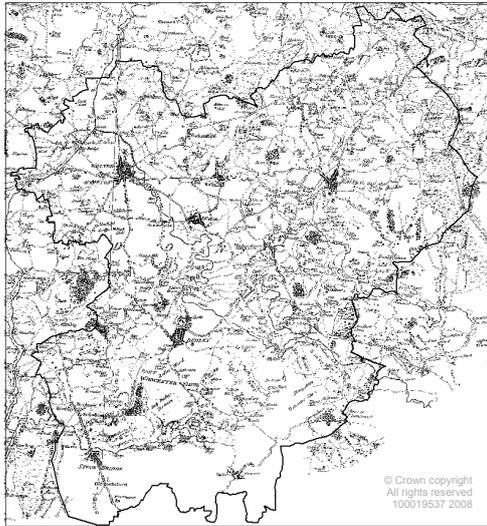
Figure 2.2: Dudley Borough Circa 1300

The map produced by Hemingway et. al. and (inset) its coverage within the Black Country



Before the start of the Ordnance Survey's 1:2,500 series in the 1880s, one other set of sources provided evidence of the development of the landscape: these were the tithe maps and awards of the period 1839 to 1851. Those used for the BCHLC are listed in Table 2.4, and the extent to which their evidence had been incorporated into the BCHLC is illustrated by Figure 2.4 which shows those records which were at least

Figure 2.3: Part of Yates' Map of Staffordshire Showing the Area of Modern Black Country



partly based on tithe maps. Tithe maps were particularly useful for areas which had undergone major change between the 1840s and 1880s, as a result of industrialisation for example.

The most modern data used was of two types: the Ordnance Survey's *Land-Line* data for 2000; and aerial photographs taken between 1999 and 2001 (the latter illustrated by Figure 2.5). It follows that all the descriptions and maps produced by the BCHLC which relate to the *modern* landscape are, in fact, representing the landscape at around the beginning of the 21st century.

The temporal distribution and coverage of sources we have outlined here obviously has implications for the data which has been generated from them. The advantages this particular set of sources brings us include a relatively detailed record of the landscape in the late 19th century and early 20th century. However there are also limitations to this range of sources.

Two in particular are perhaps worth highlighting here. The first has already been mentioned: that very few original surveys were available prior to William Yates' map of Staffordshire, published in 1775. This is perhaps significant because important early changes in the landscape, notably the growth of industry and mining, had already started by this point. The second principal disadvantage concerned the other end of the period of development recorded by the BCHLC: it was the unavailability of digitised mapping from the second

Table 2.2: Some 18th Century Sources Used by the BCHLC

Map Source	Date
Isaac Taylor's map of Wolverhampton	1750
Plan of Walsall estate of the Countess Dowager of Mountrath	1763
Oldswinford parish map	1782
Dudley parish map, including Netherton	1785
Sherriff James' map of Bilstone Liberty	1799
Amblecote parish Map	1799

half of the 20th century. This has meant that changes in the landscape between the years 1938 and 2000 may be underrepresented in the BCHLC data.

Table 2.3: Some Early 19th Century Sources Used by the BCHLC

Map Source	Date
Sherriff James' Plan of the mines of Lord Dudley and others	1812
Gilbert's map of parish of Aldridge	1817
Kingswinford parish Map.	1822
Mason's map of Walsall	1824
Sedgley parish Map	1826
The Townscape of Smethwick in the parish of Harborne	1828
Treasure's town plan of Dudley	1835
Joseph Welch's Darlaston parish Map	1835
John Wood's West Bromwich map	1837
Map of parish of Bushbury	1837
Timmis' Map of Tettenhall	1838
Beckett's Plan of Willenhall Township	1838

Table 2.4: Tithe Maps Used as Sources by the BCHLC

Tithe Map and/or Award	Date
Penn tithe map	1839
Wolverhampton tithe map & award	1840
Rushall tithe award	1840
Smethwick tithe map	1840
Pelsall tithe map	1840
Tithe map showing Walsall Wood, Shelfield, Clayhangar & Bullings Heath	1841
Lappal tithe map	1841
Aldridge with Great Barr tithe award	1841
Willenhall tithe map	1841
Illey tithe map.	1841
Wednesfield tithe map	1842
Lutley tithe map	1842
Penn tithe map	1843
Cradley tithe map	1843
Warley Salop tithe map	1844
Ridgacre tithe (tracing)	1844
Sedgley tithe map	1845
Walsall tithe map & award	1845
Rowley Regis tithe map	1845
Oldbury & Langley tithe map & award	1845
Pedmore tithe map	1845
Warley Wigorn tithe map	1845
Halesowen tithe map	1845
The Hill tithe map	1845
Rushall tithe map	1845
Wednesbury tithe map	1846
Hasbury tithe map	1846
Hawn tithe map.	1846
Cakemore tithe map	1848
Tipton tithe map	1849
Darlaston tithe map	1852

Figure 2.4: BCHLC Records Which are at Least Partly Based on Tithe Evidence

(4,901 Records out of 12,665)

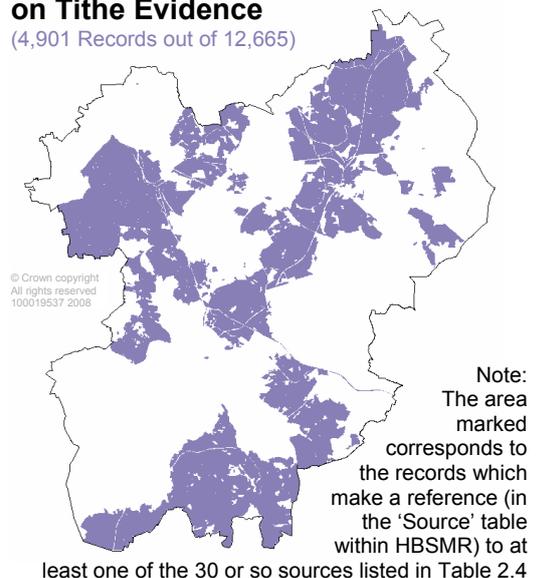


Figure 2.5: Aerial Photography

Note: Photography for Walsall was taken between 1999 and 2000, while the remainder was taken on a single date, 25th June 2001.



2.2 MODERN LAND USE

The current, most recent use of each part of the landscape is recorded in the BCHLC. In this context, land uses have been classified into broad categories (referred to here as 'Broad Types') and, within these, more specific categories of use ('HLC Types').

The first task of the project was to decide which Broad Types to use, i.e. how to divide up land use within the Black Country into a few general categories. This took into account categories which had been used by projects in other parts of the country, even though all of these except Merseyside were for largely rural areas. Nevertheless, the Broad Types used in the Black Country, detailed in Table 2.5, are generally similar to those used in previous HLC projects.

Modifications which were made to this classification included the deletion of some categories used

elsewhere which were not applicable in the Black Country (e.g. those applicable to coastal areas). There were also additions - for example the category 'extractive' was added to the Broad Types to reflect the local heritage of mining and quarrying. Table 2 lists the Black Country Broad Types and their scope notes.

The HLC Types (i.e. the narrower, more specific categories of use) were more individually tailored to the Black Country than the Broad Types. An initial list was drawn up reflecting what was known at the start of the project and additions were made during the compilation of the data as new character types were recognised.

It was recognised that, owing to the greater rate of landscape change and diversity of use in urban areas, the parcels of land associated with each BCHLC record (sometimes referred to as 'polygons', a reference to the diversity of shapes used to form the boundaries of each piece of land) would probably be

Table 2.5: Modern Land Use Categories within the Black Country HLC

Description: (Field name: <i>BroadTypeDesc</i>)	Scope: (Field name: <i>ScopeNote</i>)
Commercial	Areas which are predominantly retail/office.
Extractive	Areas of quarrying which is not linked with a specific production plant .
Field System	Areas of farm land, both arable and pasture.
Industrial	Areas where industrial activity is the predominant activity. Mining comes under extractive.
Military	Military sites.
Open Land	Areas of open land such as common and heath. Also for derelict land which had previously had industry or housing on it and for small vacant plots which appear among housing areas.
Recreational	Sites of recreation, professional sport, and large landscaped areas.
Religious	All religious buildings and for large cemeteries.
Utilities	Utility services which include reservoirs as well as water works and power stations.
Settlement	Areas of residential housing, which can include other elements such as shops or public houses as attributes where they do not cover an area large enough for their own polygon.
Public Services	Services including educational facilities, medical facilities, emergency services, government & local government, community centres.
Communications	Transport networks and services - including linear features (canals/roads) but not roads.
Woodland	Areas of woodland.



The commercial core and shopping centres in Wolverhampton: classified among the commercial types within the BCHLC

the use of a wider variety of categories of modern land use in order to reflect this.

This piecemeal type of development also meant that it was sometimes necessary to use a single HLC Type to describe a polygon which might actually contain different land uses, or features from different periods. In these cases, the dominant type, or that perceived to have the biggest impact (based on the mapping), was recorded. Other less dominant types contained within such a polygon are recorded as attributes and referred to within the description field of the database.

Commercial Types

The ten commercial categories of modern land use are listed in Table 2.6.

To reflect the differing nature of development and land use across the Black Country it was recognised that other than the commercial cores (usually the historic town or village centres), there was a need to reflect new retail locations such as the out-of-town shopping centres. Most notably, these include the Merry Hill Centre and other retail parks with large warehouse type stores (such as St John's Retail Park in Wolverhampton).

smaller, on average, than those in rural areas. Although some large housing estates, shopping centres and industrial districts have been planned and built in the Black Country, much of its development has tended to be small-scale and piecemeal, necessitating

Industrial Types

When choosing industrial types it was decided that they would be divided by sector. This was partly because it was recognised that certain areas of the



Industrial buildings in Walsall.

Table 2.6: Categories of Modern Land Use - Commercial, Industrial & Extractive

Commercial Types*

Commercial core	Public house
Other commercial site	Retail park
Market	Shopping centre
Office	Shops
Offices & shops	Superstore

Industrial Types*

Brewery or cooperage	Leather works
Brick works	Lime works
Cement works	Metal works
Chemical works	Pottery works
Clothing factory	Rope Walk/hemp factory
Depot	Scrap yard
Engineering works	Timber yard/saw mill
Enamel works	Rubber works
Garage	Vehicle factory
Glass works	Warehouse
Industrial Estate	Workshops
Japanning works	Works
Lock works	

Extractive Types*

Colliery	Disused limestone quarry
Clay quarry	Disused quarry
Disused clay quarry	Ironstone mine
Disused fireclay mine	Limestone quarry
Disused colliery	Mine

*Details of the scope of each of these categories are provided in Appendix 2.



Turner's Hill in Sandwell, the location of several disused quarries, classified as extractive landscape types.

The resulting twenty-five types of industry used are listed in Table 2.6.

Extractive Types

Like industrial types, categories of extractive land use (also in Table 2.6) were chosen based on our knowledge of Black Country mining and quarrying industries at the start of the project. This included collieries known to have existed in all of the four local government areas, as well as limestone and clay quarries in Dudley and Walsall in particular.

However, the term 'colliery' has not been used to describe the modern landscape: this is because the last of the collieries, a large open cast mine in Dudley, closed in the 1980s.

A decision was also taken to describe certain areas of land depicted as rough grassland on the historic Ordnance Survey maps as 'Disused Colliery' or 'Disused Quarry' where this was their former use, rather than describing them as 'rough grassland/scrub'. This was particularly the case where aspects of this former use are still recorded on the modern landline mapping.

Black Country were associated with particular industries, e.g. leather working in Walsall, lock making in Wolverhampton and Willenhall, glass-making in Dudley and Sandwell, and vehicle works in Wolverhampton. It was also recognised that metal working was prevalent across all four authorities.

However, the modern *Land-Line* mapping only records industrial buildings as 'Works', 'Depot', 'Warehouse' or 'Scrap Yard'. It was therefore decided that where a surviving industrial site was marked on an earlier map as an 'engineering works' or 'iron works' for example, then that HLC type would be used to describe the modern landscape.

Settlement Types

It was obvious that, in an urban area, the most frequently used Broad Type was going to be settlement. It was therefore important to include a wide range of sub-categories of housing types to reflect this. The thirty-five sub-categories used are listed in Table 2.7 (below).

After discussion with Wolverhampton City Council's Development Control team it was decided that the size of houses may be an important characteristic, and therefore the approximate extent of the average footprint of the houses in each area was recorded (as described in the scope notes in Appendix 2). For example, houses with a footprint recorded as being 'small' should be 50m² or less. On estates of houses of different sizes the most dominant was applied.

The category of 'Mixed terraces & semis' was defined as many of the large inter-war council estates were made up of these two housing types; whilst the modern housing estates of the 1980s and 1990s also tend to have a mixture of housing styles. However, some



Small semi-detached housing in Sandwell.

housing estates may have been mainly semis, with one or two terraces and these have been categorised as 'Semi detached houses'.

Types of Open Land

Among types of open land (listed in Table 2.8), the term 'ancient unenclosed pasture' was chosen to describe open heath or common land, such as that around Brownhills. This is the only HLC Type which is used for both current and previous types.

Table 2.7: Categories of Modern Land Use - Settlement*

Apartments/maisonettes	Medium terrace housing (tunnel back)
Caravan/mobile home site (permanent)	Mixed medium semis & terrace housing
Cottages	Mixed large detached & terrace housing
Country house	Mixed large terrace housing & industry
Medieval settlement core	Mixed large semis & terrace housing
Farm	Mixed medium detached & terrace housing
High rise flats	Mixed medium terrace housing & industry
High rise flats & terraces	Mixed small detached & terrace housing
Squatter settlement	Mixed small terrace housing & industry
Large detached housing	Mixed small semis & terrace housing
Mixed large semis and detached housing	Residential housing
Large semi detached housing	Small detached housing
Large terrace housing	Small terrace housing (tunnel back)
Large terrace housing (tunnel back)	Mixed small semis and detached housing
Medium detached housing	Small semi detached housing
Mixed medium semis and detached housing	Small terrace housing
Medium semi detached housing	
Medium terrace housing	

*Details of the scope of each of these categories are provided in Appendix 2.

Table 2.8: Categories of Modern Land Use - Open Land, Fields, & Woodland

Types of Open Land*

Ancient unenclosed pasture
 Derelict land
 Marsh
 Rough grassland/scrub
 Vacant plot

Types of Field System*

Irregular enclosure	Piecemeal enclosure
Other enclosed fields	Planned enclosure
Paddocks & closes	Squatter enclosures

Types of Woodland*

Deciduous woodland	Orchard
Mixed woodland	Plantation

*Details of the scope of each of these categories are provided in Appendix 2.



The Birmingham Canal at Coseley, Dudley.

The term 'derelict land' was only used where the waste land which was depicted on the modern *Land-Line* mapping and/or aerial photography had obviously been the site of a building. Where it was formerly

collieries or quarries, which have been tidied away and left to go for grass and scrub the HLC Type used was 'rough grassland/scrub'. 'Rough grassland/scrub' was also used if there was no obvious use for the land and which may once have been 'ancient unenclosed pasture', but where this could not be proved.



Derelict land in Ettingshall, Wolverhampton: classified as a type of open land within the BCHLC.

Types of Field System

The categorisation of fields was originally based on whether they were regular or irregular. However, early in the project it was decided that these terms were not reflecting past land use in an understandable way. Therefore the categorisation ultimately chosen (see Table 2.8) was that used by Staffordshire County Council's HLC project, although using fewer categories as very few field systems survive in the Black Country.

Types of Woodland

It was decided to divide woodland into the four categories outlined in Table 2.8. However, owing to the fact that much of the woodland in the Black Country no longer survives, there were in the event no records of the modern landscape logged within the categories of 'orchard' and 'plantation'.

Table 2.9: Categories of Modern Land Use - Communications, Recreation & Public Services

Communications Types*

Bus/coach Station	Railway (Used)
Canal (Disused)	Road roundabout
Canal (Used)	Railway sidings
Car park	Service Station
Railway (disused)	

Recreational Types*

Allotments	Private parkland
Cinema complex	Public park
Country Park/nature reserve	Racecourse
Golf course	Sports ground
Leisure centre	Stadium
Castle	Theatre
Open air museum	Zoo
Public open space	

Public Services Types*

Art gallery	Medical facility
Community Centre	Museum
Court Building	Public building
Emergency services building	School
Higher Education facility	Town hall
Library	
Local government/Government offices	

*Details of the scope of each of these categories are provided in Appendix 2.



A public park in Smethwick, Sandwell.

Types of Communication Features

Linear communications features have not usually been included in HLC data, but it was felt that the railways and canals contributed considerably to the character of the Black Country, as they had made it possible to exploit the natural resources in an area of the country without navigable rivers. They were therefore included as a separate category within the Broad Type of communications (Table 2.9).

Although roads themselves were not recorded, other features logged during the course of the project included car parks which, in the Black Country, are frequently extensive, particularly around Wolverhampton and Dudley, and often replace earlier settlement.

The idea for an HLC type of 'road roundabout' was taken from Staffordshire, and it includes the motorway

junctions and other very large roundabouts often associated with the dual carriageways such as the Black Country Route.

Recreational Types

Recreational types are detailed in Table 2.9. Three categories were defined for unique sites: 'Castle' for Dudley Castle; 'Open air museum' for the Black Country Museum (other museums can be found under the Broad Type of 'public services'); and 'Zoo' for Dudley Zoo with its specific architectural style.

'Country Park/nature reserve' was chosen to describe modern features, although in some case they may retain features of degraded formal landscapes. An example of this is Northcote Farm and Country Park which had previously been private parkland.

Public Services Types

It was decided to group together some of the HLC types originally conceived in this category, resulting in the list in Table 2.9. Originally 'emergency services building' had been split into 'Police Station', 'Fire Station' and 'Ambulance Station'. Similarly 'Higher Education Facility' had been split into 'College' and



Part of the campus of the University of Wolverhampton.



Mount Pleasant Methodist Church, Dudley.

'University', which meant that adult education facilities were not easy to place. However, 'School' was kept as a separate category due to the sheer number of these complexes across the sub-region.

have their own style and characteristics. The HLC type 'cemetery' was also included under this category.

Utilities Types

The Broad Type of 'Utilities' was created at the beginning of the project after it was realised that some sites were large enough to justify its creation. The HLC Types within this group are listed in Table 2.10.

Military Types

Although a Broad Type for military sites was created within the database, there were ultimately very few military sites to be found in the Black Country, other than Territorial Army centres. The only categories of military type used is therefore Territorial Army Centre (see Table 2.10).

Religious Types

It was decided to divide 'religious' HLC Types by the faith groups using them because it is often the case that, where these buildings are purpose built, they

Table 2.10: Categories of Modern Land Use - Utilities, Military & Religious

Utilities Types*

Gas works	Sewage works/water works
Power station	Sub station
Reservoir	Telephone Exchange

Military Types*

Territorial Army centre

Religious Types*

Anglican church	Non conformist church
Cemetery	Roman Catholic church
Hindu temple	Sikh temple
Monastery/nunnery	Jewish synagogue
Islamic mosque	Temple

*Details of the scope of each of these categories are provided in Appendix 2.

2.3 PERIOD OF ORIGIN (OF MODERN LAND USE)

The ranges used to define period of origin for current, modern land uses (i.e. 'HLC Type') are broad, and they were largely defined by the years in which the principal source maps were surveyed. The major exception to this is the case of housing built in the second half of the 20th century, as explained below.

Period of Origin of Settlement

It was felt that, in order to get a better understanding of the development of the Black Country in the period after WW2, the housing estates originating during that time needed to be associated with relatively narrow periods of origin. However, this was made more difficult by the unavailability of digital Ordnance Survey maps for the period between 1950 and 1990 owing to copyright restrictions and cost implications.

The period ranges relating to housing built after the 4th Edition Ordnance Survey map (i.e. the mid to late 20th century) are therefore based on modern aerial photography and professional judgement.

For the second half of the 20th century, two periods of origin were very commonly used: 1960 to 1980, and

1980 to 2000. This was because housing from these periods was fairly easy to identify from its architectural style. Obviously there will be some inaccuracies as a result of this approach: some estates will straddle the limits of these periods, for example, and others may have a style which is older or newer than their actual date of construction.

In many parts of the Black Country, especially along the older route ways and in the historic centres, the development has been very piecemeal, taking place over at least a century. In areas where houses are of a variety of ages, either the most dominant period is recorded in the database or, where no dominant period is obvious, the earliest visible period.

The date ranges used for land previously occupied by housing is discussed below, although they generally follow the similar patterns as for current land use.

2.4 PAST LAND USES

The narrow categories used to describe previous, past land uses are roughly equivalent to those used for the modern landscape discussed in Section 2.2, although there may be some cases where a category of past land use does not have an corresponding description

Table 2.11: Period Ranges within the Black Country HLC

Description:	Scope:
Medieval	follows the standard Sites & Monuments Record period found with the HBSMR database, i.e. 1066 to 1539.
Unknown - 1750	where the HLC Type is present on Yates' map or is known to have existed before 1750 from entries in the Sites & Monuments Record
1751 - 1820	where the HLC Type is present on the 1814-17 Ordnance Survey surveyors' drawings or Parish maps or other maps pre dating 1820. Otherwise where known from entries in the Sites & Monuments Record
1821 - 1880	where the HLC Type is present on the first edition Ordnance Survey map; but may have been earlier. If this is the case this should be made clear in the Description field.
1881 – 1900	where the HLC Type first appears on the second edition Ordnance Survey map
1901 – 1910	where the HLC Type first appears on the third edition Ordnance Survey map
1911 – 1930	where the HLC Type first appears on the fourth edition Ordnance Survey map
1931 – 2000	where the HLC Type is shown on the modern landline mapping, except for Broad Type 'Settlement' which is further sub-divided (see Table 2.12 opposite)

Table 2.12: Period Ranges for Settlement within the Black Country HLC

Description:	Scope:
1931 – 1950	used where the fourth edition Ordnance Survey map is missing for housing estates that were probably inter-war or immediate post-war in date
1951 – 1960	mainly estates of semis which were not obviously inter-war or immediate post-war or 1960s/70s.
1961 – 1980	Often on the edges of the main settlement area, or replacing earlier cottages/terraces. Not always red brick and some detached houses are gable end on to the street.
1981 – 2000	Mostly built on estates of cul-de-sacs. The 1990s houses are most obvious and just look newly built on the modern aerial photographs.

in the record of the modern landscape. For example, records have been made of Pre-1931 military airfields but, since none survive in the Black Country, this category does not have a modern equivalent among modern land uses.

In terms of their coding within the data record, categories of past land use differ from their modern equivalents in that their codes all have a date prefix. This is in order to enable the data to be queried. The period ranges used for past land uses are effectively as shown in Table 2.11, although they use the corresponding descriptions detailed in Table 2.13.

The scope of each of the codes used to describe past land uses is detailed in Appendix 3.

The data held on the previous uses of any individual location took account of the fact that the geography of 'polygons' on which the Black Country HLC was based reflected the modern landscape, and not what had existed previously. So, for example, a modern surviving area of inter war semi-detached housing which had been built partly upon terraces and partly upon an iron works could not, within the data, be divided to reflect the two previous types.

At the beginning of the data collection process this was resolved by recording multiple contemporary previous land uses. However, later in the process, only the most dominant land use was recorded for each period.

Table 2.13: Periods Used to Record Past Land Uses

Description:	Scope:
Circa 1750/Pre 1750	Unknown to 1750
Circa 1800/Pre 1800	1751 – 1820
Pre 1881	1821 – 1880
Pre 1901	1881 – 1900
Pre 1911	1901 – 1910
Pre 1931	1911 - 1930

2.5 OTHER RECORDED ATTRIBUTES

In this context 'attributes' refer to characteristics of the landscape recorded in the HLC which do not necessarily describe the use to which the land is put or the period of origin of the built environment. Instead, this category of data is more commonly used to describe the *form* of the landscape features in each area.

The structure of the attributes data was defined before the creation of landscape areas or 'polygons' began, and the aim was to allow other relevant information about the landscape to be included. In

the event, only a few of the broad categories of land use had recorded attributes associated with them.

Table 2.14 lists the eleven attributes which were recorded, together with their associated land use category, and it shows that the attributes recorded were overwhelmingly used to describe different types of settlement. At the end of the data collection process the attribute labelled 'Council' was added for all records within the dataset in order to make it easier to separate data for each local authority area.

Appendix 4 outlines more detail of the information collected under the heading of Attributes.

Table 2.14: Attributes of the Landscape Recorded in the BCHLC

(For full details see Appendix 4)

Land Use(s) (broadly defined) to which this attribute applies	Name of Attribute	Description
All	Council	The modern local authority in which this area is situated
Field System; Recreational	Field System type	What evidence exists of previous field types, in particular medieval ridge & furrow
Religious	Ancillary religious bldgs	Whether buildings such as a cemetery lodge, crematorium, meeting hall etc. are included
Utilities	Reservoir type	Whether the utility is a reservoir and, if so, whether it is covered or open
Recreational	Sports ground type	The type of sports or leisure activity or activities for which the ground appears to have been used
Recreational	Water body type	The type of water body, e.g. natural or ornamental, lake, canal etc.
Settlement	Components of housing areas	Whether an area of settlement includes facilities such as a community centre, pub, school, shop or surgery.
Settlement	Front of housing	Whether a front garden is present
Settlement	Rear of housing	The type and size of garden or yard present at the rear of the properties
Settlement	Size of housing plots	The size of plots within the area, defined by one of six categories.
Settlement	Street pattern type	The form of the streets within the residential area and whether they are contemporary with the housing
Settlement	Type of housing estate	Whether the settlement is part of a housing estate and whether it is known to be privately or Council built

3. Analysis of the Black Country Landscape

3.1 DIFFERENT APPROACHES TO ANALYSIS

The possibilities for analysing and interpreting a dataset as large and complex as that of the BCHLC are clearly numerous, and it is not our intention to catalogue them all here.

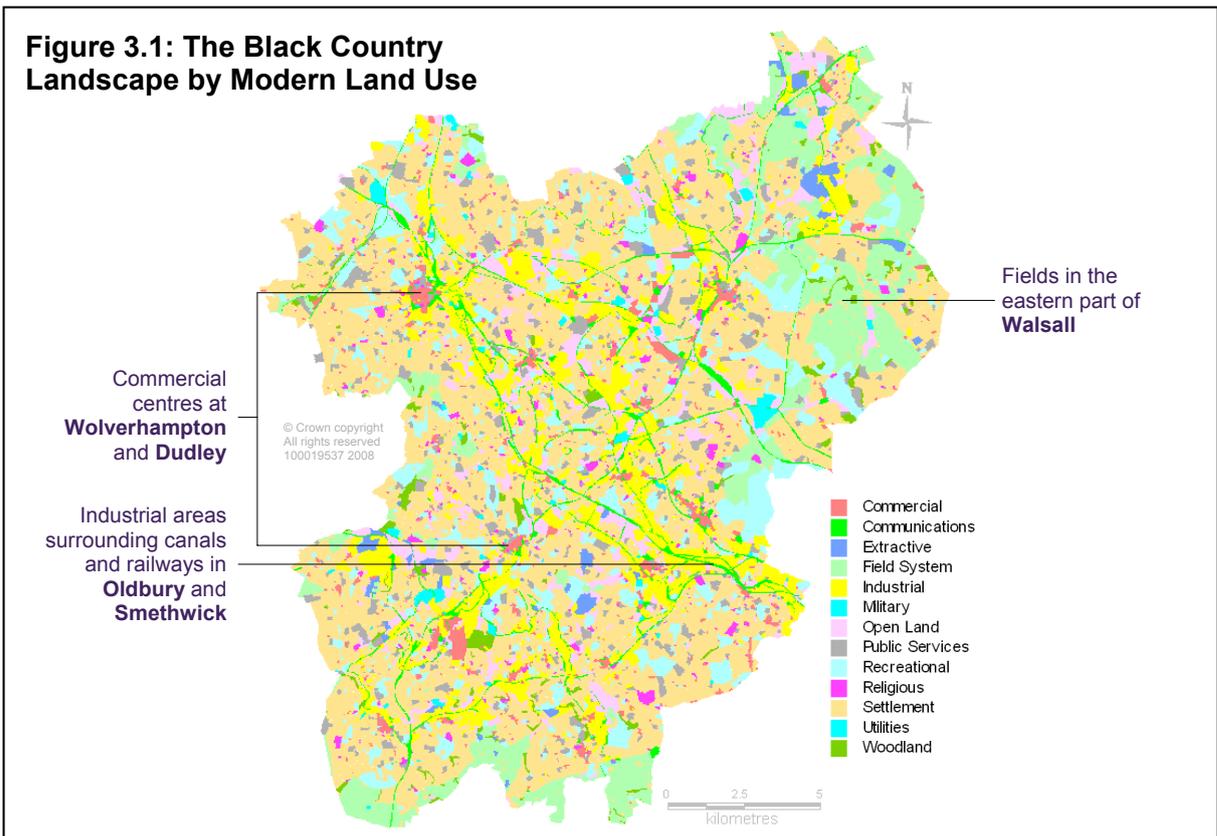
However, in this brief section we hope to illustrate some of the lines of enquiry which analysis of the dataset might inform. A further report on the Black Country Historic Landscape Characterisation, due before the end of 2009, will explore this area further.

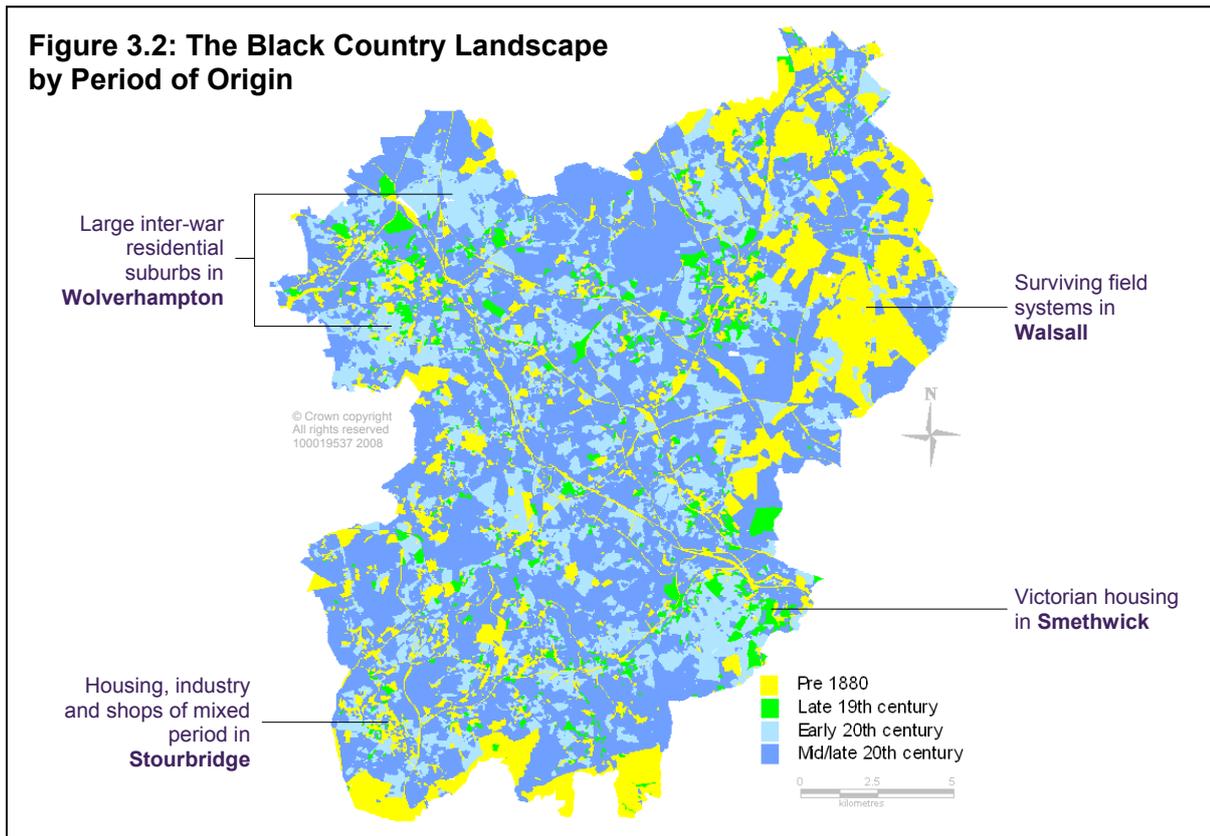
Clearly, much of the premise of assembling the HLC data is that it can be used (perhaps in a way which is not possible with other datasets) to easily associate parts of the landscape which have a similar character, where character can be defined in a number of different ways. The allocation of each part of the landscape to one of a small number of pre-defined

Table 3.1: Modern Land Use

Modern Land Use (in descending order of area)	Area (km²)	% of total
Settlement	169	47%
Industrial	40	11%
Field System	36	10%
Recreational	35	10%
Open Land	21	6%
Public Services	18	5%
Communications	11	3%
Commercial	9	3%
Woodland	5	1%
Other ¹	12	3%
Total	356	100%

¹Including land used for religious purposes, extractive industries, utilities, and by the military.





categories of modern land use (i.e. 'broad type') is an example of this type of association.

A second process which is possible is the analysis of the change which has taken place, in particular through the examination of the sequence of phases which the landscape has undergone. This might be carried out in order to illustrate the history of a specific location (through its changing land use, for example) or to make comparisons across a wider geography.

3.2 THE ASSOCIATION OF PARTS OF THE LANDSCAPE BY THEIR CHARACTER

The Black Country As A Whole

Among a number of possible outputs, the association of landscape with common features allows us to produce maps of the whole area of the Black Country highlighting a number of different aspects of its landscape. Figure 3.1, for example, shows the area divided between the thirteen broad categories of land use adopted by the BCHLC. This, together with the corresponding area totals (in Table 3.1), shows the extent of the land taken by housing in the Black Country at the start of the 21st century (represented by the beige colour in Figure 3.1).

Table 3.2: Period of Origin of the Surviving Landscape

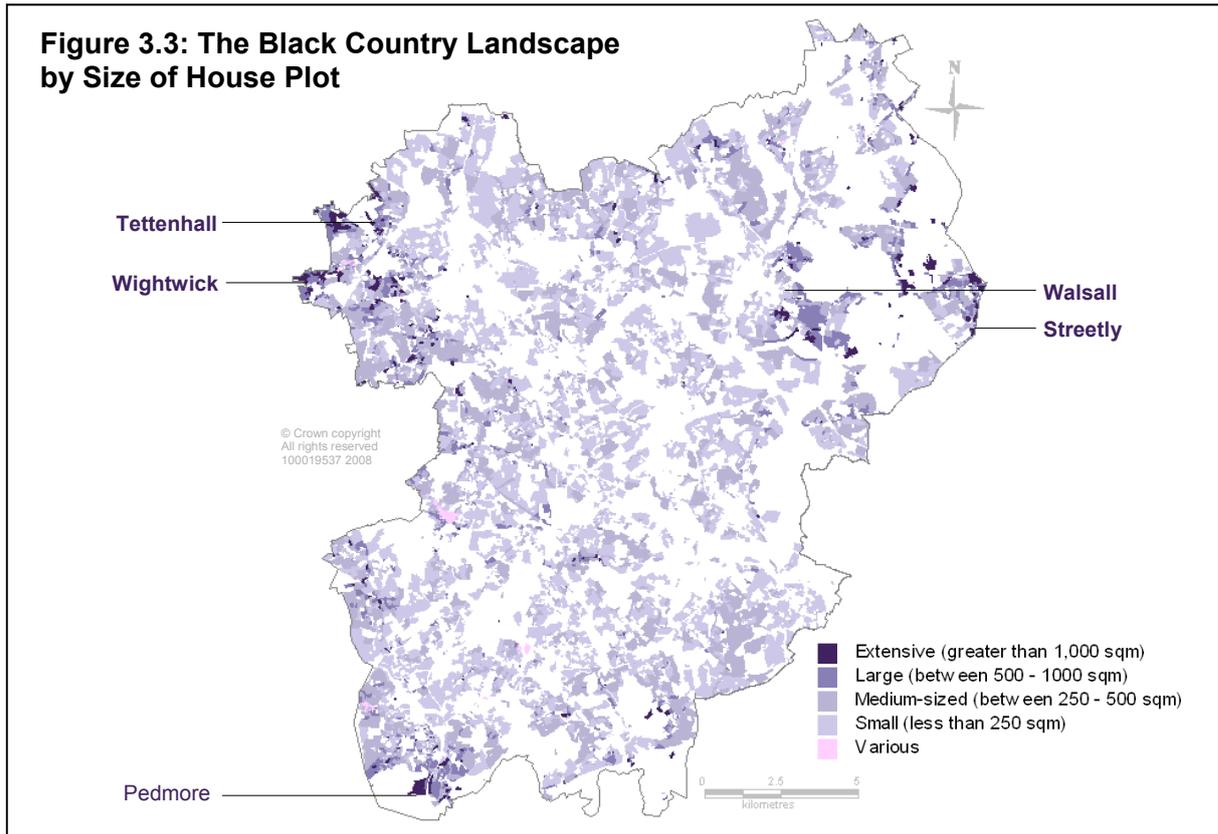
Period of Origin	Total Area in Sq Km	% of Black Country
Pre 1880	69	19%
Late 19 th century	15	4%
Early 20 th century	75	21%
Mid/late 20 th century	197	55%
Total	356	100%

Source: Black Country HLC

Similarly, Figure 3.2 shows the modern landscape by four categories of period of origin. These categories are generally organised around the survey years of three sets of historical maps (i.e. 1880, 1900, and 1938), and Table 3.2 shows the total area of the landscape which originates between each of these survey points.

*These areas are referred to as predominantly 20th century, as they do contain within them small areas of older landscape

Figure 3.3: The Black Country Landscape by Size of House Plot



Each part of this map which is coloured blue indicates a part of the surviving landscape which is predominantly* 20th century in its origin (dark blue corresponds to landscape created after 1938, light blue from the period 1900 - 1938). The extent of the blue areas, which cover three quarters of the map, starts to create an illustration of the full impact which the modern age has had on character of the sub-region.

In addition to making connections between those areas of the modern landscape which have the same use or period of origin, we can also consider what type of landscape exists in terms of a set of predefined 'attributes'. Many of these attributes describe the form of the buildings, streets, etc. which occupy each area. This record of landscape form which is contained within the BCHLC is perhaps at its most detailed in the case of the sub-set of records accounted for by housing (or 'settlement' as it is referred to in the data).

Figure 3.3, for example, illustrates the distribution of housing by the size of the plot of land allocated to each property. It shows that, in large parts of the centre of the Black Country, houses have been commonly built in plots of less than 250 square metres

(i.e. equivalent to an area 5 metres wide and 50 metres long, for example).

However, despite this general case, there are relatively small areas of the landscape where the dominant pattern is of houses with at least four times as much land. These locations - such as in Tettenhall (Wolverhampton), Pedmore (Dudley), and Streetly (Walsall) - are often on the edge of the Metropolitan area bordering the more rural counties of Staffordshire or Worcestershire.

More generally, this type of analysis - i.e. the examination of the position of each part of the modern Black Country within a range of a particular landscape attribute - is one which could be repeated for a number of different characteristics. However, it is clearly also only a small step from this approach to one which enables the selection and separate mapping of those parts of the landscape which share a particular characteristic.

Separating a Single Type of Landscape

An example of this approach, i.e. looking at individual elements within the landscape, is shown in Figure 3.4. This specific example identifies all the parts of the Black Country which were being used for clay quarrying at the end of the 20th century, as recorded

by the BCHLC. It shows that this particular type of extraction was located around three centres, i.e. Brownhills, Aldridge and Pensnett, and that, on these sites, quarrying had started from the 19th century onwards.

As relatively modern sites of clay extraction, these particular locations are unlikely to appear in any list of areas or buildings designated for their architectural or historical significance. However, more generally, the approach of using the BCHLC to identify landscape features of a particular type will, on occasion, have an advantage over using records of designations in that it may be a more extensive record.

However, using the BCHLC in this way contains the possible disadvantage that the relatively large size of the parcels of land on which the records are based (i.e. the 'polygons') might disguise an isolated feature which happens to be situated among others of a different type.

Taking our example of clay quarries - a small quarry in a larger area of derelict land might be recorded as a 'derelict land' polygon, thus making the quarry invisible to any interrogation of the data.

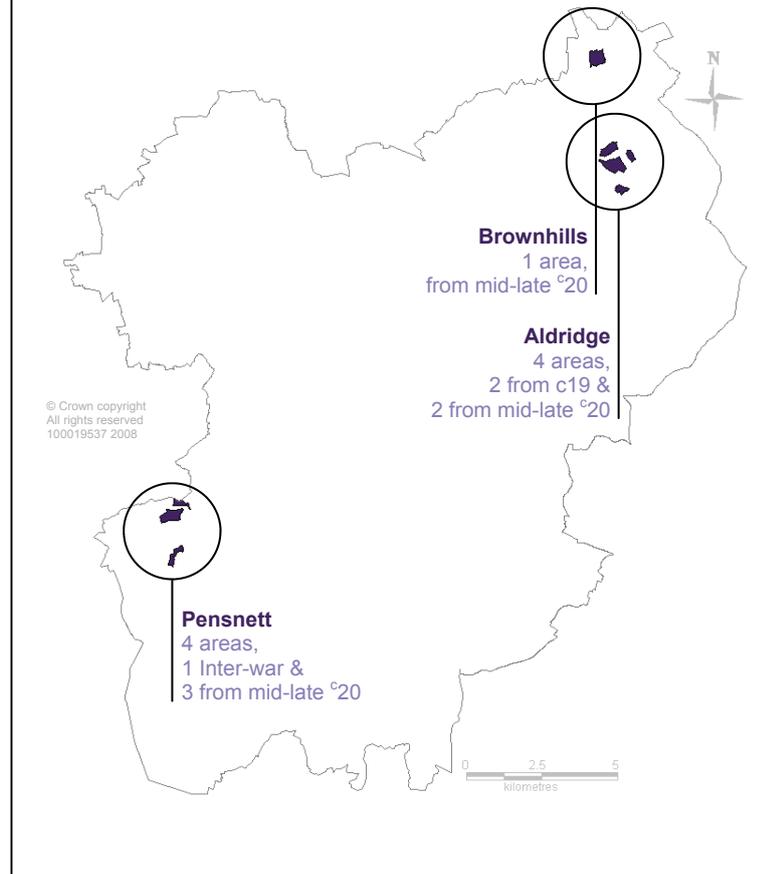
Querying the data in order to separate sets of similar features is clearly also restricted (in general) to those features which have been given a separate classification code, i.e. these which are listed in the appendices to this report.

Despite these disadvantages, this is still a useful approach, providing a consistent estimate of the distribution of a set of features in a way which may not be available elsewhere.

Adjoining Areas of Similar Character

An alternative way of selecting specific landscape types in order to show how they are distributed across the Black Country is to try to link together those areas which are both similar and situated next to each other. Character Area profiles. In this way boundaries can be drawn around adjoining areas of similar character - for

Figure 3.4: Areas of Clay Quarrying in the Black Country



example, parts of the landscape which comprise largely interwar residential suburbs, areas of post-war industrial estates, or Victorian commercial centres.

In the Black Country, this approach generated a set of 51 broad 'Character Areas', as described in Section 4 of this report. These boundaries are based as far as possible on the comparison of the individual pieces of landscape used to create the record which the BCHLC represents. Thus each Character Area was in general assembled, or 'built up', from smaller areas of land within the dataset.

Previous Uses of the Modern Landscape

These maps and tables quantifying how land is used and the age of surviving structures relates, in general, to the landscape we can see today. However, one of the key features of Historic Landscape Characterisation is its ability to peel back the layers of the built (and managed) environment to reveal the story of its previous development.

The previous phases of use of the Black Country landscape is a subject which will be explored in the second report of the BCHLC. However, it is possible at this stage to say something in broad terms about the record of previous landscapes held within the BCHLC.

We know for example that, in total, 25,495 records of previous landscapes have been made during the compilation of the BCHLC dataset. Given that there are 12,665 separate parcels of land in the record of the modern landscape, this means that, on average, about two earlier phases have been recorded for each part of the Black Country.

Not surprisingly, the largest number of previous land uses related to the former agricultural landscape of the area. In terms of the number of records, more than half of previous uses are accounted for by fields, woodland or open land (including commons). In addition, earlier phases of housing, as well as (characteristically) mineral extraction, feature strongly in the record of the local landscape's earlier phases.

3.3 RELATIONSHIPS BETWEEN LANDSCAPE PHASES

The BCHLC defines the geographic limits of the features it records in terms of their modern, 21st century boundaries. While it also records past uses of any specified piece of land occupied by a feature or site, it does not record the previous locations of any boundaries between them.

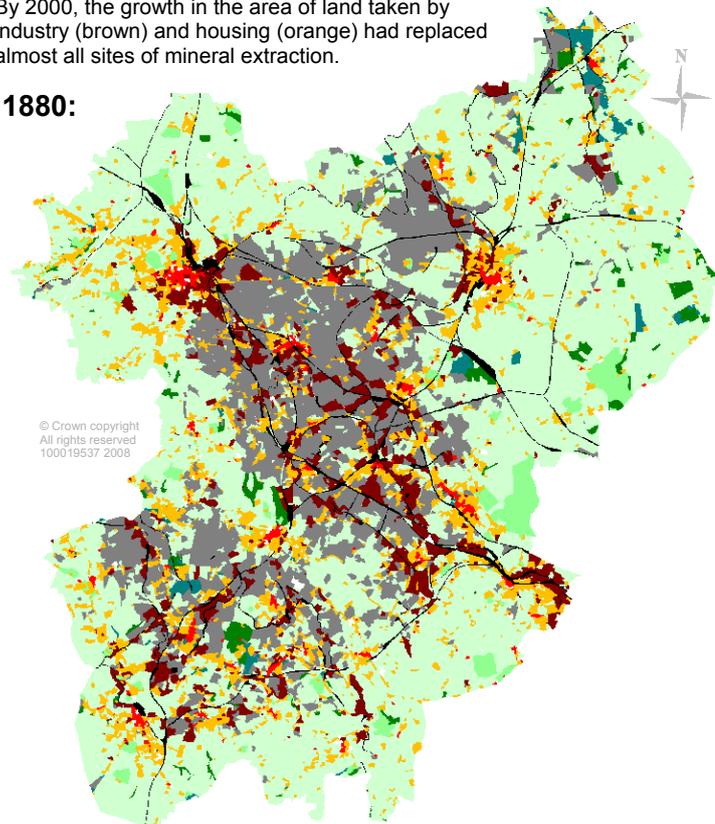
One implication of this approach is that, as soon as our mapping departs from the modern era in an attempt to represent past, disappeared landscapes, some inaccuracy is

Figure 3.5: The End of Mining in the Black Country

The grey areas in the centre of the 1880 map represent the sites of collieries, clay pits, and other mines and quarries.

By 2000, the growth in the area of land taken by industry (brown) and housing (orange) had replaced almost all sites of mineral extraction.

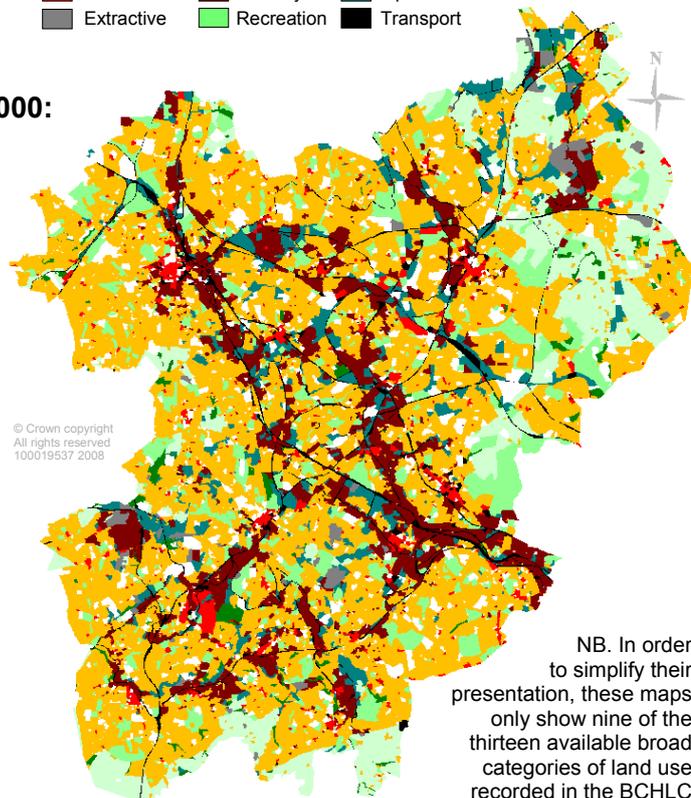
1880:



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2000:



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NB. In order to simplify their presentation, these maps only show nine of the thirteen available broad categories of land use recorded in the BCHLC

introduced into the representation of the boundaries between areas of different character.

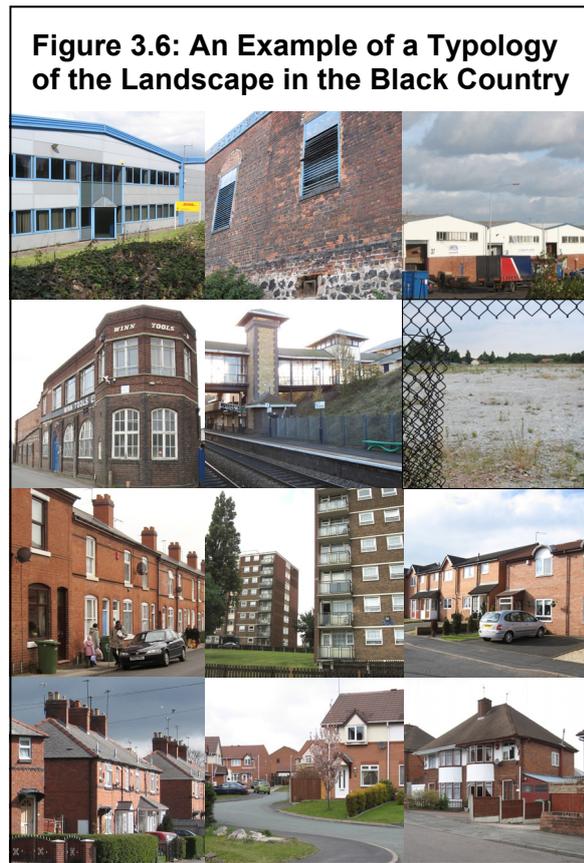
However, at a general level it is nevertheless possible to represent the broad changes which have taken place in the sub-region in a way which no other single dataset can.

Figure 3.5 is one example of the way that change in the landscape can be represented. Perhaps the defining historical phase of the Black Country was the exploitation of coal and other minerals in the 18th and 19th centuries (indeed, evidence suggests that the name 'Black Country' was first used to describe the landscape in this period). But the maps in Figure 3.6 illustrate the way in which mining and quarrying land was replaced with housing and industry in the period after 1880 (the maps show the difference between that year and 2000, but actually, the change had really taken place by a point much earlier in the 20th century).

Without discussing what these particular maps reveal in any detail here, they serve to indicate the possibilities for analysis of landscape change using the BCHLC. Our second report will explore these possibilities, looking at the nature of change (i.e. what have been common changes of land use, for example), the first period of development of each part of the area, as well as some of the most recent changes. It will also use the BCHLC to try to measure the rate of change as well as the durability of landscape features.

3.4 COMBINATIONS OF ANALYTICAL APPROACHES

In this section, we have considered ways in which the data held by the BCHLC might be analysed, including the linking of areas of similar character (i.e. land use, period of origin, and form) in the modern landscape, mapping the distribution of single types of features, and the creation of boundaries around adjoining areas of similar character. We have also considered previous uses of the land, as well as the representation of landscape change.



Clearly, any number of these approaches can be combined to achieve objectives which are not properly served by one. An example of this has been the creation of a landscape 'character framework' for those parts of the Black Country which are likely to change most in the coming decades (i.e. the Regeneration Corridors).

A Local Character Framework

A Character Framework for the Black Country Regeneration Corridors was written in 2008 and uses analysis of the BCHLC to discover what it is about the landscape of the Corridors which is distinctive in Black Country terms. In order to provide a basis for a discussion about the preservation of character and distinctiveness, it creates a typology (i.e. a classification) of the landscape consisting of twelve common elements, illustrated by Figure 3.6, which appear in the area.

4. Defining Character Areas Based on the BCHLC Data

4.1 SUMMARY OF THE PROCESS

The data collection phase of the BCHLC divided the Black Country into over 12,000 records, each of which describes the present and past land use of the individual parcel of land associated with that record.

At this point there was a desire to use the data to make wider generalisations about the physical environment through the creation of larger 'Character Areas' based on what had been recorded about the landscape.

These would assist in the presentation and understanding of the distinctive characteristics of the modern landscape in different parts of the Black Country.

As we have seen, the BCHLC data can be used to analyse and describe the character and landscape of the Black Country in an almost infinite number of ways. One would be to divide the Black Country into its administrative regions – the wards, neighbourhoods, or parliamentary constituencies for example – within each local authority area. Another would be to produce descriptions for defined areas of major change (now being done for some areas using BCHLC data in separate projects).

These are valid and useful approaches, but they do not use the data itself to create the character Area boundaries. In our case, it was therefore decided to let the data 'speak for itself' by dividing the Black Country up into areas of similar modern land use. These areas often cut across traditional divisions such as ward

boundaries etc. (although it was decided not to allow Character Area boundaries to cut across City and Borough boundaries).

It was also a guiding principle that the process should be undertaken in an objective and transparent a manner as could be achieved. Character Area boundaries have therefore been generated initially through a partially automated simplification of the BCHLC record. Specifically, the process relies on:

- clustering adjacent parcels of land of **similar modern use** into larger areas;
- drawing draft boundaries around these larger areas of modern land use;
- modifying and improving boundaries by analysing the '**performance**' of individual areas in representing landscape character;
- modifying boundaries to take into account **local government boundaries** and the **period of origin** of the surviving landscape.

Although the process adopted has generally been consistently applied across the Black Country, slightly different assumptions have been used in two different sections of the project area. This is described in more detail below.

4.2 SIMPLIFYING SETTLEMENT AREAS

Our starting point for the process is based on the fact, established by the BCHLC record, that land taken by

Table 4.1: Settlement-related Polygons within the Black Country HLC

Broad Type	Number of Polygons	Total Area in Sq Km	% of Black Country Accounted for by Broad Type
Settlement	7,490	168.7	47.4%
Recreational (settlement-related*)	474	15.1	4.3%
Public Services	754	18.4	5.2%
Religious	340	4.4	1.2%
Total	9,058	207	58.1%

*See Table 4.2

Source: Black Country HLC

Table 4.2: The Selection of Recreational Records to Associate with Settlement Areas

HLC Type	Number of Polygons	Total Area (hectares)	Average Area (hectares)	Associated with Adjacent Settlement?*
Sports ground	221	941	4	Yes
Public open space	126	355	3	Yes
Allotments	97	156	2	Yes
Public park	81	647	8	-
Golf course	20	653	33	-
Leisure centre	19	42	2	Yes
Country Park/nature reserve	14	336	24	-
Cinema complex	7	17	2	Yes
Stadium	5	28	6	-
Private parkland	5	115	23	-
Theatre	4	3	1	Yes
Country Park	4	103	26	-
Castle	1	3	3	-
Nature Reserve	1	12	12	-
Open air museum	1	12	12	-
Zoo	1	12	12	-
Racecourse	1	39	39	-
Total	608	3473	6	-

*HLC types which were considered as being connected to the immediately adjacent housing. These were, in general, those which either had an average area smaller than about 0.05 sq km or which were relatively numerous. Conversely, those recreational types which consisted of larger, fewer polygons were generally kept separate.

Source: Black Country HLC

housing (recorded as 'settlement') accounts for the largest area of any of our broad categories of land use. Table 3.1 in the previous Section of this report showed that 47% of the area of the Black Country is taken by these residential locations.

Before boundaries were drawn around them, these areas of housing were first combined with some of the smaller categories of land use most directly related to settlement. These included areas used for recreation (or at least that part of recreational land deemed to be directly related to settlement), public services, and religious buildings and land. These additions, detailed in Tables 4.1 and 4.2, combined with settlement areas themselves, account for 58% - almost three fifths - of the project area.

The shape of these areas of settlement and settlement-related land was simplified by removing both those small areas of other land use within

settlement areas (i.e. erasing 'gaps') and also those settlement-related areas isolated within areas of other land use (i.e. erasing 'islands').

The technique used to achieve this was the application of a function within the GIS* application *MapInfo Professional v7.5* which enables a map layer to be 'cleaned' of selected objects. The process is illustrated in Figure 4.1, which shows the area before and after 'cleaning'. In this case, it resulted in a notional settlement-related area, seen in Figure 4.1 (ii), which was smaller (by 11%) than the original (and real) area.

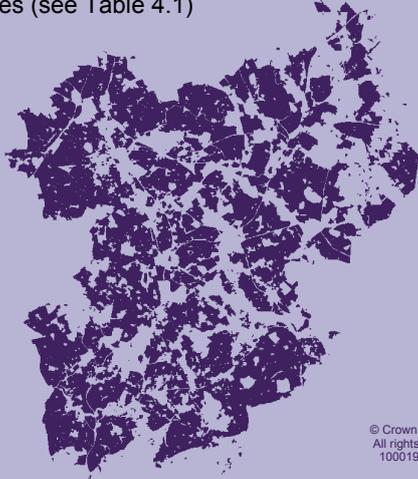
4.3 DRAFTING CHARACTER AREA BOUNDARIES IN DUDLEY

As already mentioned, the approach to defining Character Area boundaries has been applied slightly differently in two parts of the Black Country. The difference was principally in the average size of the Character Areas which have been defined.

*Geographic Information System

Figure 4.1: Simplification of the Settlement & Related Polygons

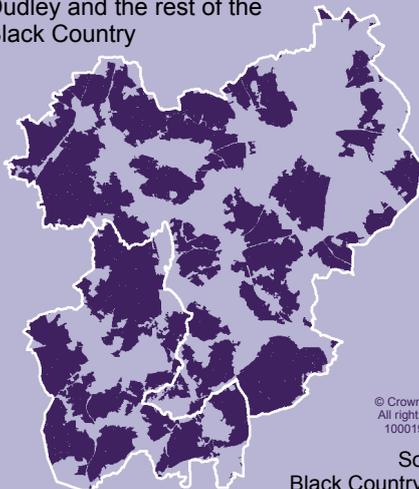
(i) Land occupied by settlement-related land uses (see Table 4.1)



(ii) the same area simplified



(iii) ... showing the boundary between Dudley and the rest of the Black Country



Source:
Black Country HLC

In the case of most of the Black Country, the aim was to produce Character Areas of about 6 square kilometres each, a size which would have led to about 60 areas being defined for the whole project area.

However, in the case of the area covered by the Metropolitan Borough of Dudley, in the south west of the Black Country (i.e. the area illustrated in Figure 4.1 (iii)), there was a desire to more closely match the scale of the areas produced by an earlier characterisation study. This study, reported in 2000, defined eight Character Areas based on a combination of the natural landscape (principally geology and topography) and socio-economic landscape (the latter being defined as *'the evolution of land use and demographics over time, broadly identifying a time series of the Borough's growth over centuries'*). These eight Character Areas are shown in Figure 4.3.

In order to try to relate to the scale of the areas produced in 2000, the process here sought to create 10 Character Areas for Dudley, rather than the 15 which might have been produced had the objective of 6 kilometre squared Character Areas been applied across the whole project area.

With this in mind, a set of Character Area boundaries were drawn for Dudley. These were based on the areas of settlement defined in Figure 4.1 with the addition of similarly identified areas of industry and communications (e.g. canals & railways). These first draft Character Areas for Dudley are shown in Figure 4.3.

Testing for Success

Before we finalised these boundaries it was necessary to consider in hypothetical terms, what would make one set of boundaries more successful than another set of boundaries drawn differently within the same landscape.

As a general point, it could be argued that the success of a system of Character Areas might be measured by the extent to which each Character Area boundary captures the distinctive feature or features of an individual part of the landscape. For any particular criterion (e.g. modern land use, period of origin, or previous use) this can also be quantified by measuring the extent to which a single category of a classification dominates a Character Area.

Figure 4.4 illustrates an example of this process applied to a classification by modern land use. We can see that in Figure 4.4 (i), in the case of 5 of the 9 Character Areas we have created for Dudley, the most

Figure 4.2: Character Areas Generated by the Dudley Borough Landscape & Townscape Character Study in 2000

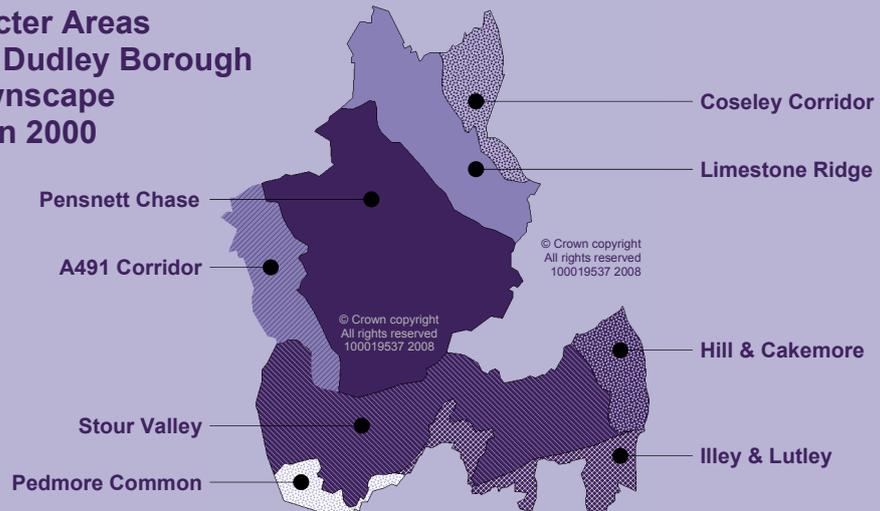


Figure 4.3: First Draft Character Areas for Dudley

Source: Black Country HLC

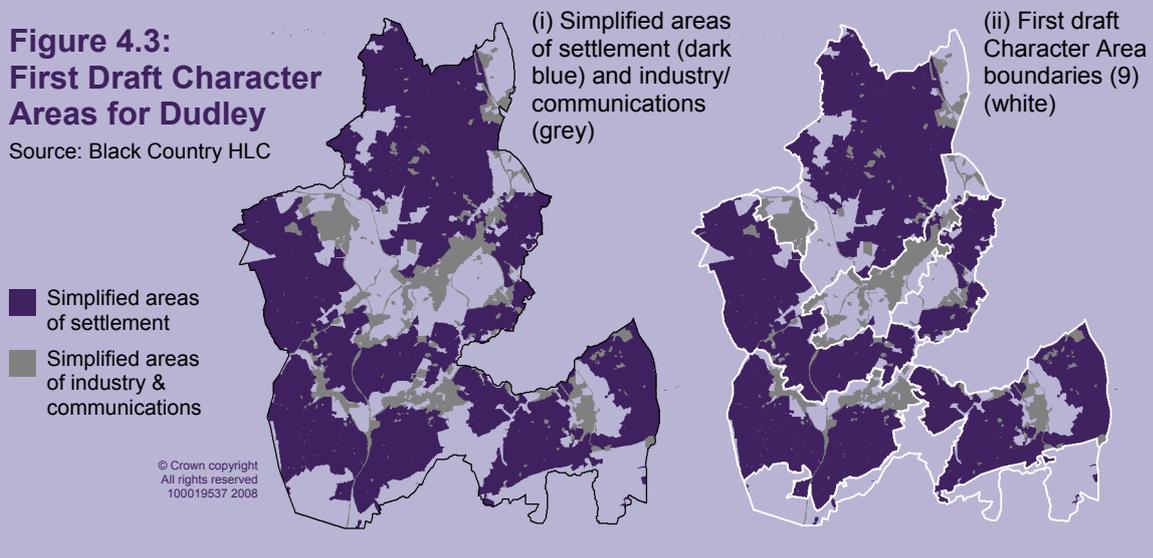
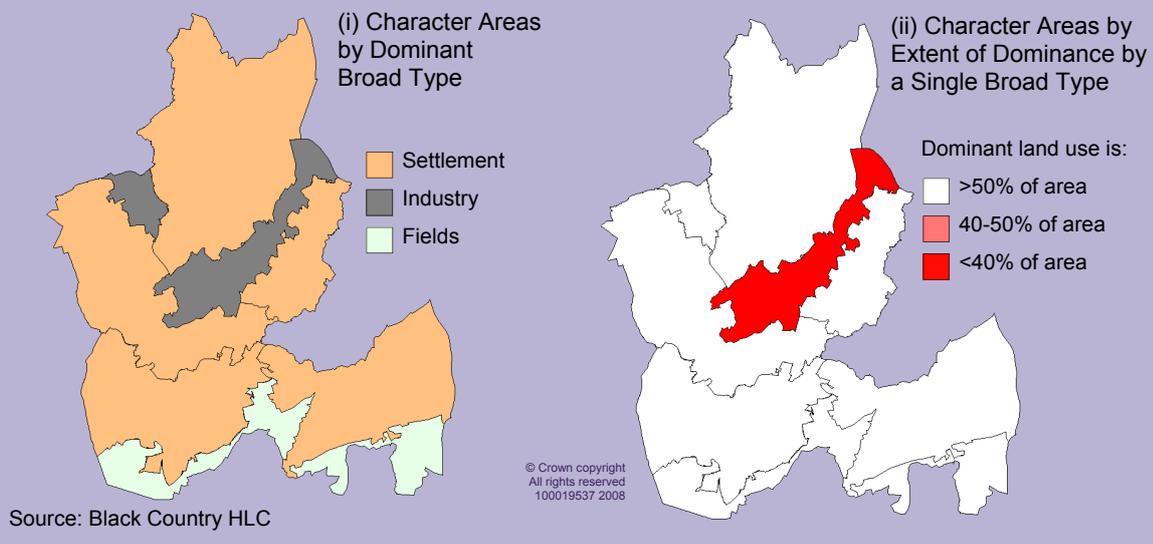
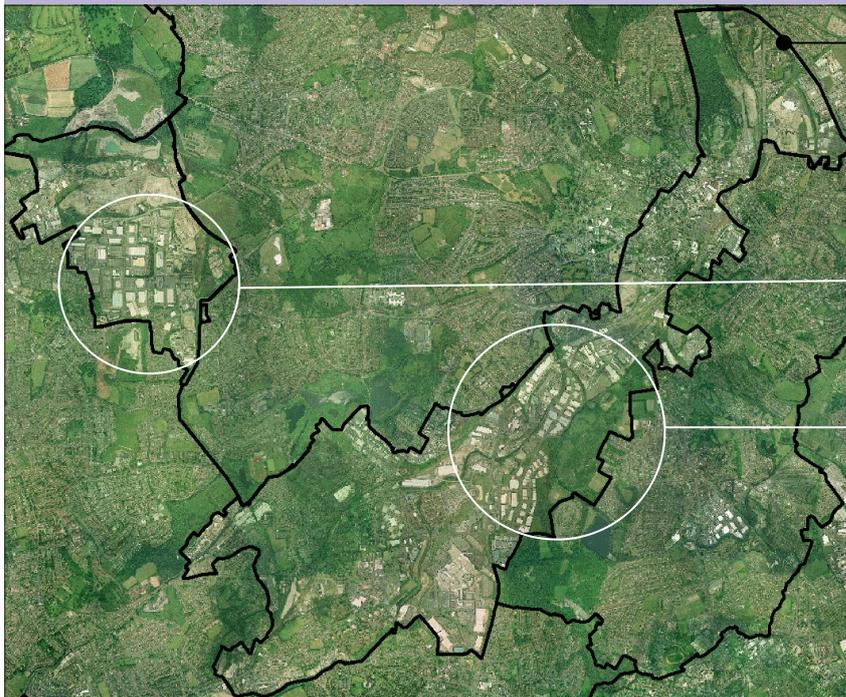


Figure 4.4: Test of the First Draft Character Areas in Dudley



Source: Black Country HLC

Figure 4.5: An Ariel View of Two Draft Character Areas in Dudley



First draft Character Area boundaries (see Figure 4.4)

These two industrial districts (visible from the large 'white blocks' of post-war industrial buildings) lie within two of our draft Character Areas.

However, the one to the north-west is more characteristic of the Area which encompasses it. The district to the south-east, although similar in size and form, lies within a Character Area of more mixed use.

As the red colour given to this second area in Figure 4.4 (opposite page) demonstrates, it is therefore more difficult to characterise this area as having a single land use.

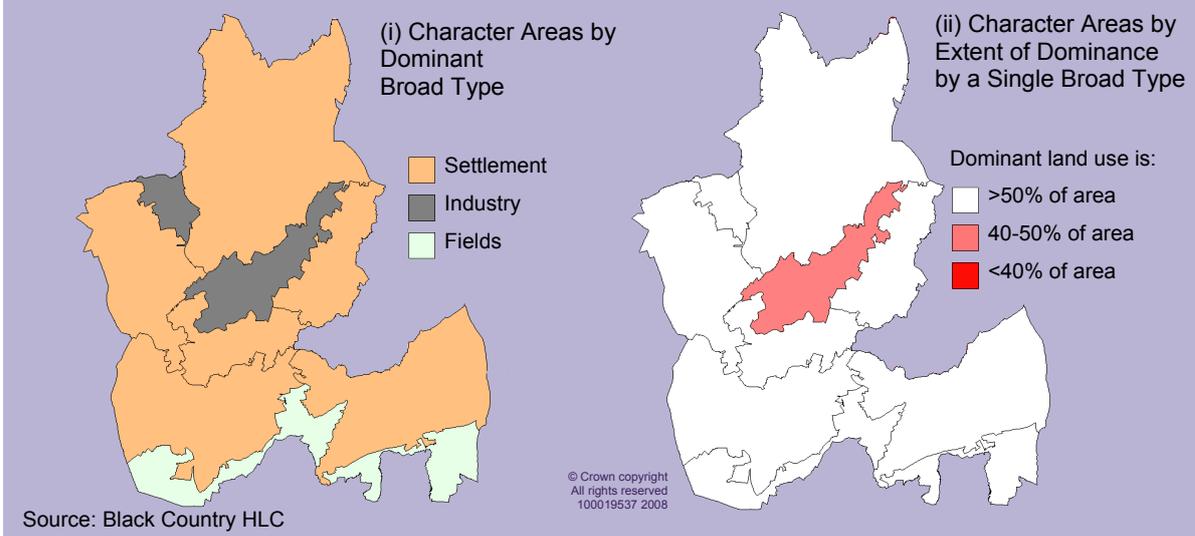
Photography copyright: The GeoInformation Group, 2001

common broad category of land use is settlement (these are sand coloured on the map). For two more the most common type is industry (shown in grey), and a further two have field systems (shown in green) as their most common land use.

However, this only tells us which is the single most common modern land use. If we want to know to what extent these land uses dominate the landscape within each Character Area, we need to consider Figure 4.4

(ii). This shows Character Areas (shown in white) in which a single land use accounts for more than 50% of the area, as well as one Character Area (shown in red) in which the single most dominant land use accounts for less than 40% of the area. This Character Area in particular is the subject of amendment and improvement during the redrafting process.

Figure 4.6: Second Draft Character Areas for Dudley



Second Draft Character Areas for Dudley

Modifications to the Character Areas to produce the second draft boundaries for Dudley largely consisted of changes to the 'industrial' Character Area in the centre of the Borough. These changes reduced the Character Area's size and focussed its boundaries more closely around the central area of industry highlighted in Figure 4.5 (above).

The differences between Figures 4.4 and 4.6 (below) illustrate these changes. Figure 4.6 (ii) in particular (in the bottom right of this page) shows that the re-draft of the boundaries defined areas which are, in all cases, accounted for by a single category of land use occupying at least 40% of its area.

This also had the incidental effect of leaving the 'Coseley Corridor' area, defined by the earlier study (illustrated by Figure 4.2), situated entirely within one of the new Character Area boundaries.

4.4 DRAFTING CHARACTER AREA BOUNDARIES FOR SANDWELL, WALSALL & WOLVERHAMPTON

The approach to defining Character Area boundaries in the remainder of the Black Country outside of Dudley has used the same process, albeit with the objective of defining areas with a slightly smaller average size.

As in Dudley, its starting point was the simplified representation of settlement areas illustrated in Figure 4.1. Figure 4.7 (ii) below shows the first draft set of Character Area boundaries.

This process actually created 24 areas. It had previously been thought that around 45 Character Areas in total would be an appropriate final number (i.e. an average of 15 for each of the four Black Country districts), and so this interim total of 24 appeared to be acceptable – taking into account that further divisions would need to be created in order to account for modern local authorities and differing periods of origin (see below).

When these first draft boundaries were tested for their success in representing land use, as in section 4.4 (above), the result was as illustrated in Figure 4.8. This seemed to show one area, shown in red - to the west of Walsall town centre, in which the largest single category of land use was settlement, but in which settlement accounted for less than 40% of its area. More generally, the analysis also showed that quite a large proportion of the three local authorities was represented by Character Areas which did not have a single category of land use accounting for more than 50% of their respective areas. Both of these results were issues addressed in the creation of a second draft set of Character Area boundaries.

Figure 4.7: First Draft Character Areas for Sandwell, Walsall & Wolverhampton

Source: Black Country HLC

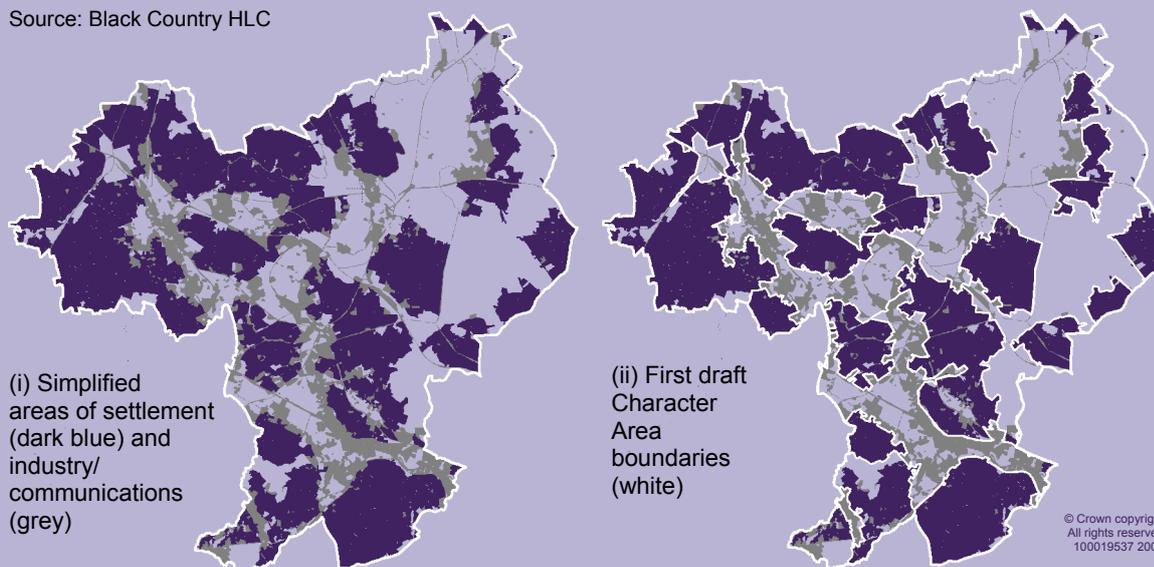
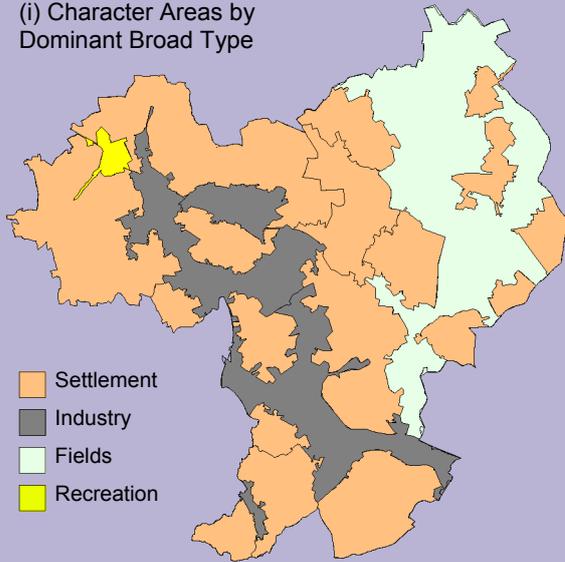
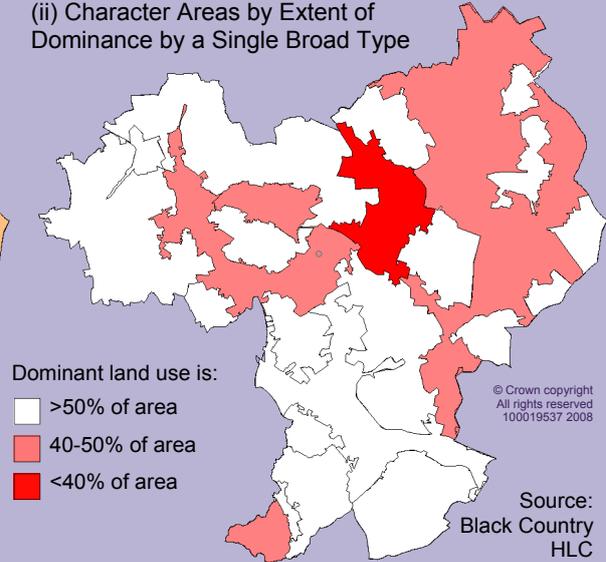


Figure 4.8: Test of the First Draft Character Areas in Sandwell, Walsall & Wolverhampton

(i) Character Areas by Dominant Broad Type



(ii) Character Areas by Extent of Dominance by a Single Broad Type



After modifications to improve the coincidence between the boundaries and clusters of single categories of land use, the boundaries appeared as shown in Figure 4.9 (i). In number, they had been increased from 24 to 27.

The demonstration that, by our defined measure, these boundaries were an improvement on the previous version is illustrated in Figure 9 (ii). When compared to Figure 4.8 (ii) (immediately above it on

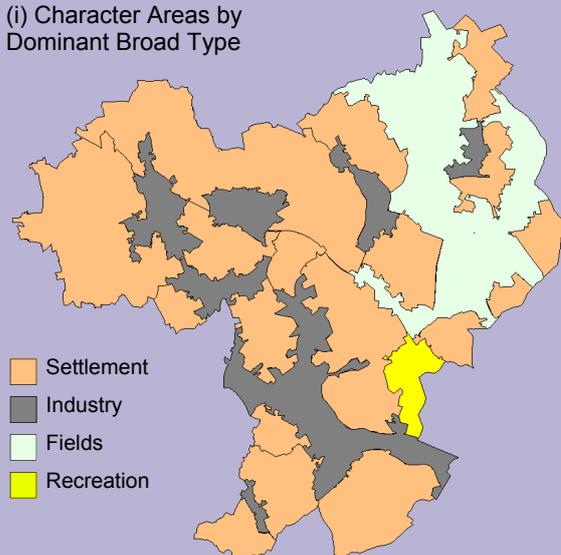
the opposite page) it shows the removal of 'red' areas (i.e. those with a dominant land use accounting for less than 40%) as well as fewer 'pink' areas (i.e. those with a dominant land use accounting for less than 50%).

4.5: ADDING ADMINISTRATIVE BOUNDARIES

In addition to representing the key features of an area, one of the other prerequisites of the definition of our

Figure 4.9: Second Draft Character Areas in Sandwell, Walsall & Wolverhampton

(i) Character Areas by Dominant Broad Type



(ii) Character Areas by Extent of Dominance by a Single Broad Type

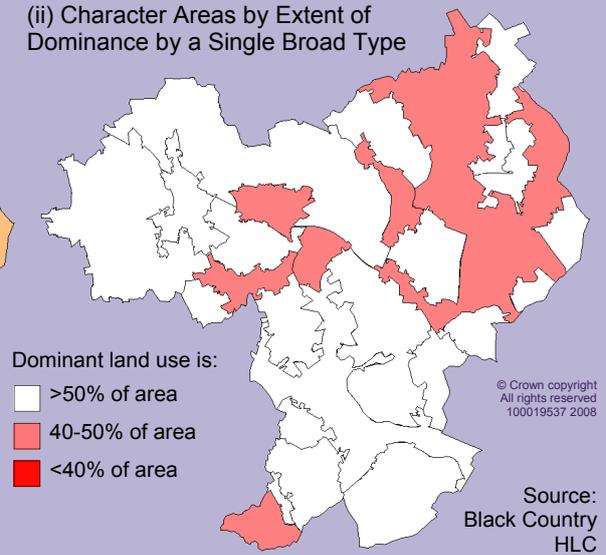
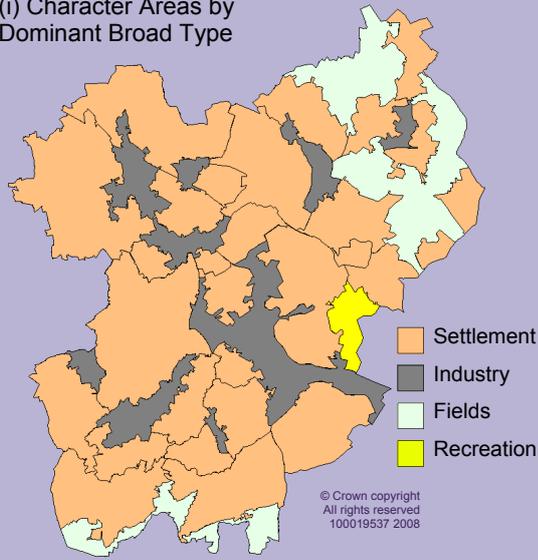


Figure 4.10: Draft Character Areas, Fitted to Local Authority Boundaries

(i) Character Areas by Dominant Broad Type



(ii) Character Areas by Extent of Dominance by a Single Broad Type

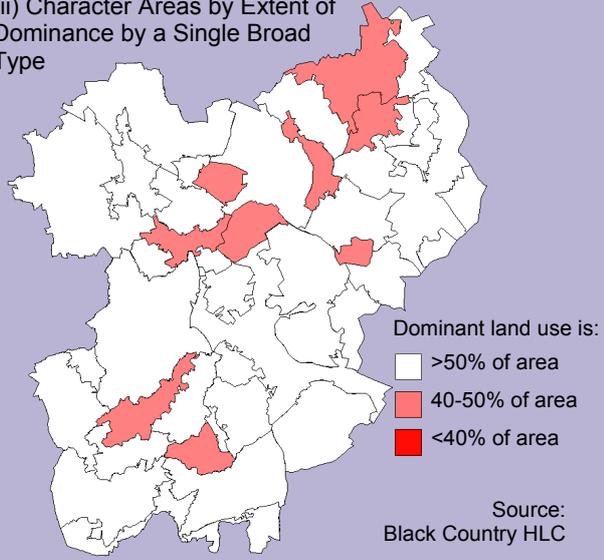
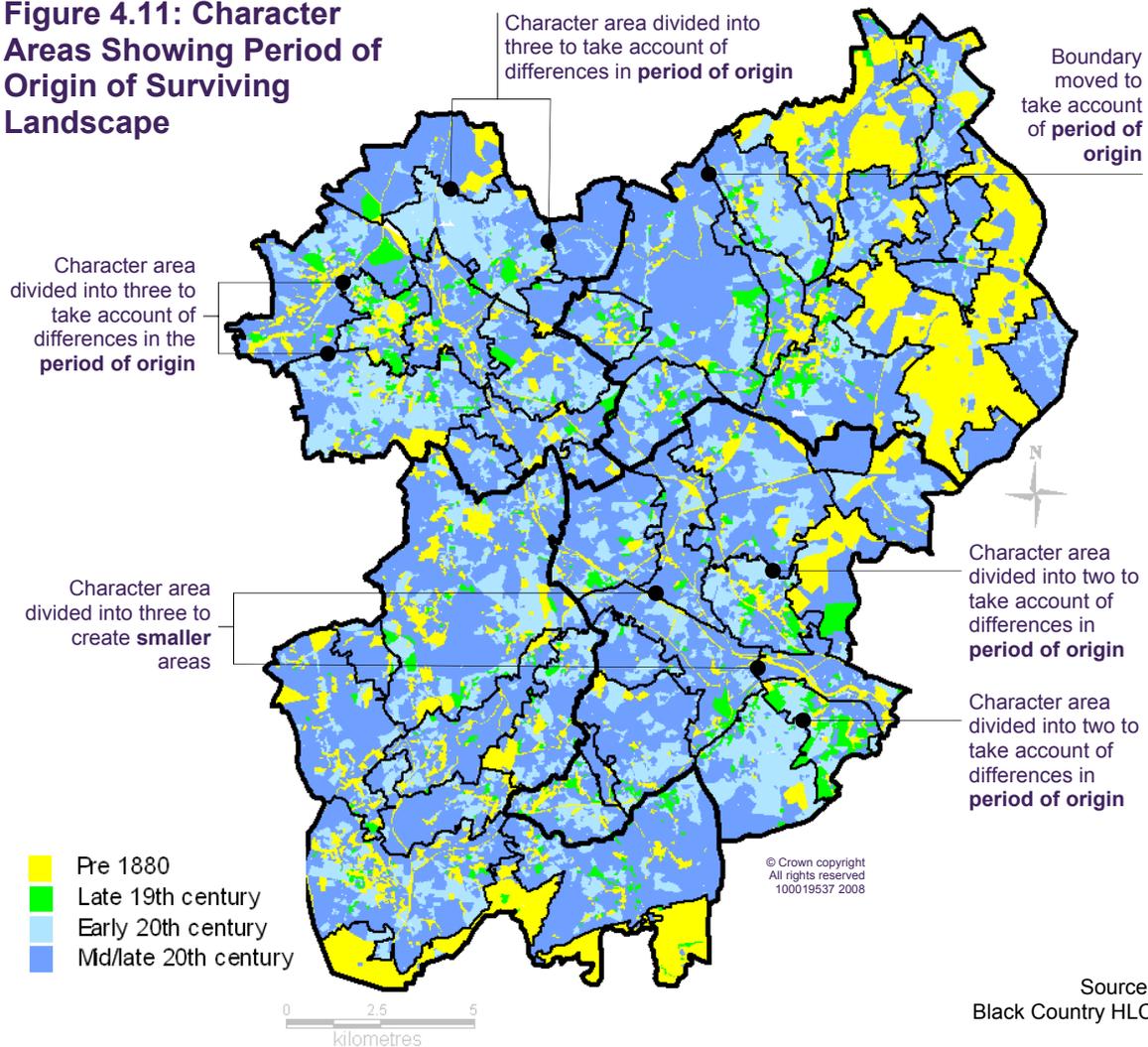


Figure 4.11: Character Areas Showing Period of Origin of Surviving Landscape



Character Areas was that they should be coterminous with the boundaries of the four Black Country authorities of Sandwell, Walsall and Wolverhampton. The next stage of the process sought to address this question.

It was hoped that this would involve little more than dividing some of the Character Areas created in the second draft. However, in the event, the irregular nature of the district boundaries and the need to maintain the effectiveness of Character Areas on either side of them caused some redrafting.

The incorporation of administrative boundaries, together with some redrafting to further improve the performance of the areas, increased the total number of Character Areas (including those within Dudley) from 37 to 43, as shown in Figure 4.10. As with the creation of the previous draft, the area covered by less 'successful' Character Areas was again reduced.

4.6 ACCOUNTING FOR THE PERIOD OF THE SURVIVING LANDSCAPE

It was always an objective that the Character Areas should not only reflect modern land uses but also the periods from which the landscape dates.

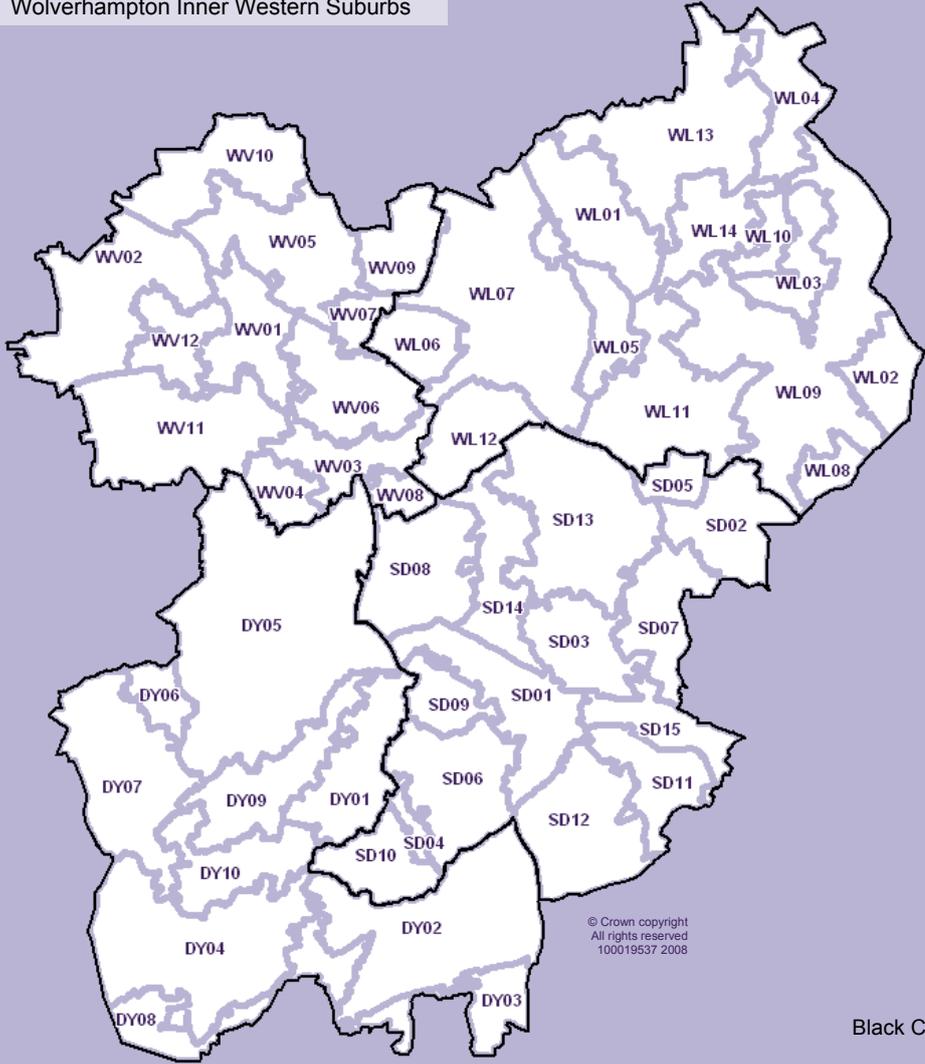
Figure 4.11 shows the third draft Character Areas further subdivided to take account of period of origin, as well as other concerns which came out of consultations with individual local authorities.

Boundaries are shown superimposed on a sub-division of the Black Country landscape into four broad periods of origin, as previously introduced in Section 3.2 of this report.

These final amendments created an additional 8 areas, bringing the total number for the project area to 51, shown in Figure 4.12 overleaf. In local authority terms, these were distributed in the following way: 10 in Dudley; 15 in Sandwell; 14 in Walsall; and 12 in Wolverhampton. Appendix 1 contains short descriptions of the areas summarising their modern and historic character.

Figure 4.12: Character Area Names

Walsall	WL01	Bloxwich & Blakenhall Heath	Dudley	DY01	Netherton
	WL02	Streetly		DY02	Halesowen
	WL03	Aldridge East		DY03	Hayley Fields & Illey
	WL04	Brownhills & Walsall Wood		DY04	Stourbridge
	WL05	Walsall Town Centre & Industrial Districts		DY05	Dudley North
	WL06	Willenhall		DY06	Pensnett North
	WL07	Bentley		DY07	Kingswinford
	WL08	Pheasey		DY08	Pedmore & Lutley
	WL09	Barr Beacon & Aldridge Fields		DY09	Brierley Hill
	WL10	Aldridge West		DY10	Quarry Bank
	WL11	South East Walsall	Sandwell	SD01	Tipton Green, Oldbury & Langley
	WL12	Darlaston		SD02	Newton, Hamstead & Great Barr
	WL13	Pelsall		SD03	West Bromwich
	WL14	Rushall & Shelfield		SD04	Old Hill
WV01	Wolverhampton City Centre & Industrial Districts	SD05		Yew Tree	
Wolverhampton	WV02	Wolverhampton Outer Western Suburbs		SD06	Rowley Regis & Blackheath
	WV03	South Bilston & Ettingshall		SD07	Sandwell Valley
	WV04	Ettingshall Park & Lanesfield		SD08	Tipton & Princes End
	WV05	Bushbury & Wednesfield North		SD09	Tividale
	WV06	North Bilston, Portobello & Moseley		SD10	Cradley Heath
	WV07	Wednesfield South		SD11	Central Smethwick and Cape Hill
	WV08	Bradley		SD12	Warley
	WV09	Ashmore Park		SD13	Wednesbury & Hill Top
	WV10	Pendeford, Fordhouses & Moseley		SD14	Great Bridge
	WV11	Blakenhall, Bradmore & Penn		SD15	North Smethwick
	WV12	Wolverhampton Inner Western Suburbs			



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